Q2 2025

# Castrol's extensive engine protection guide





### Castrol as it should be. Evolved. Advanced. Accelerated.

### Staying on top of our game

Castrol CEO, Michelle Jou, recently shared her thoughts that, "Castrol needs to listen to its customers, understand their evolving needs and aspirations, and... be a brand that inspires."

Inspiration can come in many forms – a great idea, a pertinent insight, a groundbreaking achievement – and the concept of inspiring customers motivates us to be better for you. To that end, I'm proud to say that Castrol has never been more focused on listening to customers, driving innovation, and helping you accelerate your business forward. Our success will always be measured by your success.

Castrol has a long history in New Zealand – over 100 years in fact – and during that time we've worked hand in hand with our customers to ensure we've got the right insights, the right expertise and the right products.

With this ambition, our product portfolio continues to evolve, and nowhere is that more evident than within this, our latest Product Catalogue covering Castrol's portfolio of advanced fluids and lubricants.

Whether it's Castrol's new Castrol ON range of EV fluids, the latest industry and OEM approvals on old favourites, or new products for new applications, the Castrol portfolio captured within this document is tailored to help your business succeed.

We hope you find the Product Catalogue of value and thank you for letting us be part of your company's pathway to success.

Jane Carland,

Head of Country, ANZ





Vane Carland

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Indicates meets HYSPEC standard



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MAGNA SW 32

MAGNA SW D RANGE

## We know every part of a hybrid

The demand for hybrid technology is growing. By 2025, one in every four cars sold globally will be hybrid<sup>1</sup>. Today, there is currently no industry standard specification for hybrid engine oils.

### Introducing HYSPEC

HYSPEC is Castrol's new technical standard for engine oils for hybrids. It's not a new product, ingredient, or competitor comparison. It's a benchmark to measure the performance of our engine oils for hybrids.

The rigorous standard is made up of 15 industry tests relevant to hybrid operation, supplemented by Castrol bespoke tests.

HYSPEC is an industry first for hybrid vehicles to support workshops and their customers in identifying the right oil for their cars.



Hybrids operate differently from conventional cars.

The switch between the internal combustion engine (ICE) and electric motor challenges oil in three key areas:



**Contaminants** – hybrid engines run at cooler temperatures, which can lead to water and fuel build-up in the oil. This can disrupt some oils and cause engine deterioration.



**Engine intermittency** – hybrid engines can operate at lower speeds, and then ramp up to high engine speeds quickly. Some oils can't keep up, resulting in reduced engine performance and protection.



**System efficiency** – cooler running and lower oil temperatures can lead to reduced engine efficiency and in turn, poorer fuel efficiency and charging of the battery.

HYSPEC enables Castrol to demonstrate how our engine oils for hybrids perform across these key areas.



- We have spent over 25 years researching, testing, and reporting on the characteristics of hybrids.
- We conducted a year-long road trial on mild, full, and plug-in hybrids that captured over two billion pieces of data. Combined, the cars travelled over 300,000 kms, for more than 7,000 hours – the equivalent to driving 24/7 for more than 42 weeks!
- To validate the findings, we commissioned a thirdparty consultancy and industry experts to conduct research with service centres, fleet operators and car owners to deliver a wider perspective on global markets
- Castrol has worked with vehicle manufacturers to develop hybrid testing techniques – enabling them to constantly refine their products and improve performance.



- 1 As per IHS Markit predictions, 2021.
- 2 As demonstrated in testing against HYSPEC, Castrol's hybrid performance standard. Strong resistance demonstrated by water and fuel contamination handling, protected switching by wear, stability and cold temperature testing, and fuel economy by industry standard fuel economy testing.
- 3 Compared to performance minimum requirements set in both industry specification and Castrol bespoke testing across tests applicable to hybrid vehicle types, covering contaminants, engine intermittency and system efficiency.



The benefits of HYSPEC

For strong resistance, protected switching and fuel economy<sup>2</sup>, workshops and vehicle owners can choose oils that perform against HYSPEC – Castrol's new hybrid performance standard.

Our portfolio includes many hybrid-ready engine oils. Those badged with the HYSPEC logo demonstrate at least 25% benefit across the critical areas of contaminants, engine intermittency and system efficiency.





# Your shortcut to easier ordering

Castrol express online ordering boosts efficiency and is quick and easy to use - making your business easier to manage.

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Please allow up to 24 hours for your user registration request to be completed.





### **Technical** support tools

Our dedicated team of local technical experts assist our sales teams and our customers to achieve optimum performance of the correct **Castrol** products under New Zealand conditions.

**Technical helpline:** 0800 10 40 60

Email: ganzlubesenquiry@sel.bp.com 8.30am - 5pm Monday to Friday

### **Recommendations for workshops & mechanics** smarter, faster and easier than ever



### **Mobile Product Finder App**

It's never been easier to find the right Castrol product for your needs with the launch of Castrol's upgraded Product Finder and Mobile App.

Simply scan the QR code below to discover it for yourself.











### Desktop Product Finder Tool

Recommendations for the best Castrol product for vehicles or equipment are also available online via the Product Finder Tool on our website here





Castrol NZ, PO Box 99873, Newmarket, Auckland 1149 **Customer Service:** 0800 CASTROL (227 876)

Castrol Technical Helpline: 0800 10 40 60

Material Safety Data Sheets: www.msds.castrol.co.nz

www.castrol.co/nz



# Castrol

### Master product transitions

EDGE OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	EDGE NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
EDGE Professional Longlife III 5W-30	20L	3374587	EDGE 5W-30 LL	20L	3431129	2023
EDGE Froressional Longine III 3W-3U	205L	3410275	LDGL JW-30 LL	205L	3431128	2023
EDGE Professional A3 0W-40	205L	3394492	EDGE 0W-40 A3/B4	205L	3431406	2023
EDGE Professional LL04 5W-30	20L	3389930	EDGE 5W-30 M	20L	3431108	2023
EDGE PIOIESSIONAI LLU4 5W-5U	205L	3389931		205L	3431107	2025
EDGE Professional Langlife III OW 70	20L	3424972	EDGE 0W-30 LL	20L	3433646	2024
EDGE Professional Longlife III 0W-30	208L	3424971		208L	3433645	2023
EDGE Professional LL01 5W-30	20L	3389986	EDGE 5W-30 A3/B4	20L	3421198	2023
EDGE PIOIESSIONAL LLUI 5W-5U	209L	3389985	BDGE 3W-3U A3/B4	205L	3430989	2024
EDGE Professional LL IV FE 0W-20	20L	3414301	EDGE 0W-20 LL IV	20L	3433822	2024
EDGE Ploiessional LL IV FE UW-2U	208L	3425507		208L	3433821	2023
EDGE Professional C1 5W-30	208L	3409681	EDGE Professional C1 5W-30	205L	3433347	2023
EDGE Professional E 0W-30	208L	3423558	EDGE Professional E 0W-30	205L	3435733	2023
EDGE Professional V 0W-20	208L	3397983	EDGE Professional V 0W-20	205L	3436236	2024
EDGE 0W 30.05	4x5L	3425633	EDCE 014/ 30 CE	3x5L	3435256	2027
EDGE 0W-20 C5	208L	3425217	EDGE 0W-20 C5	205L	3436801	2024
EDGE 0W-30 C2	4x5L	3420665	EDGE 0W-30 C2	3x5L	3436896	2024
EDGE 10W-60	4x5L	3412396	EDGE 10W-60	4x5L	3435063	2024
EDGE Supercar 5W-50	20L	3423787	EDGE 5W-50 S	20L	3436638	2024



MAGNATEC OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	MAGNATEC NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
MAGNATEC Stop-Start 0W-20	3x5L	3414099		3x5L	3432912	2023
5D.55.0W.20	20L	3437297	MAGNATEC 0W-20	20L	3439018	2021
EDGE 0W-20	205L	3437296		205L	3437750	2024
	6x1L	3420316		6x1L	3432802	
MAGNATEC Fuel Saver DX 5W-30	3x5L	3418435	MACNATECEW 70 DV	3x5L	3432803	2023
MACHITEC	20L	3417787	MAGNATEC 5W-30 DX	20L	3433354	1
MAGNATEC Professional DX 5W-30	205L	3376289		205L	3433353	2024
	60L	3377212		60L	3429087	
MAGNATEC Professional A5 5W-30	205L	3377211	MAGNATEC Stop-Start 5W-30 A5	205L	3429082	2023
	20L	3381199		20L	3433217	
MAGNATEC Professional MP DX 5W-30	205L	3381200		205L	3433218	
	20L	3374978	MAGNATEC SUV 5W-30 C3	20L	3433217	2023
EDGE Professional OE-X 5W-30	205L	3374979		205L	3433218	
	20L	3416386		20L	3434547	
MAGNATEC Professional C2 0W-30	208L	3416385	MAGNATEC 0W-30 D	205L	3434546	2023
	20L	3427897		20L	3434547	
MAGNATEC Stop-Start 0W-30 D	208L	3427896	MAGNATEC 0W-30 D	205L	3434546	
	208L 3427896		205L	3434546		
	6x1L	3415967	_	6x1L	3436891	2024
MAGNATEC Stop-Start 10W-30	3x4L	3383491		3x4L	3436889	
	60L	3375296		60L	3436888	2023
GTX Professional 10W-30	205L	3375059	MAGNATEC 10W-30	205L	3436892	
	60L	3377463		60L	3436888	2024
MAGNATEC Professional A3 10W-30	205L	3377462		205L	3436892	2024
MAGNATEC Professional C3 5W-40	205L	3372392	MAGNATEC 5W-40 SN/C3	205L	3436311	2024
	6x1L	3383432		6x1L	3437174	
	3x4L	3383433		3x4L	3437171	1
MAGNATEC 10W-40	3x6L	3428780	MAGNATEC 10W-40	3x6L	3437175	2024
	2x10L	3423244		2x10L	3437172	
MAGNATEC Stop-Start 5W-30	3x5L	3396960	MAGNATEC 5W-30 A	3x5L	3437037	2024
	3x5L	3383364		3x5L	3437335	
MAGNATEC Diesel 15W-40	2x10L	3422638	MAGNATEC Diesel 15W-40	2x10L	3437334	2024
	6x1L	3429085		6x1L	3437806	
	3x6L	3429084		3x6L	3437807	-
MAGNATEC Stop-Start 5W-30 A5	2x10L	3429083	MAGNATEC 5W-30 A5	2x10L	3437808	2024
	60L	3429087		60L	3437809	1
	205L	3429082		205L	3437810	
MAGNATEC 5W-30 SN/C3	205L	3436311	MAGNATEC 5W-40 SP C3	205L	3440365	Q1-25



GTX OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	GTX NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
EDGE Professional C4 5W-30	20L	3379809	GTX 5W-30 C4	20L	3433322	2023
EDGE Professional C4 5VV-30	208L	3413629	G1X 5W-50 C4	205L	3433321	2025
GTX Ultraclean 15W-40	6x1L	3414908		6x1L	3437477	202/
GTX Oltraclean 15W-40	3x4L	3414905		3x4L	3437476	2024
CTVP ( : LIFW (0	20L	3372469	GTX 15W-40	20L	3437480	202/
GTX Professional 15W-40	205L	3372468		205L	3437479	2024
	6x1L	3383439		6x1L	3437070	
GTX Diesel 15W-40	3x5L	3383440	GTX Diesel 15W-40	3x5L	3437069	2024
	2x10L	3422391		2x10L	3437068	
CTV 20W FO	6x1L	3413898	GTX 20W-50	6x1L	3413902	
GTX 20W-50	3x4L	3413899		3x4L	3413900	2024

AGRICULTURAL OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	AGRICULTURAL NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
A: T Dl 2014/ 70	20L	3362250	TRANSMAX Agri AS Trans Plus	20L	3430975	2027
Agri Trans Plus 20W-30	205L	3362251	20W-30	205L	3430974	2023
TDANICMAY Assis Tassas Diva 0004	20L 3431148	3431148	TRANSMAN, T	20L	3431044	2024
TRANSMAX Agri Trans Plus 80W	205L	3431149	TRANSMAX Agri Trans Plus 80W	205L	3431045	2023

AUTOMATIC TRANSMISSION OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	AUTOMATIC TRANSMISSION NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
	6x1L	3381100		6x1L	3428484	
	3x4L	3381101		3x4L	3428483	
ATF Dex III	20L	3371179	TRANSMAX ATF Dex/Merc  Multivehicle	20L	3429062	2023
	60L	3371178	Piolitivernicle	60L	3429064	
	205L	3371177		205L	3429063	
TD ANGMAY 7	20L	3337266	TD ANIGNA V ATE 7	20L	3430516	
TRANSMAX Z	205L	4101035	TRANSMAX ATF Z	205L	3430515	2023
	6x1L	3371182	TRANSMAX ATF DEXRON®-VI MERCON® LV Multivehicle	6x1L	3428859	
TD4446444444	3x4L	3371183		3x4L	3428860	
TRANSMAX Multivehicle	20L	3371184		20L	3430696	
	205L	3371186		205L	3428861	
Power Steering Fluid	6x500ML	3381662	TRANSMAX Power Steering Fluid	6x500ML	3429283	2023
	3x4L	3381017		3x4L	3428860	2023
TRANSMAX DEXRON®-VI MERCON® LV	20L	3381015	TRANSMAX ATF DEXRON®-VI  MERCON® LV Multivehicle	20L	3430696	
	205L	3381016	MERCON- LV Multivenicie	205L	3428861	
TRANSMAX DUAL	20L	3380380	TRANSMAX DUAL Multivehicle	20L	3439145	Apr-25
TRANSYND 668	208L	3430858	TRANSYND 668	205L	3433245	Jun-25



DIFF'S & AXLE FLUIDS OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	DIFF'S & AXLE FLUIDS NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
	6x1L	3375404		6x1L	3429279	
	3x4L	3375405		3x4L	3429280	
Axle EPX 80W-90	20L	3375406	TRANSMAX Axle EPX 80W-90	20L	3430290	2023
	60L	3375407		60L	3430292	
	205L	3375408		205L	3430291	
	3x4L	3377666		3x4L	3430296	
Axle Limited Slip 85W-140	60L	3372762	TRANSMAX Limited Slip 85W-140	60L	3430300	2023
	205L	3372761		205L	3430299	
	3x4L	3376743		3x4L	3428023	
Axle Limited Slip 90	20L	3376744	TRANSMAX Limited Slip 80W-90	20L	3431245	2023
Axie Elimited Shp 30	60L	3376745	THAIRST IAX Ellithica slip 6647 56	60L	3431247	
	205L	3376746		205L	3431246	
Axle Long Drain 80W-90	20L	3372756	TRANSMAX Axle Long Life 75W-90	20L	3429945	2023
Syntrax 80W-140	6x1L	3378345	TRANSMAX Limited Slip 80W-140	6x1L	3431007	2023
Syntrax 6000-140	20L	3375576	TRANSMAX LIMIted Slip 60W-140	20L	3431006	2023
	6x1L	3377738		6x1L	3430282	
Syntrax Universal Plus 75W-90	20L	3373869	TRANSMAX Universal LL 75W-90	20L	3430280	2023
	205L	3373870		205L	3430281	
MANUAL OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	MANUAL NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
Syntrans 75W-85	20L	3335813	TRANSMAX Manual Long Life 75W-85	20L	3432318	2023
	6x1L	3377725		6x1L	3429681	2023
	3x4L 3377724		3x4L	3429680	2023	
Manual VMX 80W	20L	3375547	TRANSMAX Manual VMX 80W	20L	3429677	2023
	60L	3375549		60L	3429679	2023
	205L	3375548		205L	3429678	2023
	3x4L	3375564		3x4L	3430313	
Universal 80W-90	60L	3375562	TRANSMAX Universal 80W-90	60L	3430312	2023
COOLANTS OLD PRODUCT NAME	OLD PACK	OLD ITEM	COOLANTS	NEW	NEW ITEM	
OLD PRODUCT NAME	SIZE	CODE	NEW PRODUCT NAME	PACK SIZE	CODE	TIMING
RADICOOL SF Premix	SIZE 208L	3417111				TIMING 2024
RADICOOL SF Premix			NEW PRODUCT NAME  RADICOOL SF Premix	SIZE	CODE	
	208L	3417111	NEW PRODUCT NAME	SIZE 205L	CODE 3430230	2024
RADICOOL SF Premix	208L 20L	3417111 3417623	NEW PRODUCT NAME  RADICOOL SF Premix	SIZE 205L 20L	3430230 3424712	2024
RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE OLD PRODUCT NAME	208L 20L 208L OLD PACK	3417111 3417623 3417624 OLD ITEM	RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE	205L 20L 208L NEW PACK	3430230 3424712 3437260 NEW ITEM	2024 2024 2024
RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE OLD PRODUCT NAME  Powerl 4T 10W-40	208L 20L 208L  OLD PACK SIZE 6x1L 3x4L	3417111 3417623 3417624 OLD ITEM CODE 3384361 3384362	RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE	SIZE 205L 20L 208L NEW PACK SIZE	3430230 3424712 3437260 NEW ITEM CODE	2024 2024 2024
RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE OLD PRODUCT NAME	208L 20L 208L  OLD PACK SIZE 6x1L 3x4L 3x4L	3417111 3417623 3417624 OLD ITEM CODE 3384361 3384362 3418672	RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE	SIZE 205L 20L 208L  NEW PACK SIZE 1L  4L	3430230 3424712 3437260 NEW ITEM CODE 3434507	2024 2024 2024
RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE OLD PRODUCT NAME  Powerl 4T 10W-40	208L 20L 208L  OLD PACK SIZE 6x1L 3x4L 3x4L 20L	3417111 3417623 3417624 OLD ITEM CODE 3384361 3384362 3418672 3384363	RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE NEW PRODUCT NAME	SIZE 205L 20L 208L  NEW PACK SIZE 1L	3430230 3424712 3437260 NEW ITEM CODE 3434507	2024 2024 2024 TIMING
RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE OLD PRODUCT NAME  Powerl 4T 10W-40  Powerl Racing 4T 10W-40	208L 20L 208L  OLD PACK SIZE 6x1L 3x4L 3x4L	3417111 3417623 3417624 OLD ITEM CODE 3384361 3384362 3418672	RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE NEW PRODUCT NAME	SIZE 205L 20L 208L  NEW PACK SIZE 1L  4L	3430230 3424712 3437260 NEW ITEM CODE 3434507	2024 2024 2024 TIMING
RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE OLD PRODUCT NAME  Powerl 4T 10W-40  Powerl 4T 10W-40  Powerl 4T 10W-40	208L 20L 208L  OLD PACK SIZE 6xlL 3x4L 20L 205L	3417111 3417623 3417624 OLD ITEM CODE 3384361 3384362 3418672 3384363 3384364	RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE NEW PRODUCT NAME	SIZE 205L 20L 208L  NEW PACK SIZE 1L  4L 20L	CODE  3430230  3424712  3437260  NEW ITEM CODE  3434507  3434506  3434508	2024 2024 2024 TIMING
RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE OLD PRODUCT NAME  Power1 4T 10W-40  Power1 4T 10W-40  Power1 4T 10W-40  Power1 4T 10W-40  Power1 Racing 4T 10W-40	208L 20L 208L  OLD PACK SIZE  6x1L 3x4L 20L 205L 205L	3417111 3417623 3417624 OLD ITEM CODE 3384361 3384362 3418672 3384363 3384364 3384358	RADICOOL SF Premix  RADICOOL SF  MOTORCYCLE NEW PRODUCT NAME  Powerl Ultimate 4T 10W-40	SIZE  205L  208L  NEW PACK SIZE  1L  4L  20L	3430230 3424712 3437260 NEW ITEM CODE 3434507 3434506 3434508	2024 2024 2024 TIMING







Pushed to the limit by the best in world motorsport.



Download the new & improved Castrol Product Finder













### Castrol EDGE product transitions

At Castrol, we know that keeping things simple is critical for your success. It's one of the reasons we're undertaking one of the biggest updates ever simplifying our portfolio whilst we continue deliver the best products, with latest industry and OEM approvals, whilst eliminating unnecessary complexity.

We appreciate that change can take some getting used to so don't forget that your local Castrol Technical Helpline is only ever a phone call away to ensure you've got the right product for the right application.

V-30 A3/B4

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OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
	20L	3374587	EDGE 5W-30 LL	20L	3431129	2023
EDGE Professional Longlife III 5W-30	205L	3410275	EDGE 5W-30 LL	205L	3431128	2023
EDGE Professional A3 0W-40	205L	3394492	EDGE 0W-40 A3/B4	205L	3431406	2023
EDGE D. (	20L	3389930	EDGE 5W 70 M	20L	3431108	2027
EDGE Professional LL04 5W-30	205L	3389931	EDGE 5W-30 M	205L	3431107	2023
5555 6 · · · · · · · · · · · · · · · · ·	20L	3424972	50.55.0W 70.11	20L	3433646	2024
EDGE Professional Longlife III 0W-30	208L	3424971	EDGE 0W-30 LL	208L	3433645	2023
	20L	3389986		20L	3421198	2023
EDGE Professional LL01 5W-30	209L	3389985	EDGE 5W-30 A3/B4	205L	3430989	2024
	20L	3414301		20L	3433822	2024
EDGE Professional LL IV FE 0W-20	208L	3425507	EDGE 0W-20 LL IV	208L	3433821	2023
EDGE Professional C1 5W-30	208L	3409681	EDGE Professional C1 5W-30	205L	3433347	2023
EDGE Professional E 0W-30	208L	3423558	EDGE Professional E 0W-30	205L	3435733	2023
EDGE Professional V 0W-20	208L	3397983	EDGE Professional V 0W-20	205L	3436236	2024
	20L	3381078		20L	3437297	2024
EDGE Professional Fuel Saver 0W-20	205L	3381079	EDGE 0W-20	205L	3437296	
	4x5L	3425633		3x5L	3435256	
EDGE 0W-20 C5	208L	3425217	EDGE 0W-20 C5	205L	3436801	2024
EDGE 0W-30 C2	3x5L	3420665	EDGE 0W-30 C2	3x5L	3436896	2024
EDGE 10W-60	4x5L	3412396	EDGE 10W-60	4x5L	3435063	2024
EDGE Supercar 5W-50	20L	3423787	EDGE 5W-50 S	20L	3436638	2024







OW-20 a

### Unlock the very edge of performance

### **EDGE 0W-20 C5**

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 0W-20 C5 is an advanced full synthetic engine oil suitable for use in automotive petrol, diesel (incl. DPF), and hybrid vehicles where the manufacturer recommends an ACEA C5 0W-20 lubricant.

Castrol EDGE 0W-20 C5 is also proven to deliver against Castrol's HYSPEC standard. In doing so it is proven to demonstrate at least 25% benefit^ across the three critical hybrid areas of contaminants, engine intermittency and system efficiency.

Choose Castrol EDGE and unlock the very edge of performance.

^ Compared to performance minimum requirements set in both industry specification and Castrol bespoke testing across tests applicable to hybrid vehicle types, covering contaminants, engine intermittency and system efficiency.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil suitable for use in automotive petrol, diesel, and hybrid vehicles (incl. DPF).

### **SUITABLE FOR USE\*:**

- Chrysler
- Honda
- Hyundai
- Jaguar
- Jeep
- KiaLand Rover
- SPECIFICATIONS/APPROVALS
- ACEA C5, C6
- API SQ
- ILSAC GF-7
- Jaguar Land Rover STJLR.03.5006
- Meets Chrysler MS 6395
- GM dexos1<sup>™</sup> Gen 3
- MB-Approval 229.71

- Lexus
- Mazda
- Mercedes-Benz
- Mitsubishi
- Subaru
- Suzuki
- Toyota
- Meets Figt 9.55535-CR1
- Meets Fiat 9.55535-GSX
- Meets Ford WSS-M2C947-A
- Meets Ford WSS-M2C947-B1
- Meets Ford WSS-M2C962-A1

Pack Size	5L	20L	205L
Item Code	3435256	3425218	3436801
Barcode	9310084035654	9310084032462	9310084035760

<sup>\*</sup>When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.









### **EDGE 0W-20 LL IV**

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 0W-20 LL IV is an advanced full synthetic engine oil suitable for use in petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C5, C6 0W-20 lubricant and in vehicles from the VW Group that require a VW 508 00 / 509 00, Porsche C20, MB-Approval 229.71/ 229.72, BMW Longlife 17 FE+.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil suitable for use in petrol and diesel vehicles (incl. DPF).

### SUITABLE FOR USE\*:

- Audi
- BMW
- · Chrysler/Jeep
- Ford
- Kia
- Hyundai
- Mercedes-Benz
- Mitsubishi
- SPECIFICATIONS/APPROVALS
- ACEA C5, C6
- BMW Longlife-17FE+
- MB-Approval 229.71/229.72
- Porsche C20

- Nissan
- Porsche
- Skoda
- Subaru
- Toyota
- Volkswagon
- · VW 508 00/ 509 00
- Meets Ford Wss-M2C956-A1

Pack Size	20L	208L
Item Code	3433822	3433821
Barcode	9310084035456	9310084035463

<sup>\*</sup>When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.







### **EDGE 0W-30 C2**

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 0W-30 C2 is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C2 0W-30 lubricant. Castrol EDGE 0W-30 C2 is approved for use in vehicles that require Jaguar Land Rover engine oil specification STJLR.03.5007 0W-30 lubricant.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil suitable for use in automotive petrol and diesel vehicles (incl. DPF).

### SUITABLE FOR USE\*:

- · Alfa Romeo
- Ford
- Honda
- Jaguar
- · Land Rover
- Subaru
- Toyota

### SPECIFICATIONS/APPROVALS

- ACEA C2
- Jaguar Land Rover engine oil specification STJLR.03.5007

Pack Size	5L
Item Code	3436896
Barcode	9310084031274









### EDGE OW-30 LL

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 0W-30 LL is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C3 0W-30 lubricant. Castrol EDGE 0W-30 LL is approved for use in Volkswagen, Audi and Skoda vehicles where a VW 504 00 / 507 00 specification OW-30 lubricant is required.

Castrol EDGE 0W-30 LL is also proven to deliver against Castrol's HYSPEC standard. In doing so it is proven to demonstrate at least 25% benefit<sup>a</sup> across the three critical hybrid areas of contaminants, engine intermittency and system efficiency.

Choose Castrol EDGE and unlock the very edge of performance.

^ Compared to performance minimum requirements set in both industry specification and Castrol bespoke testing across tests applicable to hybrid vehicle types, covering contaminants, engine intermittency and system efficiency.

### **FEATURES & BENEFITS**

- Maximises short and long term engine performance
- · Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- · Advanced full synthetic engine oil suitable for use in automotive petrol and diesel vehicles (incl. DPF).

### **SUITABLE FOR USE\*:**

- Audi
- Chrysler/Jeep
- Hyundai
- Mercedes-Benz
- Mitsubishi
- Nissan

- Porsche
- Skoda
- Subaru
- Volkswagen

### SPECIFICATIONS/APPROVALS

- ACEA C3
- · BMW Longlife-04
- MB-Approval 229.31/229.51
- Porsche C30

- VW 504 00/ 507 00
- Suitable for use in the following specifications: MB 229.52

Pack Size	20L	208L
Item Code	3433646	3433645
Barcode	9310084035432	9310084035449

<sup>\*</sup>When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.

The images shown are for illustration purposes only and









### EDGE 0W-40 A3/B4

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 0W-40 A3/B4 is an advanced full synthetic engine oil suitable for automotive petrol and hybrid vehicles that provides outstanding wear protection in performance engines, designed to run at their optimum level on lower viscosity oils, where the manufacturer recommends an ACEA A3/B4, API SP or earlier specification 0W-40 lubricant.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- Protects the engine for the entire drain interval even under extreme pressure
- · Advanced full synthetic engine oil suitable for automotive petrol and hybrid vehicles.

### SUITABLE FOR USE\*:

- Audi
- BMWFord
- Holden
- Honda
- Lexus
- Mazda
- Mercedes-Benz

- Mitsubishi
- Nissan
- Porsche
- Skoda
- Subaru
- Toyota
- Volkswagen
- Volvo

### SPECIFICATIONS/APPROVALS

- ACEA A3/B4
- API SP
- BMW Longlife-01
- MB-Approval 229.5
- · Porsche A40
- Renault RN 0700 / RN0710
- VW 502 00/ 505 00
- Meets Ford WSS-M2C937-A
- Warranted by Castrol to be completely suitable for use in vehicles where the following specifications apply: MB 229.3

Pack Size	1L	5L	205L
Item Code	3383430	3383431	3431406
Barcode	9310084023804	9310084023811	9310084034879

<sup>\*</sup> When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.

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### EDGE 5W-30 LL

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 5W-30 LL is an advanced full synthetic engine oil approved for use in automotive petrol, hybrid and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C3 specification 5W-30 lubricant.

Castrol EDGE 5W-30 LL is also proven to deliver against Castrol's HYSPEC standard. In doing so it is proven to demonstrate at least 25% benefit^ across the three critical hybrid areas of contaminants, engine intermittency and system efficiency.

Choose Castrol EDGE and unlock the very edge of performance.

^ Compared to performance minimum requirements set in both industry specification and Castrol bespoke testing across tests applicable to hybrid vehicle types, covering contaminants, engine intermittency and system efficiency.

### FEATURES & BENEFITS

- · Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil approved for use in automotive petrol, hybrid, and diesel vehicles (incl. DPF).

### SUITABLE FOR USE\*:

- Audi
- BMW
- · Chrysler/Jeep
- Hyundai
- Mercedes-Benz
- Mitsubishi

- Nissan
- Porsche
- Skoda
- Subaru
- Volkswagen

- ACEA C3
- BMW Longlife-04
- MB-Approval 229.31/229.51
- Porsche C30
- · VW 504 00/ 507 00

Pack Size	1L	5L	20L	205L
Item Code	3432978	3432979	3431129	3431128
Barcode	9310084035227	9310084035234	9310084034602	9310084034619

<sup>\*</sup>When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.







### EDGE 5W-30 A3/B4

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 5W-30 A3/B4 is an advanced full synthetic engine oil suitable for use in automotive petrol, diesel (excl. DPF), and hybrid vehicles, where the manufacturer recommends an ACEA A3/B4, API SL/CF or earlier specification 5W-30 lubricant

Castrol EDGE 5W-30 A3/B4 is also proven to deliver against Castrol's HYSPEC standard. In doing so it is proven to demonstrate at least 25% benefit^ across the three critical hybrid areas of contaminants, engine intermittency and system efficiency.

Choose Castrol EDGE and unlock the very edge of performance.

^ Compared to performance minimum requirements set in both industry specification and Castrol bespoke testing across tests applicable to hybrid vehicle types, covering contaminants, engine intermittency and system efficiency.

### **FEATURES & BENEFITS**

- Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil suitable for use in automotive petrol, diesel (excl. DPF), and hybrid vehicles.

### **SUITABLE FOR USE\*:**

- Audi
- BMW
- · Chrysler/Jeep
- Ford
- Holden
- Honda
- Hyundai
- Jaguar/Land Rover
- Kia

- Lexus
- Mazda
- · Mercedes-Benz
- Mitsubishi
- Nissan
- Skoda
- Subaru
- Toyota
- Volkswagen

### SPECIFICATIONS/APPROVALS

- ACEA A3/B4
- APISL
- BMW Longlife-01
- MB-Approval 229.5
- · VW 502 00/ 505 00
- Pack Size
   IL
   5L
   10L
   20L
   205L

   Item Code
   3421197
   3421196
   3422637
   3421198
   3430989

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9310084031328

The images shown are for illustration purposes only and may not be an exact representation of the product.

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<sup>\*</sup> When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.





### **EDGE 5W-30 M**

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 5W-30 M is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C3, API SQ in 5W-30 lubricant. Castrol EDGE 5W-30 M is recommended and approved for use in vehicles that require a BMW Longlife-04 specification lubricant. Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil suitable for use in automotive petrol and diesel vehicles (incl. DPF).

### **SUITABLE FOR USE\*:**

- BMW
- Chrysler
- CitröenHyundai
- Тубпааг
- JaguarJeep
- Kia
- Mazda

- Mercedes-Benz
- Mitsubishi
- Nissan
- Peugeot
- Subaru
- Suzuki
- Volvo

### SPECIFICATIONS/APPROVALS

- ACEA C3
- API SQ

Pack Size	205L
Item Code	3431107
Barcode	9310084034596

- BMW Longlife-04
- MB-Approval 229.51/229.52







### EDGE 5W-40 A3/B4

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 5W-40 A3/B4 is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles where the manufacturer recommends ACEA A3/B3, A3/B4 or API SN.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles.

### SUITABLE FOR USE\*:

- BMW
- Ford
- Holden
- Honda
- HyundaiKia
- Lexus

- Mazda
- Mitsubishi
- Nissan
- Renault
- Subaru
- Toyota

- ACEA A3/B3, A3/B4
- API SN/CF
- BMW Longlife-01
- MB-Approval 229.5
- Porsche A40
- Renault RN0700 / RN0710
- VW 502 00/ 505 00
- Suitable for use in vehicles requiring the specification: MB 226.5/ MB 229.3

Pack Size	1L	5L
Item Code	3421234	3421235
Barcode	9310084031366	9310084031373

<sup>\*</sup>When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.







### **EDGE 5W-40 M**

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 5W-40 M is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C3, API SN or earlier specification 5W-40 lubricant.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil suitable for use in automotive petrol and diesel vehicles (incl. DPF).

### **SUITABLE FOR USE\*:**

- · Alfa Romeo
- AudiBMW
- Chrysler
- Fiat
- Ford
- Holden
- Honda
- Hyundai
- JeepKia
- Lexus

- Mazda
- Mitsubishi
- Nissan
- Peugeot
- Porsche
- Subaru
- Suzuki
- Toyota
- Suzuki
- Toyota
- Volkswagen

- ACEA C3
- API SN
- · BMW Longlife-04

- Meets Fiat 9.55535-S2
- Porsche C40
- VW 511 00

Pack Size	20L
Item Code	3426982
Barcode	9310084032837

<sup>\*</sup>When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.







### **EDGE 5W-50 S**

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 5W-50 S is an advanced full synthetic engine oil suitable for petrol vehicles and designed to meet the latest specifications required by modern engines where the vehicle manufacturer recommends a Meets Ford WSS-M2C931-C or API SP 5W-50 lubricant. It has been developed for the FORD GT supercar and is also suitable for use in other performance cars.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Stronger under pressure in today's modern engine
- · Independently tested at the highest standards
- · Recommended for world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Proven performance across a variety of driving conditions and temperatures
- · Advanced full synthetic engine oil suitable for petrol vehicles.

### SUITABLE FOR USE\*:

- Ford
- Holden
- Honda
- Hyundai
- Kic

- Lexus
- Mazda
- Mitsubishi
- Nissan
- Toyota

- API SP
- Meets Ford WSS-M2C931-C

Pack Size	20L
Item Code	3436638
Barcode	9310084035722

<sup>\*</sup>When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.







### **EDGE 10W-30**

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 10W-30 is an advanced full synthetic engine oil suitable for use in automotive petrol, diesel (excl. DPF), and hybrid vehicles where the manufacturer recommends an API SP, CF, ILSAC GF-6 or earlier specification 10W-30 lubricant. Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil suitable for use in automotive petrol, diesel (excl. DPF), and hybrid vehicles.

### **SUITABLE FOR USE\*:**

- Ford
- Holden
- Honda
- Hyundai
- · Jaguar/Land Rover
- Kia
- l.....alai
- SPECIFICATIONS/APPROVALS
- API SP, CF
- · ILSAC GF-6

Pack Size	5L
Item Code	3399574
Barcode	9310084026225

- Mazda
- Mitsubishi
- Nissan
- Toyota



Lexus





### **EDGE 10W-60**

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE 10W-60 is an advanced full synthetic engine oil suitable for use in automotive petrol, diesel (excl. DPF), hybrid Supercars where the manufacturer recommends an ACEA A3/B4 10W-60 lubricant including - Aston Martin V8 Vantage S, Ferrari F12 Berlinetta, Ferrari FF.

It is also suitable for use where the manufacturer requires a VW 501 01/505 00 approved product including - Audi R8 V10 GT, Bugatti Chiron, Bugatti Veyron.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure
- Advanced full synthetic engine oil suitable for use in automotive petrol, diesel (excl. DPF), hybrid Supercars.

### **SUITABLE FOR USE\*:**

- · Alfa Romeo
- Aston Martin
- Audi
- BMW
- Bugatti
- Ferrari

- Ford
- FPV
- Holden
- McLaren
- Porsche
- Volkswagen

- ACEA A3/B3, A3/B4
- API SN/CF
- Approved for BMW M-Models
- VW 501 01/ 505 00

Pack Size	5L
Item Code	3435063
Barcode	9310084028069

<sup>\*</sup>When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.







### **EDGE 25W-50**

For over 15 years now, Castrol EDGE has been helping drivers unlock the very edge of performance, and the current generation of Castrol EDGE engine oils are no different.

Castrol EDGE products are tested to the highest standards to deliver the high-performance levels expected by drivers and by world-leading car manufacturers in their latest engine technology.

Castrol EDGE 25W-50 provides outstanding wear protection in big bore street machines and competition engines. It is suitable for use where the manufacturer recommends an API SG/CD or earlier specification 25W-50 lubricant.

Also suitable for use in large in-board power and ski boats, veteran motorcycles and motor cars where high viscosity oils are specified or required.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- Recommended by world-leading car manufacturers
- · Protects the engine for the entire drain interval even under extreme pressure.

### **SUITABLE FOR USE\*:**

- Chevrolet (pre 1980)
- Dodge (pre 1980)
- Ford (pre 1980)

- Holden (pre 1980)
- Pontiac

### SPECIFICATIONS/APPROVALS

· API SG/CD

Pack Size	5L
Item Code	3383419
Barcode	9310084023842

<sup>\*</sup>When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.







### **EDGE PROFESSIONAL AT 5W-20**

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE Professional Al 5W-20 is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles where the manufacturer recommends an ACEA Al/Bl, API SL, ILSAC GF-3 or earlier specification 5W-20 lubricant. Castrol EDGE Professional Al 5W-20 is approved for use in Jaguar Land Rover vehicles that require a Jaguar Land Rover engine oil specification STJLR.03.5004 5W-20 lubricant.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- · Reduces engine deposits to help maximise engine response
- Delivers complete protection across a variety of engine speeds, conditions and temperatures
- · Sustains maximum performance even when under pressure
- Independently proven to improve engine efficiency
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- Advanced full synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles<sup>1</sup>.

### SPECIFICATIONS/APPROVALS

- ACEA A1/B1
- API SL
- ILSAC GF-3
- Jaguar Land Rover engine oil specification STJLR.03.5004

Pack Size	20L	205L
Item Code	3374699	3374700
Barcode	9 310084018947	9 310084018824







### **EDGE PROFESSIONAL C15W-30**

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE Professional C1 5W-30 is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C1 lubricant.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- · Reduces engine deposits to help maximise engine response
- · Sustains maximum performance even when under pressure
- · Independently proven to improve engine efficiency
- Delivers outstanding levels of protection across a variety of driving conditions and temperatures
- Advanced engine oil suitable for use in automotive petrol and diesel (incl.DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- ACEA C1
- Jaguar Land Rover engine oil specification STJLR.03.5005

Pack Size	20L	205L
Item Code	3375617	3433347
Barcode	9310084019074	9310084035388







### **EDGE PROFESSIONAL EC 0W-20**

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE Professional EC 0W-20 is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C5 0W-20 lubricant.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- Castrol EDGE Professional remains the only product exclusively recommended by Jaguar Land Rover
- Maximises short and long term engine performance
- · Reduces engine deposits to help maximise engine response
- Delivers complete protection across a variety of engine speeds, conditions and temperatures
- · Sustains maximum performance even when under pressure
- Provides enhanced fuel efficiency
- Advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl.DPF) vehicles<sup>1</sup>.

### SPECIFICATIONS/APPROVALS

- · ACEA C5
- Jaguar Land Rover engine oil specification STJLR.03.5006, STJLR.51.5122

Pack Size	20L	208L
Item Code	3427866	3427865
Barcode	9310084033124	9310084033131









### **EDGE PROFESSIONAL E 0W-30**

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE Professional E OW-30 is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C2 OW-30 lubricant

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- · Maximises short and long term engine performance
- · Reduces engine deposits to help maximise engine response
- Delivers complete protection across a variety of engine speeds, conditions and temperatures
- Sustains maximum performance even when under pressure
- · Suitable for diesel engines fitted with DPF that allow fuel efficient oils
- Provides enhanced fuel efficiency
- Advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- ACEA C2
- Jaguar Land Rover engine oil specification STJLR.03.5007

Pack Size	20L	205L
Item Code	3423559	3435733
Barcode	9310084031847	9310084035616







### **EDGE PROFESSIONAL V 0W-20**

(PLEASE REFER TO TRANSITION TABLE)

For 20 years, Castrol EDGE engine oils have been trusted by manufacturers, mechanics, and drivers to unlock the very edge of performance.

Formulated with advanced full synthetic technology, not only are Castrol EDGE engine oils Castrol's most advanced, they're data engineered to deliver Castrol's ultimate performance. It's the reason why Castrol EDGE is chosen by leading car manufacturers for use in their latest engine technology.

From the workshop to the racetrack, Castrol EDGE engine oils are also relied on by the best in world motorsport including Tickford Racing in Supercars and Ford M-Sport in the World Rally Championship to deliver race winning performance - year after year after year.

Castrol EDGE Professional V OW-20 is an advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C5 OW-20 lubricant.

Choose Castrol EDGE and unlock the very edge of performance.

### **FEATURES & BENEFITS**

- Maximises short and long term engine performance
- · Improves engine efficiency, independently qualified
- Delivers unsurpassed levels of protection across a variety of driving conditions and temperatures
- · Reduces engine deposits to help maximise engine response
- Advanced full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- · ACEA C5
- Volvo VCC RBS0-2AE

Pack Size	20L	205L
Item Code	3383785	3436236
Barcode	9310084024191	9310084035692





# Give your engine the power of a magnet

Non-stop protection from every start









Castrol MAGNATEC product transitions
At Castrol, we know that keeping things simple is critical for your success. It's one of the reasons we're undertaking one of the biggest updates ever simplifying our portfolio whilst we continue deliver the best products, with latest industry and OEM approvals, whilst eliminating unnecessary complexity.

We appreciate that change can take some getting used to so don't forget that your local Castrol Technical Helpline is only ever a phone call away to ensure you've got the right product for the right application.

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OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMIN
MACNATECE IS DVEW 70	6x1L	3420316		6x1L	3432802	2023
MAGNATEC Fuel Saver DX 5W-30	3x5L	3418435		3x5L	3432803	2023
M.C.U.TECD ( : IDVEW 70	20L	3417787	MAGNATEC 5W-30 DX	20L	3433354	2023
MAGNATEC Professional DX 5W-30	205L	3376289		205L	3433353	2024
MACNATEC D. C. LAF EW 70	60L	3377212		60L	3429087	2023
MAGNATEC Professional A5 5W-30	205L	3377211	MAGNATEC Stop-Start 5W-30 A5	205L	3429082	2023
MACNIATEC D. C. LAND DV EW 70	20L	3381199		20L	3433217	2023
MAGNATEC Professional MP DX 5W-30	205L	3381200		205L	3433218	2023
	20L	3374978	MAGNATEC SUV 5W-30 C3	20L	3433217	2023
EDGE Professional OE-X 5W-30	205L	3374979		205L	3433218	2023
MAGNATEC Stop-Start 0W-20	3x5L	3414099		3x5L	3432912	2023
EDGE OW 20	20L	3437297	MAGNATEC 0W-20	20L	3439018	2024
EDGE 0W-20	205L	3437296		205L	3437750	2024
MACNIATEC Desfersion al C2 OW 70	20L	3416386	MACNATEC OW 70 D	20L	3434547	
MAGNATEC Professional C2 0W-30	208L	3416385	MAGNATEC 0W-30 D	205L	3434546	
	20L	3427897		20L	3434547	202
MAGNATEC Stop-Start 0W-30 D	208L	3427896	MAGNATEC 0W-30 D	205L	3434546	
	208L	3427896		205L	3434546	2627
	6x1L	3415967		6x1L	3436891	2024
MAGNATEC Stop-Start 10W-30	3x4L	3383491		3x4L	3436889	2023
CTV Danfa asia a al 10/4/ 70	60L	3375296		60L	3436888	2024
GTX Professional 10W-30	205L	3375059	MAGNATEC 10W-30	205L	3436892	
MACNATEC D. C LAZJOW ZO	60L	3377463		60L	3436888	2024
MAGNATEC Professional A3 10W-30	205L	3377462		205L	3436892	2024
MAGNATEC Professional C3 5W-40	205L	3372392	MAGNATEC 5W-40 SN/C3	205L	3436311	2024
	6x1L	3383432		6x1L	3437174	2024
MACNATEC 10M //O	3x4L	3383433	MACNATEC 10M 40	3x4L	3437171	202
MAGNATEC 10W-40	3x6L	3428780	MAGNATEC 10W-40	3x6L	3437175	2024
	2x10L	3423244		2x10L	3437172	2024
MAGNATEC Stop-Start 5W-30	3x5L	3396960	MAGNATEC 5W-30 A	3x5L	3437037	2024
MAGNATEC Diesel 15W-40	3x5L	3383364	MAGNATEC DiscollEW 40	3x5L	3437335	2024
MAGINALEC DIESELIOW-40	2x10L	3422638	MAGNATEC Diesel 15W-40	2x10L	3437334	2024
	6x1L	3429085		6x1L	3437806	2024
	3x6L	3429084		3x6L	3437807	2024
MAGNATEC Stop-Start 5W-30 A5	2x10L	3429083	MAGNATEC 5W-30 A5	2x10L	3437808	2024
		3429087			3437809	2024
	205L	3429082		205L	3437810	2024
MAGNATEC 5W-30 SN/C3	205L	3436311	MAGNATEC 5W-40 SP C3	205L	3440365	Q1-2







### Non-stop protection from every start

### **MAGNATEC HYBRID 0W-16**

Other oils have to reach a minimum temperature before they provide full engine protection performance. The engines in Hybrid and Stop Start Technology vehicles can run up to 40 degrees cooler\* than the engines in conventional cars because the repeated engine shut downs restrict the rise in engine temperature.

Castrol MAGNATEC's intelligent molecules cling to the engine like a magnet providing an extra layer of protection. In addition, fully-synthetic base oil is used to improve oil flow at low temperatures. Therefore, Castrol MAGNATEC Hybrid's formulation dramatically reduces\*\* engine wear for protection even while driving when the oil temperature is low. Now with ultra-refined molecules, for instant protection from the moment you start.

Castrol MAGNATEC Hybrid 0W-16 is a full synthethic engine oil suitable for use in automotive petrol and hybrid vehicles where the manufacturer recommends an API SP, ILSAC GF-6B 0W-16 lubricant.

Castrol MAGNATEC HYBRID 0W-16 is also proven to deliver against Castrol's HYSPEC standard. In doing so it is proven to demonstrate at least 25% benefit^ across the three critical hybrid areas of contaminants, engine intermittency and system efficiency.

Castrol MAGNATEC. Non-stop protection from every start.

- \* Proven by internal tests.
- \*\* Tested using an industry standard wear test, measured versus relevant industry limit.
- ^ Compared to performance minimum requirements set in both industry specification and Castrol bespoke testing across tests applicable to hybrid vehicle types, covering contaminants, engine intermittency and system efficiency.

### **FEATURES & BENEFITS**

- · Cling to critical engine parts when the oil drains down
- · Cling to your engine forming an extra layer that protects during start up and beyond
- · Bond to metal surfaces to make engine parts more resistant to wear
- Are combined with synthetic technology to provide increased protection in high and low temperature applications
- · Provide continuous protection for all driving conditions, styles and temperatures
- Deliver superior performance under stop-start mode operation
- Advanced full synthethic engine oil suitable for use in automotive petrol and hybrid vehicles<sup>1</sup>.

### SPECIFICATIONS/APPROVALS

- API SP
- ILSAC GF-6B

Pack Size	20L	205L
Item Code	3428869	3428868
Barcode	9310084033391	9310084033407







### **MAGNATEC OW-20**

(PLEASE REFER TO TRANSITION TABLE)

Castrol MAGNATEC engine oils are specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by re-starting in busy traffic.

Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC OW-20 is a full synthetic engine oil suitable for use in automotive petrol vehicles where the manufacturer recommends an API SP, ILSAC GF-6 or earlier specification OW-20 lubricant.

Castrol MAGNATEC OW-20 is also proven to deliver against Castrol's HYSPEC standard. In doing so it is proven to demonstrate at least 25% benefit^ across the three critical hybrid areas of contaminants, engine intermittency and system efficiency.

Castrol MAGNATEC. Non-stop protection from every start.

- ^ Compared to performance minimum requirements set in both industry specification and Castrol bespoke testing across tests applicable to hybrid vehicle types, covering contaminants, engine intermittency and system efficiency.
- \* Tested using an industry standard wear test, measured versus relevant industry limit.



- · Clings to engine parts when the oil drains down
- · Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- · Provides increased protection in high and low temperature applications
- · Provides continuous protection for all driving conditions, styles and temperatures.
- · Full synthetic engine oil suitable for use in automotive petrol vehicles1.

### SPECIFICATIONS/APPROVALS

- API SP
- ILSAC GF-6

Pack Size	5L	20L	205L
Item Code	3432912	3439018	3437750
Barcode	9310084035173	9310084036446	9310084036248









### MAGNATEC 0W-20 C5

Castrol MAGNATEC has been developed to meet the unique demands of modern driving. 75% of engine wear can happen when we start the ignition. And acceleration, slowing down, and idling journeys in city driving only increase this strain. That means every congested commute, weekend getaway, and shopping trip may increase engine wear.

Castrol MAGNATEC clings like a magnet to critical engine parts and locks in place to deliver 50% better engine wear protection\*. Helping to safeguard your engine's vital components - the valvetrain, timing chain, pistons, and bearings - from damage and wear

Castrol MAGNATEC 0W-20 C5 is a full synthetic engine oil suitable for use in automotive petrol, diesel (incl. DPF), and hybrid vehicles where the manufacturer recommends an ACEA C5, API SQ or earlier specification OW-20 lubricant.

Choose non-stop protection from every start. Choose Castrol MAGNATEC.

Castrol MAGNATEC clings, locks, and protects to deliver 50% better engine wear protection\*.

 $^{\star} \ \ \text{Tested using an industry standard wear test, measured versus relevant industry limit.}$ 

### **FEATURES & BENEFITS**

- · Forming a resistive barrier between metal contact points in the valvetrain
- · Managing abrasive piston deposits, guarding against cylinder liner wear
- Maintaining timing chain tension and engine synchronicity by minimising chain damage and elongation
- · Preserving engine bearings from corrosive wear
- Full synthetic engine oil suitable for use in automotive petrol, diesel (incl. DPF), and hybrid vehicles¹.

### SPECIFICATION/APPROVALS

- · ACEA C5
- API SQ

Pack Size	5L	20L	205L
Item Code	3440529	3439951	3439950
Barcode	9310084036842	9310084036781	9310084036798









**COMING Q2 2025** 

### MAGNATEC OW-20 E

Castrol MAGNATEC has been developed to meet the unique demands of modern driving. 75% of engine wear can happen when we start the ignition. And acceleration, slowing down, and idling journeys in city driving only increase this strain. That means every congested commute, weekend getaway, and shopping trip may increase engine wear.

Castrol MAGNATEC clings like a magnet to critical engine parts and locks in place to deliver 50% better engine wear protection\*. Helping to safeguard your engine's vital components - the valvetrain, timing chain, pistons, and bearings - from damage and wear.

Castrol MAGNATEC 0W-20 E is full synthetic engine oil suitable for use in automotive petrol vehicles where the manufacturer recommends Ford WSS-M2C954-A1 specification.

Choose non-stop protection from every start. Choose Castrol MAGNATEC.

\* Tested using an industry standard wear test, measured versus relevant industry limit.

### **FEATURES & BENEFITS**

- · Full synthetic engine oil suitable for use in automotive petrol vehicles1
- Forming a resistive barrier between metal contact points in the valvetrain
- Managing abrasive piston deposits, guarding against cylinder liner wear
- Maintaining timing chain tension and engine synchronicity by minimising chain damage and elongation
- · Preserving engine bearings from corrosive wear.

### SPECIFICATION/APPROVALS

Meets Ford WSS-M2C954-A1

Pack Size	20L	205L
Item Code	3440475	3440474
Barcode	9310084036804	9310084036811









### MAGNATEC OW-30 D

(PLEASE REFER TO TRANSITION TABLE)

Castrol MAGNATEC engine oils are specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by re-starting in busy traffic.

Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC OW-30 D is a full synthetic engine oil suitable for use in petrol, diesel (incl. DPF), and hybrid vehicles that require a OW-30 lubricant that meets API SN, ACEA C2, and meets Ford WSSM2C950- A specification.

Castrol MAGNATEC. Non-stop protection from every start.

\* Tested using an industry standard wear test, measured versus relevant industry limit.

### **FEATURES & BENEFITS**

- · Clings to engine parts when the oil drains down
- · Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- Provides increased protection in high and low temperature applications
- · Provides continuous protection for all driving conditions, styles and temperatures
- Full synthetic engine oil suitable for use in automotive petrol, diesel (incl. DPF) and hybrid vehicles¹.

### SPECIFICATIONS/APPROVALS

- ACEA C2
- API SN
- Meets Ford WSS-M2C950-A

Pack Size	5L	20L	205L
Item Code	3440165	3434547	3434546
Barcode	9310084036729	9310084035500	9310084035517









# **MAGNATEC 5W-20**

Castrol MAGNATEC engine oils are specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by re-starting in busy traffic.

Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC 5W-20 is a full synthetic engine oil suitable for use in automotive petrol vehicles where the manufacturer recommends an API SP, ILSAC GF-6 or earlier specification 5W-20 lubricant. Castrol MAGNATEC 5W-20 is approved for use in vehicles where a 5W-20 lubricant that Meets - Ford WSS-M2C960-A1 is required, please refer to your owners handbook.

Castrol MAGNATEC. Non-stop protection from every start.

\* Tested using an industry standard wear test, measured versus relevant industry limit.

### **FEATURES & BENEFITS**

- · Clings to engine parts when the oil drains down
- · Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- Provides increased protection in high and low temperature applications
- · Provides continuous protection for all driving conditions, styles and temperatures
- · Full synthetic engine oil suitable for use in automotive petrol vehicles1.

### SPECIFICATIONS/APPROVALS

- API SP
- · ILSAC GF-6
- Meets Ford WSS-M2C960-A1

Pack Size	20L	205L
Item Code	3429066	3429065
Barcode	9310084033452	9310084033469









### **MAGNATEC 5W-30**

Castrol MAGNATEC engine oils are specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by re-starting in busy traffic.

Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC 5W-30 is a part synthetic engine oil suitable for use in automotive petrol and hybrid vehicles where the manufacturer recommends an API SP, ILSAC GF-6 5W-30 lubricant.

Castrol MAGNATEC 5W-30 is also proven to deliver against Castrol's HYSPEC standard. In doing so it is proven to demonstrate at least 25% benefit^ across the three critical hybrid areas of contaminants, engine intermittency and system efficiency.

Castrol MAGNATEC. Non-stop protection from every start.

### **FEATURES & BENEFITS**

- · Clings to engine parts when the oil drains down
- · Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- · Provides increased protection in high and low temperature applications
- · Provides continuous protection for all driving conditions, styles and temperatures
- · Part synthetic engine oil suitable for use in automotive petrol and hybrid vehicles1.

### SPECIFICATIONS/APPROVALS

- API SP
- · ILSAC GF-6

Pack Size	4L	20L
Item Code	3428803	3428870
Barcode	9310084033353	9310084033414





<sup>\*</sup> Tested using an industry standard wear test, measured versus relevant industry limit.





### **MAGNATEC 5W-30 A**

(PLEASE REFER TO TRANSITION TABLE)

Up to 75% of engine wear happens while your engine warms up. When the engine stops, oils drain off critical engine parts, however Castrol MAGNATEC's Intelligent Molecules don't. They cling to the engine like a magnet providing an extra layer of protection.

Castrol MAGNATEC's formulation protects from the moment you start, dramatically reducing engine wear\*.

Castrol MAGNATEC 5W-30 A is a full synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles where the manufacturer recommends an API SP, ACEA A3/B4 5W-30 lubricant.

Castrol MAGNATEC. Non-stop protection from every start.

- \* Tested using an industry standard wear test, measured versus relevant industry limit.
- ^ Compared to performance minimum requirements set in both industry specification and Castrol bespoke testing across tests applicable to hybrid vehicle types, covering contaminants, engine intermittency and system efficiency.

### **FEATURES & BENEFITS**

- · Clings to engine parts when the oil drains down
- · Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- · Provides increased protection in high and low temperature applications
- · Provides continuous protection for all driving conditions, styles and temperatures
- Full synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- API SP
- ACEA A3/B4

Pack Size	5L
Item Code	3437037
Barcode	9310084035845







## MAGNATEC 5W-30 A5

(PLEASE REFER TO TRANSITION TABLE)

Castrol MAGNATEC engine oils are specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by restarting in busy traffic.

Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC 5W-30 A5 is a full synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles where the manufacturer recommends an ACEA A5/B5, API SP, ILSAC GF-6 or earlier specification 5W-30 lubricant.

Castrol MAGNATEC 5W-30 A5 is approved for use in vehicles where a 5W-30 lubricant that Meets - Ford WSS-M2C913-D is required, please refer to your owners handbook.

Castrol MAGNATEC 5W-30 A5 is also proven to deliver against Castrol's HYSPEC standard. In doing so it is proven to demonstrate at least 25% benefit^ across the three critical hybrid areas of contaminants, engine intermittency and system efficiency.

Castrol MAGNATEC. Non-stop protection from every start.

- \* Tested using an industry standard wear test, measured versus relevant industry limit.
- ^ Compared to performance minimum requirements set in both industry specification and Castrol bespoke testing across tests applicable to hybrid vehicle types, covering contaminants, engine intermittency and system efficiency.

### **FEATURES & BENEFITS**

- · Clings to engine parts when the oil drains down
- · Forms an extra layer that protects your engine during start up and beyond
- Bonds to metal surfaces to make engine parts more resistant to wear
- Provides increased protection in high and low temperature applications
- · Provides continuous protection for all driving conditions, styles and temperatures
- Full synthetic engine oil is suitable for use in automotive petrol and diesel (excl. DPF) vehicles<sup>1</sup>.

### SPECIFICATIONS/APPROVALS

- API SP
- ACEA A5/B5
- ILSAC GF-6
- Meets Ford WSS-M2C913-D

Pack Size	1L	6L	10L	60L	205L
Item Code	3437806	3437807	3437808	3437809	3437810
Barcode	9310084036323	9310084036330	9310084036347	9310084036309	9310084036316









### MAGNATEC 5W-30 DX

(PLEASE REFER TO TRANSITION TABLE)

Castrol MAGNATEC engine oils are specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by re-starting in busy traffic.

Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC 5W-30 DX is a full synthetic engine oil suitable for use in automotive petrol and hybrid vehicles where the manufacturer recommends an API SP, ILSAC GF-6 or earlier specification 5W-30 lubricant.

Castrol MAGNATEC 5W-30 DX is suitable for use for use in vehicles that require a 5W-30 lubricant that Meets Ford WSSM2C946-A/ WSS-M2C946-B1/ WSS-M2C961-A1 and is also approved for use in vehicles that require a dexos1™ Gen 3 specification 5W-30 lubricant.

Castrol MAGNATEC. Non-stop protection from every start.

\* Tested using an industry standard wear test, measured versus relevant industry limit.

### **FEATURES & BENEFITS**

- · Clings to engine parts when the oil drains down
- Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- · Provides increased protection in high and low temperature applications
- · Provides continuous protection for all driving conditions, styles and temperatures
- · Full synthetic engine oil suitable for use in automotive petrol and hybrid vehicles1.

### SPECIFICATIONS/APPROVALS

- API SP
- · ILSAC GF-6
- GM dexos1<sup>™</sup> Gen 3
- Meets Ford WSS-M2C946-A/ WSS-M2C946-B1/ WSS-M2C961-A1

Pack Size	1L	5L	20L	205L
Item Code	3432802	3432803	3433354	3433353
Barcode	9310084035074	9310084035081	9310084035098	9310084035104







### **MAGNATEC 5W-40**

(PLEASE REFER TO TRANSITION TABLE)

Up to 75% of engine wear happens while your engine warms up. When the engine stops oils drain off critical engine parts, however Castrol MAGNATEC's intelligent molecules don't. They cling to the engine like a magnet providing an extra layer of protection.

Castrol MAGNATEC's unique formulation protects from the moment you start, dramatically reducing\* engine wear. Now with ultra-refined molecules, for protection you can see, hear and feel.

Castrol MAGNATEC 5W-40 is a full synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles where the manufacturer recommends an ACEA A3/B4, API SP or earlier specification 5W-40 lubricant.

Castrol MAGNATEC. Instant Protection From The Moment You Start.

### **FEATURES & BENEFITS**

- · Cling to engine parts when the oil drains down
- · Adsorbs to metal surfaces to make engine parts more resistant to wear
- Are combined with synthetic technology to provide increased protection in high and low temperature applications
- · Provide continuous protection for different driving conditions, styles and temperatures
- Full synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- ACEA A3/B4
- API SP.

Pack Size	5L
Item Code	3428779
Barcode	9310084033360



<sup>\*</sup>As tested in the industry Sequence IVA wear test.





## MAGNATEC 5W-40 SN/C3

(PLEASE REFER TO TRANSITION TABLE)

Castrol MAGNATEC engine oils are specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by re-starting in busy traffic.

Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC 5W-40 SN/C3 is a part synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an API SN/CF, ACEA C3 or earlier specification 5W-40 lubricant.

Castrol MAGNATEC 5W-40 SN/C3 delivers superior performance under extreme cold start up conditions relative to thicker grades.

Castrol MAGNATEC. Non-stop protection from every start.

\* Tested using an industry standard wear test, measured versus relevant industry limit.

### **FEATURES & BENEFITS**

- · Clings to engine parts when the oil drains down
- · Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- · Provides increased protection in high and low temperature applications
- Provides continuous protection for all driving conditions, styles and temperatures
- Part synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles<sup>1</sup>.

### SPECIFICATIONS/APPROVALS

- ACEA C3
- API SN/CF
- Meets Fiat 9.55535-S2

Pack Size	205L
Item Code	3436311
Barcode	9310084035678







**COMING Q2 2025** 

# MAGNATEC 5W-40 SP C3

Castrol MAGNATEC has been developed to meet the unique demands of modern driving.

75% of engine wear can happen when we start the ignition. And acceleration, slowing down, and idling journeys in city driving only increase this strain. That means every congested commute, weekend getaway, and shopping trip may increase engine wear.

Castrol MAGNATEC clings like a magnet to critical engine parts and locks in place to deliver 50% better engine wear protection\*. Helping to safeguard your engine's vital components - the valvetrain, timing chain, pistons, and bearings - from damage and wear.

Castrol MAGNATEC 5W-40 SP C3 is a part synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C3, API SP or earlier specification 5W-40 lubricant.

Choose non-stop protection from every start. Choose Castrol MAGNATEC.

\* Tested using an industry standard wear test, measured versus relevant industry limit.

### **FEATURES & BENEFITS**

- · Forming a resistive barrier between metal contact points in the valvetrain
- · Managing abrasive piston deposits, guarding against cylinder liner wear
- Maintaining timing chain tension and engine synchronicity by minimizing chain damage and elongation
- · Preserving engine bearings from corrosive wear
- · Part synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles1.

### SPECIFICATION/APPROVALS

- ACEA C3
- API SP

Pack Size	205L
Item Code	3440365
Barcode	9310084036798







### MAGNATEC 10W-30

(PLEASE REFER TO TRANSITION TABLE)

Castrol MAGNATEC engine oils are specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by re-starting in busy traffic.

Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC 10W-30 is a part synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles where the manufacturer recommends an ACEA A3/B4, API SP or earlier specification 10W-30 lubricant.

Castrol MAGNATEC. Non-stop protection from every start.

\* Tested using an industry standard wear test, measured versus relevant industry limit.

### **FEATURES & BENEFITS**

- · Clings to engine parts when the oil drains down
- · Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- · Provides increased protection in high and low temperature applications
- · Provides continuous protection for all driving conditions, styles and temperatures
- Part synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- API SP
- ACEA A3/B4

Pack Size	1L	4L	60L	205L
Item Code	3436891	3436889	3436888	3436892
Barcode	9310084035777	9310084035784	9310084035807	9310084035814







### **MAGNATEC 10W-40**

Castrol MAGNATEC engine oils are specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by re-starting in busy traffic.

Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC 10W-40 is a part synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles where the manufacturer recommends an ACEA A3/B4, API SP or earlier specification 10W-40 lubricant.

Castrol MAGNATEC. Non-stop protection from every start.

\* Tested using an industry standard wear test, measured versus relevant industry limit.

### **FEATURES & BENEFITS**

- · Clings to engine parts when the oil drains down
- · Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- · Provides increased protection in high and low temperature applications
- · Provides continuous protection for all driving conditions, styles and temperatures
- Part synthetic engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles¹.



API SP
 ACEA A3/B3, A3/B4

Pack Size	1L	4L	6L	10L	205L
Item Code	3437174	3437171	3437175	3437172	3437052
Barcode	9310084035944	9310084035968	9310084035920	9310084035951	9310084035838







# **MAGNATEC SUV 5W-30 C3**

(PLEASE REFER TO TRANSITION TABLE)

SUVs are typically larger and heavier than standard cars. They are popular for their rugged, go-anywhere, do-anything capabilities. But this versatility is nothing without reliability and that's why SUVs need protection from the demands of modern driving. Whether you're driving your SUV loaded with heavy luggage, carrying extra passengers, or making cross-country road trips in snow or rain, these demands force your engine to work harder.

Castrol MAGNATEC SUV is dedicated to preventing engine wear caused by these challenges, even in extreme conditions. It clings to high-temperature oil contaminants and locks to critical SUV engine parts, delivering 50% better heavy load wear protection\*. This helps to safeguard your SUV's crucial engine components, such as the valvetrain, timing chain, pistons and bearings, from damage and wear.

Castrol MAGNATEC SUV 5W-30 C3 is a full synthetic engine oil suitable for use in automotive petrol, diesel (incl. DPF) and hybrid vehicles where the manufacturer recommends an ACEA C2, C3, and API SP or earlier specification 5W-30 lubricant.

Choose non-stop SUV protection from every start. Choose Castrol MAGNATEC SUV.

### **FEATURES & BENEFITS**

- Full synthetic engine oil suitable for use in automotive petrol, diesel (incl. DPF) and hybrid vehicles<sup>1</sup>
- Forms a resistive barrier between metal contact points in the valvetrain even under heavy engine loads
- · Manages abrasive piston deposits, guarding against cylinder liner wear
- Maintains timing chain tension and engine synchronicity by minimising chain damage and elongation
- Preserving engine bearings from corrosive wear.

### SPECIFICATIONS/APPROVALS

· ACEA C2/C3

API SP

Pack Size	1L	5L	7L	10L	20L	205L
Item Code	3420557	3420556	3420388	3423385	3433217	3433218
Barcode	9310084031212	9310084031205	9310084031120	9310084031779	9310084035319	9310084035326

When choosing oil, please refer to your owner's handbook and the product specifications required may also be suitable for other vehicles.





<sup>\*</sup>Tested using an industry standard wear test, measured versus relevant industry limit.





## **MAGNATEC DIESEL DX 5W-40**

From daily commutes to cross-country road trips and casual Sunday drives – when a diesel car runs smoothly, life does too. With excellent efficiency, low-rev pulling power and versatile performance, diesel engines are dependable as long as they're well protected.

Castrol MAGNATEC Diesel contains dedicated diesel technology that clings to soot and locks to critical parts of the diesel engine, delivering 50% better engine wear protection\*. Its excellent soot handling capabilities also prevent oil thickening, ensuring your diesel vehicle is protected to deliver engine efficiency. Plus, it helps safeguard your diesel engine's crucial components - the valvetrain, timing chain, pistons and bearings from damage and wear.

Castrol MAGNATEC Diesel DX 5W-40 is a full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C3, API SN/CF or earlier specification 5W-40 lubricant. Castrol MAGNATEC Diesel DX 5W-40 is approved for use in vehicles that require a GM dexos2™ specification.

Choose non-stop protection from every start. Choose Castrol MAGNATEC Diesel.

### **FEATURES & BENEFITS**

- Full synthetic engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles¹
- Forms a resistive barrier between metal contact points in the valvetrain
- · Manages abrasive piston sooty deposits, quarding against cylinder liner wear
- Maintains timing chain tension and engine synchronicity by minimising chain damage and elongation
- · Preserves engine bearings from corrosive wear.
- \* Tested using an industry standard wear test, measured versus relevant industry limit.

### SPECIFICATIONS/APPROVALS

- API SN/CF
- ACEA C3
- GM dexos<sup>®</sup> 2

Pack Size	1L	5L	10L	205L
Item Code	3383628	3383629	3422230	3415113
Barcode	9310084023613	9310084023620	9310084031533	9310084030147







### **MAGNATEC DIESEL 15W-40**

Castrol MAGNATEC engine oil is specifically engineered for today's urban driving environment and designed to protect engines against the wear caused by re-starting in busy traffic. Castrol MAGNATEC clings like a magnet and locks to protect vulnerable metal surfaces and moving parts in your engine during warm-up, delivering superior protection from engine wear\*.

Castrol MAGNATEC Diesel 15W-40 is a part synthetic engine oil suitable for use in petrol and automotive diesel (excl. DPF) vehicles where the manufacturer recommends an ACEA A3/B4, API SP or earlier specifiction 15W-40 lubricant.

Castrol MAGNATEC. Non-stop protection from every start.

### **FEATURES & BENEFITS**

- Part synthetic engine oil suitable for use in petrol and automotive diesel (excl. DPF) vehicles<sup>1</sup>
- Cings to engine parts when the drains down
- · Forms an extra layer that protects your engine during start up and beyond
- · Bonds to metal surfaces to make engine parts more resistant to wear
- Provides increased protection in high and low temperature applications
- · Provides continuous protection for driving conditions styles and temperatures..
- \* Tested using an industry standard wear test, measured versus relevant industry limit.

### SPECIFICATIONS/APPROVALS

API SP
 ACEA A3/B4

Pack Size	5L	10L
Item Code	3437335	3437334
Barcode	9310084036019	9310084036026





<sup>\*</sup> As tested in the industry Sequence IVA wear test.



Keeps engines cleaner for longer.













THETIC

# Castrol GTX product transitions

At Castrol, we know that keeping things simple is critical for your success. It's one of the reasons we're undertaking one of the biggest updates ever simplifying our portfolio whilst we continue deliver the best products, with latest industry and OEM approvals, whilst eliminating unnecessary complexity.

We appreciate that change can take some getting used to so don't forget that your local Castrol Technical Helpline is only ever a phone call away to ensure you've got the right product for the right application.

OGY

7L . DIESEL

OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
EDGE Professional C4 5W-30	20L	3379809	CTV FW 70 C/	20L	3433322	2023
EDGE Professional C4 5W-30	208L	3413629	GTX 5W-30 C4	205L	3433321	2025
GTX Ultraclean 15W-40	6x1L	3414908		6x1L	3437477	2024
GTX Offracted it 15W-40	3x4L	3414905	GTX 15W-40	3x4L	3437476	
CTV Profession of JEW 40	20L	3372469		20L	3437480	2024
GTX Professional 15W-40	205L	3372468		205L	3437479	
	6x1L	3383439		6x1L	3437070	2024
GTX Diesel 15W-40	3x5L	3383440	GTX Diesel 15W-40	3x5L	3437069	2024
	2x10L	3422391		2x10L	3437068	2024
CTV 20W FO	6x1L	3413898	CTV 2014 FO	6x1L	3413902	2024
GTX 20W-50	3x4L	3413899	- GTX 20W-50	3x4L	3413900	2024







### GTX 5W-30 RN17

Castrol GTX is one of the world's most trusted engine oils. The modern world creates difficult challenges for engines.

Poor fuel quality, heat and frequent short trips can all lead to sludge that potentially shortens engine life. Sludge is a sticky deposit that can block your engine's vital oilways and if untreated it can rob an engine of power and, ultimately, its life.

Castrol GTX with 3X CLEAN formula works to Catch - Control – Clean dirt from engine oilways, keeping your engine cleaner for longer and helping to extend engine life.

Castrol GTX also protects against new sludge formation better than tough industry standards\*.

Castrol GTX 5W-30 RN17 is a mineral engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C3 in 5W-30 lubricant. Castrol GTX 5W-30 RN17 is approved for use in vehicles that require a Renault RN17 specification 5W-30 lubricant.

Help extend the life of your engine with Castrol GTX.

### **FEATURES & BENEFITS**

- Superior cleaning of engine sludge caused by poor fuel quality, heat and frequent short trips
- · Advanced protection against viscosity and thermal breakdown
- · Premium quality base oils and anti wear additives to help extend the life of your engine
- · Helps minimise oil consumption
- · Mineral engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- · ACEA C3
- Renault RN17

Pack Size	20L	205L
Item Code	3428037	3428036
Barcode	9310084032936	9310084032943

<sup>\*</sup> vs. ACEA C3 limits









### GTX 5W-30 C4

(PLEASE REFER TO TRANSITION TABLE)

Castrol GTX is one of the world's most trusted engine oils. The modern world creates difficult challenges for engines.

Poor fuel quality, heat and frequent short trips can all lead to sludge that potentially shortens engine life. Sludge is a sticky deposit that can block your engine's vital oilways and if untreated it can rob an engine of power and, ultimately, its life.

Castrol GTX with 3X CLEAN formula works to Catch - Control – Clean dirt from engine oilways, keeping your engine cleaner for longer and helping to extend engine life.

Castrol GTX also protects against new sludge formation better than tough industry standards\*.

Castrol GTX 5W-30 C4 is a mineral engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles where the manufacturer recommends an ACEA C4 in 5W-30 lubricant. Castrol GTX 5W-30 C4 is approved for use in vehicles that require a Renault RN 0720 approved 5W-30 lubricant and vehicles that require a MB-Approval 226.51 approved 5W-30 lubricant.

Help extend the life of your engine with Castrol GTX.

### **FEATURES & BENEFITS**

- Superior cleaning of engine sludge caused by poor fuel quality, heat and frequent short trips
- · Advanced protection against viscosity and thermal breakdown
- · Premium quality base oils and anti wear additives to help extend the life of your engine
- · Helps minimise oil consumption
- Mineral engine oil suitable for use in automotive petrol and diesel (incl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- · ACEA C4
- MB-Approval 226.51
- Renault RN 0720

Pack Size	20L	205L
Item Code	3433322	3433321
Barcode	9310084035364	9310084035371

<sup>\*</sup> vs. ACEA C4 limits







## GTX 15W-40

Castrol GTX is one of the world's most trusted engine oils. The modern world creates difficult challenges for engines.

Poor fuel quality, heat and frequent short trips can all lead to sludge that potentially shortens engine life. Sludge is a sticky deposit that can block your engine's vital oilways and if untreated it can rob an engine of power and, ultimately, its life.

Castrol GTX with 3X CLEAN formula works to Catch - Control – Clean dirt from engine oilways, keeping your engine cleaner for longer and helping to extend engine life.

Castrol GTX also protects against new sludge formation better than tough industry standards\*.

Castrol GTX 15W-40 is a mineral engine oil suitable for use in automotive petrol, LPG, CNG and diesel (excl. DPF) vehicles where the manufacturer recommends an ACEA A3/B4, API SP or earlier specification 15W-40 lubricant

Help extend the life of your engine with Castrol GTX.

### **FEATURES & BENEFITS**

- Superior cleaning of engine sludge caused by poor fuel quality, heat and frequent short trips
- · Advanced protection against viscosity and thermal breakdown
- Premium quality base oils and anti wear additives to help extend the life of your engine
- · Helps minimise oil consumption
- Mineral engine oil suitable for use in automotive petrol, LPG, CNG and diesel (excl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- ACEA A3/B4
- API SP

Pack Size	1L	4L	20L	205L
Item Code	3437477	3437476	3437480	3437479
Barcode	9310084036149	9310084036156	9310084036170	9310084036187

### \* vs. ACEA C3 limits









### GTX 20W-50

Castrol GTX is one of the world's most trusted engine oils. The modern world creates difficult challenges for engines.

Poor fuel quality, heat and frequent short trips can all lead to sludge that potentially shortens engine life. Sludge is a sticky deposit that can block your engine's vital oilways and if untreated it can rob an engine of power and, ultimately, its life.

Castrol GTX with 3X CLEAN formula works to Catch - Control – Clean dirt from engine oilways, keeping your engine cleaner for longer and helping to extend engine life.

Castrol GTX also protects against new sludge formation better than tough industry standards\*.

Castrol GTX 20W-50 is a mineral engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles where the manufacturer recommends an API SN/CF or earlier specification 20W-50 lubricant.

Help extend the life of your engine with Castrol GTX.

### **FEATURES & BENEFITS**

- Superior cleaning of engine sludge caused by poor fuel quality, heat and frequent short trips
- · Advanced protection against viscosity and thermal breakdown
- · Premium quality base oils and anti wear additives to help extend the life of your engine
- · Helps minimise oil consumption
- Mineral engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

· API SN/CF

Pack Size	1L	4L
Item Code	3413902	3413900
Barcode	9 310084029462	9310084029448

<sup>\*</sup> vs API SN limits









### GTX DIESEL 15W-40

Castrol GTX is one of the world's most trusted engine oils. It's more than just oil. It's liquid engineering that provides extra protection against diesel engine problems, like soot and harsh deposits that your engine faces every day. Why is this important? Because soot and harsh deposits can make your oil thicker, block oil ways, cause wear and decrease performance.

Castrol GTX DIESEL 15W-40 is mineral engine oil suitable for use in automotive petrol, LPG, CNG and diesel (excl. DPF) vehicles where the manufacturer recommends an ACEA A3/B4, API SP or earlier specification 15W-40 lubricant.

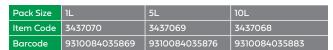
Help extend the life of your engine with Castrol GTX DIESEL.

### **FEATURES & BENEFITS**

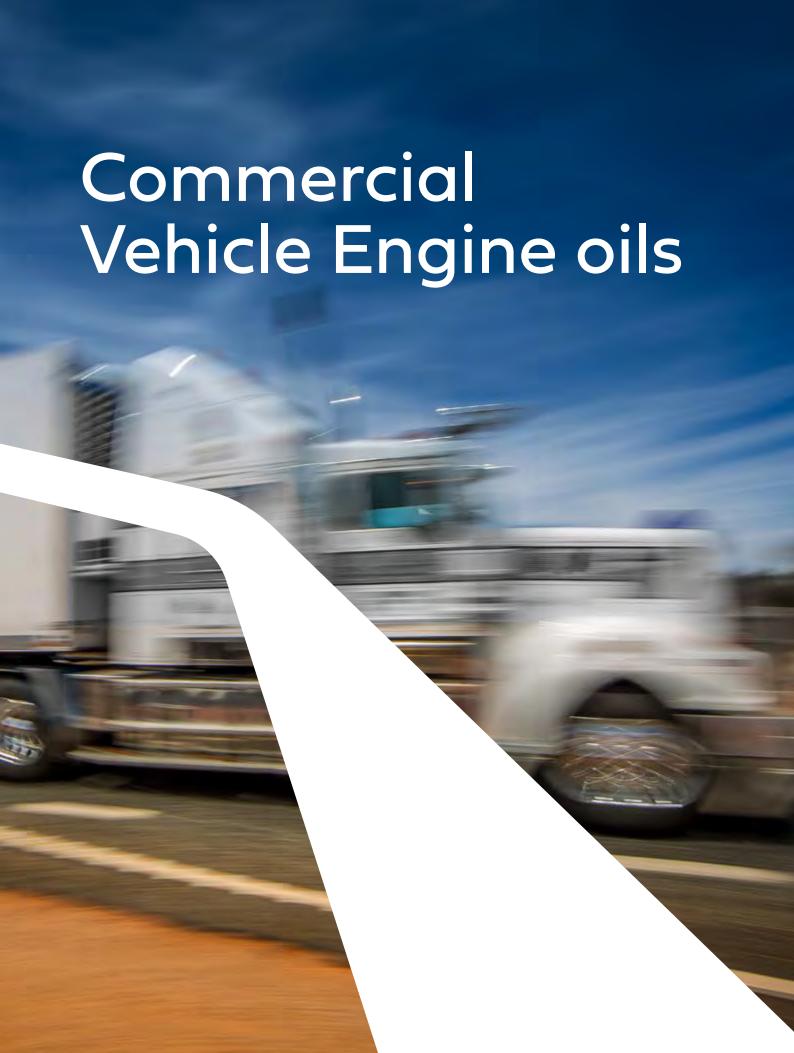
- · Provides superior cleaning power to maintain engine performance
- · Reduces the build-up of harsh deposits
- · Helps prevent oil from thickening to keep it flowing freely
- · Outstanding diesel engines wear protection
- Suitable for inter-cooled, turbo-charged diesel engines
- · Mineral engine oil suitable for use in automotive petrol and diesel (excl. DPF) vehicles¹.

### SPECIFICATIONS/APPROVALS

- API SP
- ACEA A3/B4
- NOT recommended for vehicles fitted with Diesel Particulate Filters or petrol engines with catalytic converters











DESEL 5W-30 14/29

# VECTON FUEL SAVER 5W-30 E6/E9

Castrol VECTON Fuel Saver 5W-30 E6/E9 is a full synthetic low SAPS engine oil formulated with System Pro Technology for use in the latest European diesel engines including Euro VI and engines fitted with DPF.

It also gave up to 1% fuel saving\* in a Euro V engine using the European Transient Cycle test when compared to a modern top tier 15W-40 engine oil.

### **FEATURES & BENEFITS**

Designed for better fuel economy in the latest Euro VI diesel engines. Also suitable for extended service intervals as recommended by many European engine manufacturers, including Mercedes-Benz, and Volvo, and is approved for use in MAN Euro VI engines. It can be used in low emission Euro IV & Euro V European trucks and buses, especially those requiring a low SAPS lubricant and in older on-road and offroad vehicles and equipment that require this performance level.

- · Delivers real world fuel savings without compromising engine protection
- · Fights wear to critical engine components even at low viscosity

208L

3414365

- · Fights piston deposits helping to reduce oil consumption
- · Fights harmful acids which form during engine operation

### SPECIFICATIONS/APPROVALS

- ACEA E6, E7, E8, E9, E11
- API CJ-4
- JASO DH-2
- CAT ECF-3
- Cummins CES 20081
- Deutz DQC IV-10LA
- DTFR 15C100 (MB 228.31), DTFR 15C110 (MB 228.51)
- · Mack EO-M Plus, EO-N Premium Plus, EO-O Premium Plus
- MAN M 3677 Pack Size

- Scania LDF-4
- Volvo CNG, VDS-4
- Meets Ford WSS-M2C213-A1
- Meets requirements of MAN M 3271-1, M 3477
- For Iveco trucks requiring ACEA E6,

•	MTU	Oil	Category	3.1
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RVI RLD-3

E7, E8, E9, E11

Meets DAF PX Euro VI requirements



Item Code 9403044104269 9310084029851 Barcode

<sup>\*</sup> Actual fuel economy depends on the type of vehicle, the driving style and the driving conditions. Results may vary.





# **VECTON LONG DRAIN 10W-40 E6/E9**

Castrol VECTON LONG DRAIN 10W-40 E6/E9 is a full synthetic low SAPS engine oil engineered for extended oil drain in the latest European diesel engines including Euro 6 and engines fitted with DPF, in accordance with OEM specifications.

### **FEATURES & BENEFITS**

- Designed for extended drain in the latest Euro 6 diesel engines. It can also be used in low emission Euro 4 & Euro 5 European trucks and buses, especially those requiring a low SAPS lubricant and in older on-road and off-road vehicles and equipment that require this performance level
- Approved by Mercedes Benz, MAN, Renault, Volvo and Deutz for oil drain up to 100,000 Km2, in accordance with their specifications
- · Oil drain intervals vary based on factors such as engine type, duty cycle and fuel burn\*.

### SPECIFICATIONS/APPROVALS

- ACEA E6, E7, E8, E9, E11
- API CJ-4
- JASO DH-2
- CAT ECF-3
- Cummins CES 20081
- Deutz DQC IV-18 LA
- DTFR15C110 (MB 228.51)
- Mack EO-O Premium Plus, EOS-4.5
- MTU Oil Category 3.1
- RVI RLD-3
- Volvo CNG VDS-4 VDS-4.5
- Meets requirements of MAN M 3271-1, M 3477
- For Iveco trucks requiring ACEA E6, E7, E9 and E11
- · Meets DAF Euro VI requirements

Pack Size	3 X 5L	20L	208L
Item Code	3415495	3437464	3415493
Barcode	9310084030239	9310084036132	9310084030253



<sup>\*</sup>Consult service manuals for recommended oil drain intervals. Extended drains may be possible if done in conjunction with Castrol's Used Oil Analysis (UOA) program and in consultation with Castrol's Technical Services team.

<sup>\*</sup> Refer Castrol PDS.





### **VECTON LONG DRAIN 10W-40 E7**

A heavy duty diesel engine oil designed to allow fleet operators to run their Scania vehicles to maximum oil drain' intervals.

Castrol VECTON LONG DRAIN 10W-40 E7's primary application is for Scania trucks and buses and it is also suitable for use in any vehicle requiring the ACEA E7 level of performance.

Castrol VECTON LONG DRAIN 10W-40 E7 provides exceptional resistance to soot loading, and delivers outstanding performance when you run extended drains, even under severe operating conditions.

### **FEATURES & BENEFITS**

- Maximum oil drain intervals to keep vehicles on the road for longer. Scania have approved Castrol VECTON LONG DRAIN 10W-40 E7 for use at extended oil drain intervals in their latest diesel engines
- · Engine protection, even when soot and other co against all types of engine wear, deposit buildd formulation continues to protect even under th engine life and preventing unscheduled downtime.



- ACEA E4, E7
- API CF

Pack Size

- Deutz DQC III-18
- DTFR 15B120 (MB 228.5)
- Mack EO-N, MAN M 3277

- MTU Oil Category 3
- RVI RLD-2
- Scania LDF-3
- Volvo VDS-3
- Meets DAF requirements

ontaminants are present. It protects
-up and bore-polishing. Its advanced
e most severe conditions, extending
ima





Item Code 3410898 9310084027512 9310084027215

<sup>^</sup>An extended drain interval programme should be undertaken in conjunction with Castrol Technical Service, who can assist with oil sampling frequency and interpretation of oil analysis results. Engage your OEM to understand your equipment's extended drain capability prior to commencing any long drain program.





# **VECTON 15W-40 CK-4/E9**

Castrol VECTON 15W-40 CK-4/E9 is an advanced heavy duty diesel engine, specifically engineered with synthetic technology to deliver longer useful oil life. It is suitable for use in high speed 4-stroke diesel engines with diesel fuels of up to 500ppm sulphur and is compatible with diesel engines fitted with exhaust gas recirculation (EGR) systems. It is also compatible with the latest exhaust after treatment systems such as DPF, DOC and/or SCR when diesel sulphur is limited to 15ppm max.

### **FEATURES & BENEFITS**

Castrol VECTON with System Pro Technology™ delivers up to 45% extra performance reserve\* for longer useful oil life, giving you confidence in your maximum drain interval. All Castrol VECTON products are certified CO2 neutral according to the internationally applicable PAS2060 standard.

Modern trucks use new technologies to make as much as 30% higher torque, but that also brings higher engine temperatures and pressures. This punishes the oil, pushing it closer to breakdown, reducing its useful life. Castrol VECTON's System Pro Technology™ formulated with extra performance reserve fights oil breakdown by:

- · Controlling oxidation and deposits
- · Neutralising harmful acids
- · Maintaining viscosity loss.

Oil drain intervals vary based on factors such as engine type, duty cycle and fuel burn. System Pro Technology™ also adapts to increased temperatures resisting viscosity loss through thermal and mechanical shear. All of this means longer useful oil life giving you the confidence in your maximum drain interval.

\*Compared to API and ACEA industry requirements and based on tests conducted on 81% of the Castrol VECTON range by volume using 12 months sales up to March 2017.

### SPECIFICATIONS/APPROVALS

- ACEA E9, E11
- API CK-4
- JASO DH-2
- CAT ECF-3
- · Cummins CES 20086
- DDC DFS 93K222
- Deutz DQC III-18 LA

- DTFR 15C100 (MB 228.31)
- Mack EOS-4.5
- MAN M 3775
- MTU Oil Category 2.1
- RVI RLD-3
- Volvo VDS-4.5
- Meets Ford WSS-M2C171-F1

Pack Size	3x5L	20L	205L	1000L
Item Code	3415966	3419919	3419920	3419918
Barcode	9310084030314	9310084021800	9310084021817	9310084021824







# VECTON 15W-40 CI-4 PLUS/SL/E7

Castrol VECTON 15W-40 CI-4 Plus/SL/E7 is an advanced mineral heavy duty diesel engine oil that is specifically engineered to deliver longer useful oil life. It is suitable for use in high speed 4-stroke diesel engines that use a broad range of fuel qualities. It is also compatible with diesels engines fitted with exhaust gas recirculation (EGR) systems.

### **FEATURES & BENEFITS**

Castrol VECTON 15W-40 CI-4 Plus/SL/E7 with System Pro Technology™ delivers up to 45% extra performance reserve\* that fights oil breakdown and also adapts to higher temperatures for longer useful oil life, giving you confidence in your maximum drain interval.

Castrol VECTON's System Pro Technology™ formulated with extra performance reserve fights oil breakdown by:

- Combination oxidation and deposits
- Neutralising harmful acids
- Maintaining viscosity

### SPECIFICATIONS/APPROVALS

- ACEA E7
- API CI-4 PLUS/SL
- · CAT ECF-2
- Cummins CES 20078
- DDC Powerguard 93K214
- Deutz DQC III-18
- DTFR 15B110

- MB-Approval 228.3
- MTU Oil Category 2
- Volvo VDS 3

•	Mack	EO-N	Premium	Plus
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- **RVI RLD-2**
- Meets the requirements of MAN M3275-1



Pack Size 3420638 Item Code 3420636 9403044104504 9403044104443

<sup>\*</sup>Compared to API and ACEA industry requirements and based on tests conducted on 81% of the Castrol VECTON range by volume using 12 months sales up to March 2017.





### **RX MONO 30 CF**

Castrol RX MONO 30 CF is a diesel engine oil designed for use in heavy duty diesel engines, hydraulic systems and transmissions that specify the use of monograde diesel engine oil.

### **FEATURES & BENEFITS**

During its working life, your engine faces challenges from combustion by-products that can form deposits, and thicken the oil. Castrol RX MONO 30 CF combats these issues in two ways:

- It contains cleaning agents which displace particles that may otherwise build up on your engine surfaces reducing deposits
- It also contains anti-oxidants which disrupt the chemical reactions that can lead to oil thickening.

Castrol RX MONO 30 CF provides protection across multiple applications to encourage long and healthy engine life.

### SPECIFICATIONS/APPROVALS

API CF/SF

Pack Size	20L	205L
Item Code	3416718	3416720
Barcode	9310084032820	9310084030413



# **RX MONO 40 CF**

Castrol RX MONO 40 CF is a diesel engine oil designed for use in heavy duty diesel engines, hydraulic systems and transmissions that specify the use of monograde diesel engine oil.

### FEATURES & BENEFITS

During its working life, your engine faces challenges from combustion by-products that can form deposits, and thicken the oil. Castrol RX MONO 40 CF combats these issues in two ways:

- It contains cleaning agents which displace particles that may otherwise build up on your engine surfaces reducing deposits
- It also contains anti-oxidants which disrupt the chemical reactions that can lead to oil thickening.

Castrol RX MONO 40 CF provides protection across multiple applications to encourage long and healthy engine life.

### SPECIFICATIONS/APPROVALS

API CF/SF

Pack Size	20L	205L
Item Code	3425563	3416774
Barcode	9310084032660	9310084030437









Castrol Agricultural product transitions

At Castrol, we know that keeping things simple is critical for your success. It's one of the reasons we're undertaking one of the biggest updates ever simplifying our portfolio whilst we continue deliver the best products, with latest industry and OEM approvals, whilst eliminating unnecessary complexity.

We appreciate that change can take some getting used to so don't forget that your local Castrol Technical Helpline is only ever a phone call away to ensure you've got the right product for the right application.

OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
	Agri Trans Plus 20W-30 20L 3362250 205L 3362251	3362250	TRANSMAX Agri AS Trans Plus	20L	3430975	2027
Agri Trans Plus 20W-30		3362251	20W-30	205L	3430974	2023
TRANSMAYA :T BL COM	20L	3431148	TRANSMANA :T BL COM	20L	3431044	2024
TRANSMAX Agri Trans Plus 80W	205L	3431149	TRANSMAX Agri Trans Plus 80W	205L	3431045	2023

# AGRICULTURAL PRODUCTS



### TRANSMAX AGRI AS TRANS PLUS 20W-30

Castrol Transmax Agri AS Trans Plus 20W-30 is a universal, wet brake transmission/hydraulic fluid designed to satisfy the various requirements of most tractor and farm machinery manufacturers. The AS (anti-squawk) characteristics of the formulation help to minimise the effect of wet brake chatter.

### **FEATURES & BENEFITS**

- · One oil reduces inventory and saves money.
- · One oil simplifies servicing and avoids misapplication.
- · Formulated to minimise wet brake chatter and improve brake efficiency.

3430974

 Provides outstanding gear wear protection and bearing durability extending component life.

### SPECIFICATIONS/APPROVALS

3430975

API GL-4

Pack Size Item Code

 Meets - MFM1135, FORD ESN-M2C-86B  Can be used where NH 420A is specified.

•	Can be used specified.



# TRANSMAX AGRI MP PLUS 20W-40

Castrol TRANSMAX Agri MP Plus 20W-40 is a multi-purpose oil suitable for use in a wide range of applications on the farm. It has been developed specifically to deliver performance and protection for engines, transmissions, wet brakes, hydraulics and front axles.

### **FEATURES & BENEFITS**

- · One oil simplifies servicing, avoids misapplication
- · One oil reduces inventory, saves money
- · Improved wear protection in latest generation diesel engines
- Enhanced soot handling performance.

### SPECIFICATIONS/APPROVALS

- · API GL-4
- · API CE/SF

Pack Size	20L	205L
Item Code	3430997	3430996
Barcode	9310084034534	9310084034541





# AGRICULTURAL PRODUCTS



### TRANSMAX AGRI TRANS PLUS 80W

(PLEASE REFER TO TRANSITION TABLE)

Castrol TRANSMAX Agri Trans Plus 80W can be used in hydraulic, transmission and PTO of tractors and off-highway equipment. It gives high levels of wear prevention from start up and throughout the operative period with enhanced corrosion protection properties.

Castrol TRANSMAX Agri Trans Plus 80W is also suitable for hydraulic/transmission systems which require SAE 10W-30 lubricant.

### **FEATURES & BENEFITS**

- · Outstanding gear wear protection and bearing durability to extend component life
- SAE 10W-30 viscosity rating which is beneficial for cold start-up hydraulic performance
- Suitable for separate hydraulic systems where SAE 15W, 20W or 10W-30 fluids are specified, this allows for product rationalisation and inventory opportunities.

### SPECIFICATIONS/APPROVALS

- API GL-4
- Massey Fergusson M1145
- Volvo Transmission Oil 97303:053 (WB 101)
- · ZF TE-ML 03E, 05F, 17E, 21F
- Meets Ford M2C134-D, Ford M2C86-B, NewHolland NH410B, John Deere JDM J20C, Valtra G2-08
- Suitable for use where Case 1207, 1209, MAT 3505, MAT 3525, MAT 3540, are specified.
- Suitable for use in S-Matic CVT and RC-shift transmissions.
- Suitable for use where Kubota UDT is required.



Pack Size	20L	205L
Item Code	3431044	3431045
Barcode	9310084034732	9310084034749







Castrol Automatic Transmissions Fluids product transitions

At Castrol, we know that keeping things simple is critical for your success. It's one of the reasons we're undertaking one of the biggest updates ever simplifying our portfolio whilst we continue deliver the best products, with latest industry and OEM approvals, whilst eliminating unnecessary complexity.

We appreciate that change can take some getting used to so don't forget that your local Castrol Technical Helpline is only ever a phone call away to ensure you've got the right product for the right application.

OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
	6x1L	3381100		6x1L	3428484	
	3x4L	3381101		3x4L	3428483	
ATF Dex III	20L	3371179	TRANSMAX ATF Dex/Merc  Multivehicle	20L	3429062	2023
	60L	3371178	Totalvernale	60L	3429064	
	205L	3371177		205L	3429063	
TDANISMAN 7	20L	3337266	TDANIGNAN ATE 7	20L	3430516	2023
TRANSMAX Z	205L	4101035	TRANSMAX ATF Z	205L	3430515	
	6x1L	3371182	TRANSMAX ATF DEXRON®-VI MERCON® LV Multivehicle	6x1L	3428859	
TRANSMANNA III. II. I	3x4L	3371183		3x4L	3428860	
TRANSMAX Multivehicle	20L	3371184		20L	3430696	
	205L	3371186		205L	3428861	
Power Steering Fluid	6x500ML	3381662	TRANSMAX Power Steering Fluid	6x500ML	3429283	2023
	3x4L	3381017		3x4L	3428860	2023
TRANSMAX DEXRON®-VI MERCON® LV	20L	3381015	TRANSMAX ATF DEXRON®-VI MERCON® LV Multivehicle	20L	3430696	
	205L	3381016		205L	3428861	
TRANSMAX DUAL	20L	3380380	TRANSMAX DUAL Multivehicle	20L	3439145	Apr-25
TRANSYND 668	208L	3430858	TRANSYND 668	205L	3433245	Jun-25





#### TRANSMAX ATF HEAVY DUTY

Castrol Transmax ATF Heavy Duty is an Automatic Transmission Fluid designed for heavy duty applications. It is approved against Allison TES 389 and is suitable for use in all Allison Heavy Duty Automatic Transmissions.

#### **FEATURES & BENEFITS**

 Formulated to provide optimized seal compatibility meeting Allison TES 389 requirements.

#### SPECIFICATIONS/APPROVALS

- Volvo 97341
- · Allison TES 389
- Meets Volvo 97340

- · Meets GM DEXRON® -IIIH
- Meets Ford MERCON®

Pack Size	20L	60L	205L
Item Code	3430536	3430538	3430537
Barcode	9310084034206	9310084034213	9310084034220



### TRANSMAX ATF DEX/MERC MULTIVEHICLE

Castrol TRANSMAX ATF Dex/Merc Multivehicle is recommended for use in GM and Ford vehicles requiring Dexron III or Mercon fluids and the automatic transmissions of a wide range of Japanese cars, light commercial vehicles, and SUVs. Additionally, it is suitable for use in most European passenger cars requiring a Dexron III/Mercon fluid.

#### **FEATURES & BENEFITS**

- · Enhanced friction durability prolongs transmission life and promotes smooth shifting
- · Increased resistance to oil oxidation and degradation
- · Increased clutch band and clutch pack capacity
- · Improved protection of copper and bronze components.

- Meets Dexron®-IIIH, Mercon®
- Suitable for use as Power steering fluid
- Suitable for use where Allison C4 is required
- Suitable for use where JASO 1A(03)
   JASO 1A LV(13) is required including:
  - Toyota T III, T IV, WS
  - Mitsubishi SP II, IIM, III, IV, PA, J3
  - Mazda ATF M-III, M-V, FZ
  - Honda/Acura DW 1/Z 1

- Nissan Matic D, J, S
- JWS 3314/3317/ 3309
- Suzuki AT Oil 5D06, 2384K
- Isuzu
- Subaru F6
- Red 1
- Daihatsu AMMIX ATF D-III Multi, D3-SP
- Hyundai/Kia SP III, SP IV



Pack Size	6 x 1L	3 x 4L	20L	60L	205L
Item Code	3428484	3428483	3429062	3429064	3429063
Barcode	9403044104276	9403044104283	9310084033544	9310084033551	9310084033568





#### TRANSMAX POWER STEERING FLUID

Castrol TRANSMAX Power Steering Fluid may be used in power steering units of many types of vehicles where DEXRON®-IIIH, DEXRON®-IID, MERCON®, or JASO-1A type performance is required.

#### **FEATURES & BENEFITS**

· Efficient operation of power steering units in all conditions.

- Meets GM DEXRON®-IIIH
- Meets Ford MERCON®
- · Suitable for use where JASO 1A(03), JASO 1A LV(13) is required including:
  - Toyota T III, T IV, WS,
  - Mitsubishi SP II, IIM, III, IV, PA, J3,
  - Mazda ATF M-III, M-V, FZ,
  - Honda/Acura DW 1/Z 1,
  - Nissan Matic D, J, S,
  - JWS 3314/3317/ 3309,

  - Suzuki AT Oil 5D06, 2384K,
  - Isuzu
  - Subaru F6,
  - Red 1,
  - Daihatsu AMMIX ATF D-III Multi, D3-SP,
  - Hyundai/Kia SP III, SP IV
- Suitable for use as power steering fluid.

Pack Size	6 x 500ML
Item Code	3429283
Barcode	9310084033629







#### TRANSMAX OFFROAD 10W

Castrol TRANSMAX Offroad 10W is designed for use in powershift transmissions, direct drive transmissions, wet disc brakes, final drives and differentials in off road machinery where Caterpillar TO-4 is required. It is approved against ZF TE ML 03C and is recommended for use in Komatsu off road machinery drivetrain and hydraulics.

#### **FEATURES & BENEFITS**

- Good oxidation stability maintains high temperature performance and transmission cleanliness during service life
- · Stable friction characteristics eliminate slippage and reduce brake noise
- Excellent friction performance with a wide range of friction materials ensures smooth positive changes and enhanced friction material durability
- · Improved wear performance extends component life.

#### SPECIFICATIONS/APPROVALS

- Approved ZF TE-ML 03C
- Meets CAT TO-4
- · Recommended for use in Komatsu Equipment.

Pack Size	20L	205L	1000L
Item Code	3381936	3381937	3427751
Barcode	9403044104290	9403044104306	9310084032950



#### **TRANSMAX OFFROAD 30**

Castrol TRANSMAX OFFROAD 30 is designed for use in powershift transmissions, direct drive transmissions, wet disc brakes, final drives and differentials in off road machinery where Caterpillar TO-4 is required. This product is also approved for use where ZF TE ML 03C and 07F are required and recommended for use in Komatsu off-road machinery drivetrain and hydraulics as well as the now obsolete Allison C-4 applications.

#### **FEATURES & BENEFITS**

- Excellent oxidation stability maintains high temperature performance and transmission cleanliness during service life
- · Stable friction characteristics eliminate slippage and reduce brake noise
- Excellent friction performance with a wide range of friction materials ensures smooth positive changes and enhanced friction material durability
- · Improved wear performance extends component life.

- ZF TE-ML 03C, 07F
- Meets CAT TO-4
- · Recommended for use in Komatsu Equipment
- · Recommended for use where Allison C4 is required.

Pack Size	20L	205L	1000L
Item Code	3382109	3427811	3427809
Barcode	9403044104313	9310084033025	9310084032998







#### TRANSMAX OFFROAD 50

Castrol TRANSMAX Offroad 50 is designed for use in powershift transmissions, direct drive transmissions, wet disc brakes, final drives and differentials in off road machinery where Caterpillar TO-4 is required, and recommended for use in Komatsu off-road machinery drivetrain and hydraulics. It is also suited to severe operating conditions such as mining.

#### **FEATURES & BENEFITS**

- Excellent oxidation stability maintains high temperature performance and transmission cleanliness during service life
- · Stable friction characteristics eliminate slippage and reduce brake noise
- Excellent friction performance with a wide range of friction materials ensures smooth positive changes and enhanced friction material durability
- · Improved wear performance extends component life
- · Suitable for mining and off-highway applications.

#### SPECIFICATIONS/APPROVALS

- Meets CAT TO-4
- · Recommended for use in Komatsu Equipment

Pack Size	20L	205L
Item Code	3382107	3382108
Barcode	9403044104337	9403044104344



#### TRANSMAX OFFROAD 60

Castrol TRANSMAX Offroad 60 is a transmission lubricant using highly refined mineral oil, designed for use in powershift transmissions, direct drive transmissions, wet disc brakes, final drives and differentials in off road machinery. It is also suited to severe operating conditions such as mining.

#### FEATURES & BENEFITS

- Excellent oxidation stability maintains high temperature performance and transmission cleanliness during service life
- Stable friction characteristics eliminate slippage and reduce brake noise
- Excellent friction performance with a wide range of friction materials ensures smooth positive changes and enhanced friction material durability
- Improved wear performance extends component life
- Suitable for mining and Off-Highway applications.

#### SPECIFICATIONS/APPROVALS

Suitable for use where: CAT TO-4 is required.

Pack Size	205L
Item Code	3427669
Barcode	9310084033094









#### TRANSMAX CVT

Fully synthetic fluid recommended for use in push belt continuous variable transmissions (CVT) of most Japanese passenger cars.

#### **FEATURES & BENEFITS**

- · Exceptional steel on steel friction durability maintains transmission performance
- Good gear wear protection prolongs the performance and life of the transmission
- High shear stability and enhanced antifoaming and air release characteristics maintain effective lubrication.

#### SPECIFICATIONS/APPROVALS

- · For most Japanese cars with CVT
- · Also Hyundai, Kia, Chrysler, Mini, Ford, Mercedes Benz

Pack Size	3x4L (from Apr-25)	20L
Item Code	3440301	3425325
Barcode	9310084036750	9310084032516

<sup>\*</sup> Refer to the PDS for the full list of specifications



#### TRANSMAX ATF DEXRON®-VI MERCON® LV MULTIVEHICLE

Castrol TRANSMAX ATF DEXRON®-VI MERCON® LV Multivehicle, formulated with Smooth Drive Technology™, is a Full Synthetic Technology formulation designed for modern automatic transmissions. Its superior technology enables longer transmission life. Castrol TRANSMAX ATF DEXRON®- VI MERCON® LV Multivehicle is approved and licensed by GM and Ford for use in vehicles requiring their latest ATF specifications and also exceeds the requirements of the JASO-1A for use in most Asian automatic transmissions.

Castrol TRANSMAX ATF DEXRON®-VI MERCON® LV Multivehicle is also suitable for use in the majority of 6,7,8 and 9 speed automatics of European cars. It delivers enhanced protection and a smoother drive for longer.

#### **FEATURES & BENEFITS**

- OEM approved and licensed by Ford (MERCON®LV) and GM (DEXRON®-VI)
- · Low viscosity formula for maximum fuel efficiency in modern automatic transmissions
- · Enhanced friction durability for smooth transmission performance
- Superior high temperature protection to effectively resist oxidation.

- Meets GM DEXRON® VI
- Meets Ford MERCON® LV
- Suitable for use where JASO 1A(03), JASO 1A LV(13) is required including:
  - Toyota T III, T IV, WS
  - Mitsubishi SP II, IIM, III, IV
  - PA, J3
  - Mazda ATF M-III, M-V, FZ
  - Honda/Acura DW 1/Z 1
  - Nissan Matic D, J, S
  - JWS 3314/3317/3309

- Suzuki AT Oil 5D06, 2384KIsuzu
- Subaru F6, Red 1
- Daihatsu AMMIX ATF D-III
- Multi D3-SP
- Hyundai/Kia SP III, SP IV
- Also suitable for use in 6-speed automatics from Audi BMW, Mini-Cooper, Jaguar, Peugeot/Citroen, Saab, Volvo, VW, Porsche and all vehicles where Dexron III or Mercon SP is required.

Pack Size	1L	3x4L	20L	205L
Item Code	3428859	3428860	3430696	3428861
Barcode	9310084033575	9310084033582	9310084034312	9310084034336

<sup>\*</sup> Refer to the PDS for the full list of specifications







#### TRANSMAX DUAL

(PLEASE REFER TO TRANSITION TABLE)

Full synthetic transmission fluid developed for the latest Dual Clutch transmission technology.

#### **FEATURES & BENEFITS**

- Excellent synchroniser and clutch performance due to balanced frictional characterisitics
- · Excellent thermal and oxidation stability
- Exceptional cold flow properties
- · Operating temperature reduction through reduced friction
- · Very good extreme pressure (EP) anti-pitting behaviour
- · High shear resistance constant viscosity during oil life
- · Good seal compatibility.

- Audi / VW TL 52529 (G 052 529)
- · Suitable for use in the following:
  - Audi / VW TL 52182 (G 052 182), Seat
  - Chrysler (Europe)
  - Ford WSS-M2C936-A (Dual Clutch)
  - Mitsubishi dual clutch including Dia Queen SSTF-1
  - Peugeot using Getrag DCT, PSA Transmission oil 9734 52
  - Skoda 6-speed Dual Clutch Transmission (DSG) (DQ250)
  - Volvo Dual Clutch Transmission.

Pack Size	20L
Item Code	3380380
Barcode	9310084022050







#### VP R N D

#### **COMING Q2 2025**

#### TRANSMAX DUAL MULTIVEHICLE

Castrol Transmax Dual Multivehicle is a full synthetic dual clutch transmission fluid, suitable for use in the majority of dual clutch transmissions.

#### **FEATURES & BENEFITS**

- · Enhanced friction durability for smooth transmission performance
- · Improved wear protection to provide longer component life
- · Excellent thermal and oxidative stability to effectively resist oxidation
- Excellent synchroniser and clutch performance due to balanced frictional characteristics
- High shear resistance constant viscosity during oil life Proven performance in field trials.



Suitable for the majority of DCT service fill applications, and is suitable for use in the following applications, or where these specifications or fluid references are required:

- BMW Drivelogic 7-speed (Getrag), DCTF-1, DCTF-1+, DCTF-2, 6-speed DCT, MTF LT-5
- Borg Warner
- Bugatti Veyron
- BYD DCTs, Q/BYD-A1909.0058-2013
- Castrol BOT 341
- · Castrol BOT 351 C4
- · Castrol BOT 450
- · Changan DCTF
- Chrysler 68044345EA/GA, Powershift 6-speed (Getrag)
- · Eaton PS-278
- Ferrari 7-speed (Getrag), TF DCT-3
- Fiat 9.55550-HE2, 9.55550-MZ6

Pack Size	20L
Item Code	3439145
Barcode	9310084036583

- Ford/Nissan Powershift 6-speed (GFT)
- Ford WSS-M2C936-A, WSS-M2C200-D2/XT-11-QDC, WSS-M2C218-A1, KU7J M2C218AA, Ford F-DC, 1490763/1490761
- · Geely 7 speed
- · Great Wall DCT
- Jaguar/Land Rover GX73-M1R564-AA
- MB 236.21, 236.22, 236.24, 236.25, 239.21
- Mitsubishi TC-SST 6-speed (GFT), MZ320065, DiaQueen SSTF-1
- · Pentosin FFL-2, FFL-3, FFL-7A
- Porsche 999.917.080.01, ZF/Porsche 999.917.080.00, PDK DCT Transmission Oil for ZF

 PSA (Peugeot/Citroen) DCS 6-speed (GFT), 9734.S2

0

Renault EDC 6-speed (Getrag), EDC-7, DC4, DW5, DW6

Castrol

MULTIVEHICLE

- Renault EDC 6-speed (Getrag), EDC-7, DC4, DW5, DW6Shell TF DCT-F3
- Volvo Powershift 6-speed (GFT), 1161838, 1161839, D1, D2, 7DCTH
- · VW (Audi, Seat, Skoda) 6-speed
- VW/Audi G 052 182, G 052 512, G 052 529/DSG7/S-Tronic 7, G 055 529
- VW Golf GTE DQ400E







#### TRANSMAX ATF Z

Castrol TRANSMAX ATF Z, formulated with Smooth Drive Technology™, is a full synthetic automatic transmission fluid. It can solve shiftability problems in automatic transmissions, enabling longer transmission life.

Castrol TRANSMAX ATF Z is recommended for use in automatic and semi-automatic transmissions used in cars, buses and coaches. As such, it is recommended for fleets employing a mixture of Voith, Renk, ZF, Allison and MB transmissions alongside the Leyland Pneumocyclic and Hydracyclic units. Extended oil drain [120,000 km] in ZF Ecomat and EcoLife, MB AT and Voith AT. TRANSMAX ATF Z, formulated with Smooth Drive Technology™, delivers enhanced protection and gives drivers a smoother drive for longer.

#### **FEATURES & BENEFITS**

- · Enhanced friction durability for smooth transmission performance
- Enhanced wear protection to provide longer component life offers extended drain potential and lowers operating costs
- Excellent thermal and oxidative stability to effectively resist oxidation and maintains operational efficiency for longer
- · Enhanced protection against deposits extends transmission life
- Temperature reduction in severe service improves transmission and oil service life and helps reduce fuel consumption and emissions
- Outstanding cold flow properties giving high protection to transmission especially at start-up
- A problem-solver for gear shiftability issues with over 15 years of trouble-free field performance.

- JASO 1A(03)
- · DTFR 13C160 (MB 236.81)
- MAN 339 V2, Z3, Z12
- Voith H55.6336.xx
- VW/Audi 501 60
- ZF TE-ML 04D, 11B, 14C, 16M, 16S, 20C,
- Suitable for use where the following are called for:
  - Toyota T, T II, T III, T IV, WS
  - Nissan Matic D, J, S
  - Mitsubishi SP II, IIM, III, PA, J3, SP IV
  - Mazda ATF M-III, M-V, JWS 3317, FZ
  - Subaru F6, Red 1
  - Daihatsu AMMIX ATF D-III Multi, D3-SP
  - Suzuki AT Oil 5D06, 2384K
  - JWS 3314, 3317
  - Hyundai/Kia SP III, SP IV

- Aisin Transmissions requiring JWS 3309
- Honda/Acura DW 1/Z1
- Isuzu (where Toyota T-IV is required)
- BMW, VW, Audi and Jaguar 5 speed automatic transmission and MB 4 and 5 speed automatic transmissions.
- BMW Oil No. 8322.9407807
- Citroen Oil No. Z 000169756
- Jaguar Oil No. JLM 20238, LA 2634, LT 71141
- Mercedes Benz Oil No. 0019892203, MB 236.1, 236.6, 236.7, 236.9, 236.10
- Peugeot Oil No. Z 000169756
- Porsche Oil No. 999.917.547.00
- VW / Audi TL 52162 (G 052 162)
- ZF Lifeguardfluid 5.

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Pack Size	20L	205L
Item Code	3430516	3430515
Barcode	9310084034299	9310084034305







#### **TRANSYND 668**

Castrol TranSynd 668 is a premium, full-synthetic automatic transmission fluid specifically formulated for Allison Transmission® on-highway automatic transmissions. Castrol TranSynd 668 provides oxidative stability, anti-wear performance, and friction durability, as well as TES 668™ specification differentiators such as extended anti-shudder durability and extended clutch friction durability. The TES 668™ spec is fully backwards compatible with both Allison TES 295® and TES 468™ applications.

#### **FEATURES & BENEFITS**

- Delivers improved gear protection
- · Excellent corrosion and foaming resistance
- Excellent transmission cleanliness under all conditions permits extended oildrain intervals and decreased servicing
- Excellent temperature reduction through reduced friction leads to longer oil and component life
- Outstanding cold-flow properties enables faster oil flow to all critical components particularly during cold starts.

- Allison® TES 668™
- Backwards compatible with both Allison TES 295<sup>®</sup> and TES 468<sup>™</sup>
- Voith H55.6335.xx

- · Volvo Transmission Oil 97341
- MAN 339 V1
- DTFR 13C190 (MB 236.92).

Pack Size	20L	205L (from June '25)	208L
Item Code	3430859	3433245	3430858
Barcode	9310084034350	9310084035395	9310084034367







product transitions

At Castrol, we know that keeping things simple is critical for your success. It's one of the reasons we're undertaking one of the biggest updates ever simplifying our portfolio whilst we continue deliver the best products, with latest industry and OEM approvals, whilst eliminating unnecessary complexity.

We appreciate that change can take some getting used to so don't forget that your local Castrol Technical Helpline is only ever a phone call away to ensure you've got the right product for the right application.

OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING	
	6x1L	3375404		6x1L	6x1L 3429279		
	3x4L	3375405		3x4L	3429280		
Axle EPX 80W-90	20L	3375406	TRANSMAX Axle EPX 80W-90	20L	3430290		
	60L	3375407		60L	3430292		
	205L	3375408		205L	3430291		
	3x4L	3377666		3x4L	3430296	-	
Axle Limited Slip 85W-140	60L	3372762	TRANSMAX Limited Slip 85W-140	60L	3430300	300 2023	
	205L	3372761		205L	3430299		
	3x4L	3376743		3x4L	3428023		
	20L	3376744		20L	3431245	-	
Axle Limited Slip 90	60L	3376745	TRANSMAX Limited Slip 80W-90	60L	3431247		
	205L	3376746		205L	3431246	-	
Axle Long Drain 80W-90	20L	3372756	TRANSMAX Axle Long Life 75W-90	20L	3429945	-	
	6x1L	3378345		6x1L	3431007	2023	
Syntrax 80W-140	20L	3375576	TRANSMAX Limited Slip 80W-140	20L	3431006		
	6x1L	3377738		6x1L	3430282	2027	
Syntrax Universal Plus 75W-90	20L	3373869	TRANSMAX Universal LL 75W-90	20L	3430280	2023	
	205L	3373870		205L	3430281		





#### TRANSMAX AXLE AP 85W-140

Castrol TRANSMAX Axle AP 85W-140 is a multipurpose gear oil for use in most trucks, LCV, and passenger cars' conventional differentials, non synchronized manual transmissions, and steering gears where API GL-5 performance is required. It is not recommended for Eaton, Spicer, Renault, or Rockwell transmissions as those manufacturers prefer non-EP transmission oils.

#### **FEATURES & BENEFITS**

- · Formulated for high thermal stability, reducing oxidation and deposits
- Excellent wear protection prolongs component life.

#### SPECIFICATIONS/APPROVALS

· API GL-5/MT-1

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SAE J2360

ArvinMeritor O76-A

Pack Size	20L	205L
Item Code	3430302	3430303
Barcode	9310084033933	9310084033957



#### TRANSMAX AXLE EPX 80W-90

Castrol TRANSMAX Axle EPX 80W-90 is a multipurpose axle oil which may be used in differentials, final drives and other applications in passenger cars and commercial vehicles where API GL-5 performance is required. It is approved by MAN and ZF for use in a range of commercial applications including axles in off-road and agricultural equipment.

#### **FEATURES & BENEFITS**

- High load carrying capability ensures gears operating under high loads are protected, prolonging component life
- · High film strength ensures protection against wear and shock loads
- Good thermal/oxidation stability protects against the formation of deposits and oil thickening, prolonging the life of components and lubricant.

- API GL-5
- MAN 342 Type M2
- ZF TE-ML O5A, 12E, 16B, 17B, 19B, 21A

Pack Size	6x1L	3x4L	20L	60L	205L
Item Code	3429279	3429280	3430290	3430292	3430291
Barcode	9310084033636	9310084033643	9310084033896	9310084033902	9310084033919







#### TRANSMAX LIMITED SLIP 80W-90

Castrol TRANSMAX Limited Slip 80W-90 is a mineral gear oil that is suitable for use in limited slip differentials in cars and commercial vehicles where API GL-5 oils with specific limited slip friction performance is required. It can also be used in conventional differentials.

#### **FEATURES & BENEFITS**

- Optimised and stable friction characteristics for effective operation of limited slip differentials throughout the drain interval
- Friction modified providing desired frictional characteristics required by the clutches in the limited slip differential
- Very good anti-wear and load carrying performance even under high load conditions prolongs component life
- · High film strength providing protection against wear
- · Thermally stable additive chemistry less sludge and cleaner gears
- · Anti-weld high tooth loadings can be tolerated.

#### SPECIFICATIONS/APPROVALS

API GL-5

· Limited Slip Performance

Pack Size	3x4L	20L	60L	205L
Item Code	3428023	3431245	3431247	3431246
Barcode	9310084033308	9310084034800	9310084034817	9310084034824

# TRANSMAX LIMITED SLIP 85W-140

Castrol TRANSMAX Limited Slip 85W-140 is a mineral based gear oil which is suitable for use in limited slip differentials in cars and commercial vehicles where API GL-5 performance is required. It is also suitable for use in conventional differentials.

#### **FEATURES & BENEFITS**

- Optimised and stable friction characteristics for effective operation of limited slip differentials throughout the drain interval
- Very good antiwear and load carrying performance even under high load conditions prolongs component life.

#### SPECIFICATIONS/APPROVALS

API GL-5

- · Limited slip applications
- · Approved for use in Hino and Isuzu axles

Pack Size	3x4L	60L	205L	1000L
Item Code	3430296	3430300	3430299	3430297
Barcode	9310084033971	9310084033995	9310084034008	9310084034015









#### TRANSMAX UNIVERSAL LL 75W-90

Castrol TRANSMAX Universal LL 75W-90 formulated with Smooth Drive Technology™ is a full synthetic multi-purpose manual transmission and final drive lubricant. It may be used in synchronized manual transmissions and final drives / differentials of a wide range of vehicles (commercial vehicle, construction equipment) where API GL-4 or API GL-5 fluids are required, and it carries number of OEM approvals.

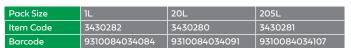
#### **FEATURES & BENEFITS**

- A single product for transmissions and final drives reducing inventory and the potential for misapplication
- Excellent low temperature fluidity provides improved shift quality and wear protection in cold conditions and improves fuel efficiency
- Superior high temperature stability and excellent wear protection even in the most arduous conditions prolongs equipment life and allows for extended drain intervals
- Full compatibility with conventional mineral oils and seals allows this product to be used in a wide range of applications.

#### SPECIFICATIONS/APPROVALS

- API GL-4/GL-5/MT-1
- SAE J2360
- DTFR 12B140 (MB 235.8)
- MAN 341 Z2, 341 GA1, 342 S1
- MB-Approval 235.9

- · Scania STO 1:1G, STO 2:0A FS
- Volvo Transmission Oil 97312:047
- ZF TE-ML 02B, 05A, 12L, 12N, 16F, 17B, 19C, 21A



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#### **TRANSMAX LIMITED SLIP 75W-85**

Castrol TRANSMAX Limited Slip 75W-85 is a full synthetic high-performance SAE 75W-85 gear lubricant, specifically developed for highly loaded limited-slip axles of modern vehicles. It is also suitable for use in axles and non synchronised manual gearboxes, where API GL-5 performance level is recommended by the manufacturers.

#### **FEATURES & BENEFITS**

- Excellent anti-wear and extreme pressure performance at all ambient temperatures and load conditions provide better final drive protection leading to longer life and reduced repair costs
- Excellent cold flow properties reduces torque loss and increases efficiency and ensures improved protection at start up in cold conditions
- Excellent thermal and oxidative stability combined with operating temperature reduction
- Excellent shear stability permitting longer oil and component life.

#### SPECIFICATIONS/APPROVALS

· API GL-5

· Suitable for use in limited slip axles

Pack Size	20L
Item Code	3430676
Barcode	9310084034343







#### TRANSMAX LIMITED SLIP 80W-140

Castrol TRANSMAX Limited Slip 80W-140 is a full synthetic rear axle fluid designed to provide protection at the extremes of low and high operating temperatures. It is recommended for competition, severe duty and long drain applications. It may be used in both limited slip and non limited slip differentials.

Applications include Holden V8 rear axles, trucks operating in severe service where high temperatures in differentials and power dividers are encountered, and competition vehicles e.g., Group A, sports sedans, Formula Holden and Rally cars.

#### **FEATURES & BENEFITS**

- Excellent high temperature and load performance provides maximum protection against wear and noise
- · Low friction improves axle efficiency offering fuel economy improvements
- · High shear stability ensures properties are retained over very long service periods
- · Reduced operating temperatures increase life of gears and seals
- · Wide viscosity range ensures suitability for use in all temperatures
- Compatible with mineral gear oils and seals so it may replace conventional oils with no need for seal changes or extensive flushing.

#### SPECIFICATIONS/APPROVALS

· API GL-5

 Suitable for use in axles with limited slip differentials

Pack Size	6x1L	20L
Item Code	3431007	3431006
Barcode	9310084034152	9310084034688

# SYNTRAX E 80W-140

Fully synthetic rear axle oil for arduous service in rear axle (differential) and power dividers.

Recommended for use in Eaton and Rockwell rear axles operating where long oil drain periods and extended warranty conditions apply. Also recommended for use under severe conditions, particularly in B-double or road train applications.

#### **FEATURES & BENEFITS**

- Thermally stable provides protection at extremes of very low/high operating temperatures
- Improved performance over conventional mineral API GL-5 85W-140 lubricants
- · Reduced wear, increased gear component life
- · Approved for extended warranty programmes for longer real axle drive life.

- API GL-5
- SAE J2360
- Mack GO-J
- DANA SHAES 429
- · Eaton Road Ranger

Pack Size	20L
Item Code	4100924
Barcode	9310084086427









#### TRANSMAX LIMITED SLIP LL 75W-140

Castrol TRANSMAX Limited Slip LL 75W-140, formulated with Smooth Drive Technology™, is a full synthetic hypoid gear oil formulated for use in both conventional and limited slip differentials. It has demonstrated outstanding performance in competition vehicles employing limited slip differentials. It is approved for use in the high-performance BMW-M Series and Mercedes Benz AMG limited slip differentials.

#### **FEATURES & BENEFITS**

- · Reduces noise and vibrations in the axle
- · Excellent shear stability maintaining performance over the life of the lubricant
- · Exceptional stability at high temperatures extending the life of lubricant and axle
- Effective wear resistance ensures protection under high loads and prevents damage to components
- · Very good low-temperature fluidity properties increase protection at start-up.

#### SPECIFICATIONS/APPROVALS

- API GL-5
- MB-Approval 235.61
- Approved ZFTE-ML 05C, 16G, 18, 21C

Pack Size	20L
Item Code	3429313
Barcode	9310084033759

- · BMW LS Rear Axles
- Recommended for Nissan GTR limited slip axles
  - \* SAE Class according to J306 pre-1998



#### TRANSMAX AXLE LONG LIFE 75W-90

Castrol TRANSMAX Axle Long Life 75W-90, formulated with Smooth Drive Technology™, is a full synthetic rear axle fluid. It provides superior protection, especially when driving under stop-start or extreme conditions e.g. towing. This enables smoother axle operation and noise reduction, resulting in a more comfortable drive throughout the lifetime of the vehicle. It is specially designed and approved by BMW for use in all BMW final drives fitted with conventional (non limited slip) differentials. TRANSMAX Axle Long Life 75W-90 is Castrol's prime recommendation for final drives in heavy commercial vehicles, and is approved by MAN and ZF.

#### **FEATURES & BENEFITS**

- Fuel savings and reduced emissions due to balanced viscometrics and frictional characteristics
- Superior low temperature fluidity pumpability ensures optimum protection at start up under all conditions
- Excellent thermal and oxidative stability provides final drive and differential cleanliness which permits extended drain and decreased servicing
- Optimal anti-wear, extreme pressure performance at all ambient temperatures and load conditions
- Excellent temperature reduction and shear stability enhance final drive performance and extends component life.

#### SPECIFICATIONS/APPROVALS

- API GL-5
- MAN 342 S1
- · ZF TE-ML 05A, 12B, 17B, 19C, 21A

Pack Size	20L
Item Code	3429945
Barcode	9310084033841

 BMW (Non-Limited Slip Rear Axles) according to Service Instruction 33 01 96 (149)







#### TRANSMAX AXLE LONG LIFE 75W-140

Castrol TRANSMAX Axle Long Life 75W-140 is a full synthetic final drive lubricant that is suitable for use in axles and final drives in commercial vehicles and passenger cars where API GL-5 performance is required. Transmax Axle Long Life 75W-140 is included in the Scania high-performance product list and is approved against Scania STO 2:0A.

#### **FEATURES & BENEFITS**

- Excellent anti-wear and extreme pressure performance at all ambient temperatures and load conditions provides superior protection, longer component life and reduced repair costs
- · Excellent cold flow properties reduce torque loss and increase fuel efficiency
- · Improved protection at start-up and in cold conditions
- Excellent thermal and oxidative stability combined with superb temperature reduction protects against pitting
- · Excellent shear stability permitting longer oil and component life
- · Extended drain reduces repair costs.

#### SPECIFICATIONS/APPROVALS

API GL-5

· Scania STO 2:0A

Pack Size	20L	208L
Item Code	3429998	3429997
Barcode	9310084033872	9310084033889







#### TRANSMAX DYNADRIVE LONG LIFE 80W-90

Castrol TRANSMAX Dynadrive Long Life 80W-90 is a part-synthetic SAE 80W-90 gear oil specifically developed to meet all the gear oil requirements for both manual transmissions and final drives. The unique additive system provides the extreme pressure protection needed in heavy-duty differentials as well as the frictional properties required for smooth shifting synchromesh manual transmissions.

#### **FEATURES & BENEFITS**

- High oxidative stability enables better component cleanliness and longer oil life, resulting in extended servicing
- · Excellent viscosity/temperature characteristics
- · Synthetic base oil provides enhanced lubricant durability
- · Excellent shear stability ensures high performance throughout the lubricant's life
- Being one product for both manual and final drive transmissions, it offers rationalisations that reduce workshop stockholding and helps prevent service filling errors
- · Reduced gear change baulking at low temperatures
- · Excellent differential cleanliness
- Reduced wear
- Extended drain
- · Excellent transmission performance
- · Extended axle bearing life.

- · API GL-4/GL-5
- SAE J2360
- Volvo Transmission Oil 97321-24-082
- Mack GO-J
- Meets ArvinMeritor O76-D

Pack Size	20L	205L
Item Code	3430285	3430284
Barcode	9310084034022	9310084034039







At Castrol, we know that keeping things simple is critical for your success. It's one of the reasons we're undertaking one of the biggest updates ever simplifying our portfolio whilst we continue deliver the best products, with latest industry and OEM approvals, whilst eliminating unnecessary complexity.

We appreciate that change can take some getting used to so don't forget that your local Castrol Technical Helpline is only ever a phone call away to ensure you've got the right product for the right application.

OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
Syntrans 75W-85	20L	3335813	TRANSMAX Manual Long Life 75W-85	20L	3432318	2023
	6x1L	3377725	TRANSMAX Manual VMX 80W	6x1L	3429681	2023
	3x4L	3377724		3x4L	3429680	2023
Manual VMX 80W	20L	3375547		20L	3429677	2023
	60L	3375549		60L	3429679	2023
	205L	3375548		205L	3429678	2023
	3x4L	3375564	TD41/51/41/11 : 100/1/ 00	3x4L	3430313	2027
Universal 80W-90	60L 3375562		TRANSMAX Universal 80W-90	60L	3430312	2023





#### TRANSMAX MANUAL VMX 80W

A manual transmission fluid of advanced design especially developed to provide easier gear changes over a wide temperature range.

It is particularly versatile in cold weather as it reduces shift effort at start-up, as well as controlling transmission noise and idle rattle at operating temperatures.

It should be used in manual transmissions of most car and light commercial vehicles (LCV's) requiring GL-4 performance, where improved low temperature shift performance is required.

#### **FEATURES & BENEFITS**

- Quieter transmission operation and easier low temperature gear shifting improves driving experience
- Improved gear tooth and bearing durability reduces the risk of breakdown and extends component life
- · Effective lubrication over a wide temperature range
- It can be used as a low drag gearbox oil in 2-stroke motorcycles with separate gearboxes.

#### SPECIFICATIONS/APPROVALS

API GL-4

ı	Pack Size	6x1L	3x4L	20L	60L	205L
	Item Code	3429681	3429680	3429677	3429679	3429678
	Barcode	9310084033704	9310084033711	9310084033728	9310084033735	9310084033742

#### TRANSMAX MANUAL E LONG LIFE 40

Synthetic lubricant designed for fuel efficiency, extended drain intervals and severe service in heavy duty commercial vehicle transmissions which require a non-EP transmission lubricant. It is specially formulated to protect higher torque transmissions coupled with increased horsepower engines.

It is approved for use in Eaton transmissions such as Ultrashift Plus, Fuller Advantage, FR and RT Series.

#### **FEATURES & BENEFITS**

- Proven to provide better fuel economy versus PS 164 type transmission fluids
- · High performance and extended drain capabilities in transmissions
- Excellent thermal and oxidation stability which resists deposit and sludge formation.

#### SPECIFICATIONS/APPROVALS

- API MT-1
- · Eaton PS 386

Suitable for use with the following Industry & OEM specifications:

- Mack TO-A Plus
- Meritor O-81
- Navistar MPAPS B-6816 Type II

Pack Size	20L	205L
Item Code	3416169	3415488
Barcode	9310084030352	9310084030260









#### TRANSMAX MANUAL LONG LIFE 75W-85

Castrol TRANSMAX Manual Long Life 75W-85 is a full synthetic transmission fluid recommended for most commercial vehicle manual transmissions (truck, bus, light commercial vehicle) where API GL-4 lubricants are required. These transmissions are generally larger and subjected to higher loads and temperatures than those in passenger cars. Castrol TRANSMAX Manual Long Life 75W-85 was developed for these particular requirements and is approved by a number of manufacturers.

#### **FEATURES & BENEFITS**

- Excellent thermal and oxidative stability maintains transmission cleanliness and lubricant performance allowing extended drain capability
- Synthetic formulation provides a reduction in operating temperatures giving longer component and lubricant life
- Superb cold flow characteristics give smoother gear shifts at low temperatures
- · High shear stability maintains lubricant performance throughout the drain interval
- Good wear and EP performance ensures component protection under high load conditions reducing downtime and service costs.

- · API GL-4
- DTFR 13B150 (MB 235.4)
- Volvo Transmission Oil 97307:045
- · Eaton 500000km drain Europe (service bulletin 2273)

Pack Size	20L
Item Code	3432318
Barcode	9310084035111





#### TRANSMAX MANUAL AT 75W-90

Castrol TRANSMAX Manual AT 75W-90 is a synthetic fluid approved for use in the manual transmissions of Mercedes Benz Actros vehicles.

#### **FEATURES & BENEFITS**

- Excellent viscosity temperature characteristics provide effective lubrication over a wide temperature range.
- Smooth gear shifting at low temperatures increases transmission efficiency and aids fuel economy.
- Very good wear protection, especially under high loads, extends component life and reduces downtime and service costs.

#### SPECIFICATIONS/APPROVALS

- · API GL-4
- MB-Approval 235.21
- DTFR 13B110 (MB 235.11)

Pack Size	20L
Item Code	3429964
Barcode	9310084033797



#### TRANSMAX MANUAL HEAVY DUTY 75W-90

Castrol TRANSMAX Manual Heavy Duty 75W-90 is a full synthetic manual transmission lubricant developed for use in synchronised and non-synchronised transmissions in long haul trucks, b-double road trains and other severe duty applications. Castrol TRANSMAX Manual Heavy Duty 75W-90 is approved against Volvo's most demanding Heavy Duty Manual Transmission specification, enabling extended oil drain intervals (400K kms) in severe duty manual and automated manual (i-Shift) transmission applications. It is also suitable for us in manual transmissions of cars or light commercial vehicles where GL-4 oils are recommended.

#### **FEATURES & BENEFITS**

- Excellent oxidation stability ensures suitability in high temperature and extended drain applications
- Proven synchroniser performance makes easier gear changes, transmission operation quieter and reduces driver fatigue
- · Excellent low temperature fluidity ensures easy cold start gear shifting
- · Excellent wear protection reduces wear and prolongs gear life
- Long drain performance offers the potential to lower maintenance costs and increase vehicle availability.

- · API GL-4
- Volvo Transmission Oil 97315:002
- Volvo Transmission Oil 97319:007

Pack Size	20L
Item Code	3430335
Barcode	9310084034237







#### TRANSMAX MANUAL Z LONG LIFE 75W-80

Castrol TRANSMAX Manual Z Long Life 75W-80 is a full synthetic SAE 75W-80 fluid developed specifically to meet ZF extended drain intervals requirements (540,000 km) and is approved for use in all ZF commercial manual and automated manual transmissions. It can be recommended in other manual transmissions requiring API GL-4 and is particularly suitable for severe applications where loads and temperatures are higher.

#### **FEATURES & BENEFITS**

- Excellent frictional characteristics with carbon, sinter bronze and molybdenum synchronisers provide improved shift quality and extend component life
- Temperature reduction in operation extends the life of the oil and components aiding extended drain intervals and reducing downtime and repair costs
- Provides excellent low-temperature fluidity giving improved protection and smooth gear shifts at low temperatures
- Excellent thermal and oxidative stability extends the life of transmission and lubricant extending drain intervals and reducing service needs
- Excellent wear and EP performance protects components under high loads, extending component life and reducing maintenance costs.

- API GL-4
- MAN 341 Z5

- DTFR 13B160 (MB 235.41)
- ZF TE-ML 01E, 02E, 16P

Pack Size	20L	208L
Item Code	3429956	3429955
Barcode	9310084033773	9310084033780





#### **TRANSMAX UNIVERSAL 80W-90**

Castrol TRANSMAX Universal 80W-90 is a multipurpose gear lubricant for use in synchronised manual transmissions and final drives and differentials where either API GL-4 or API GL-5 are specified.

#### **FEATURES & BENEFITS**

- A single product for transmissions and final drives reduces inventory and the potential for misapplication
- High temperature stability gives superior performance and extended drain potential
- Optimised synchroniser performance gives smooth gear shifting at all temperatures
- Excellent wear protection extends component life and reduces maintenance costs

#### SPECIFICATIONS/APPROVALS

· API GL-4 / GL-5

Pack Size	3x4L	60L
Item Code	3430313	3430312
Barcode	9310084034190	9310084034275









# Switch ON an Electric Future

An advanced range of EV Fluids to help electric vehicles go further<sup>1</sup>, charge faster<sup>2</sup> and last longer<sup>3\*</sup>.

The images shown are for illustration purposes only and may not be an exact representation of the product.



<sup>\*</sup> Castrol EV Fluids benefits are demonstrated in bespoke testing and development.

 $<sup>^{1}</sup>$  vs mass market EV factory fill fluid  $^{2}$  vs indirect cooled battery system  $^{3}$  vs standard EV transmission fluid.

# **EV TRANSMISSION FLUIDS**



#### ON EV TRANSMISSION FLUID DI

Castrol ON EV Transmission Fluid D1 is a full synthetic, high performance, high efficiency fluid for transmissions with dry e-Motors. It is an advanced EV Transmission Fluid that helps extend the life of the drivetrain system and helps vehicles go further<sup>1\*</sup> on a single charge. This next generation transmission fluid supports the requirement towards increasing torque levels and maximum efficiency.

#### **FEATURES & BENEFITS**

Castrol ON EV Transmission Fluid D1 has the following advantages:

- Excellent balance of reduced fluid viscosity and extremely good gear and bearing protection
- · Very good cold flow properties
- · High shear stability
- · Excellent thermal and oxidative stability.

#### SPECIFICATIONS/APPROVALS

Suitable for use in the following EV transmissions

- Aiways U5
- Buick Velite
- Chery Tiggo Kunpeng e plus, Jetour X90
- Dong Feng Lantuo, Voyah (dry motors)
- Enovate ME5
- · GWM all models with dry motor
- Hozon Neta
- Hyundai Kona Electric
- · Kia e-Niro, Soul EV, EV6

Pack Size	5L
Item Code	3434054
Barcode	9310084035487

- Maxus EUNIQ 7
- Maxus eDeliver 3, eDeliver 9
- Mercedes Benz EQE+, EQS
- · Rimac Nevera (front motor)
- · Pininfarina Battista (front motor)
- SGM Velite
- Weltmeister EX5, EX6
- · Vinfast VF e34, VF e35, VF 8, VF 9



 $<sup>{}^{\</sup>star}\operatorname{\mathsf{Castrol}}\operatorname{\mathsf{EV}}\operatorname{\mathsf{Fluids}}\operatorname{\mathsf{benefits}}\operatorname{\mathsf{are}}\operatorname{\mathsf{demonstrated}}\operatorname{\mathsf{in}}\operatorname{\mathsf{bespoke}}\operatorname{\mathsf{testing}}\operatorname{\mathsf{and}}\operatorname{\mathsf{development}}.$ 

<sup>&</sup>lt;sup>1</sup> vs mass market EV factory fill fluid.

# **EV TRANSMISSION FLUIDS**



#### ON EV TRANSMISSION FLUID D2

Castrol ON EV Transmission Fluid D2 is a full synthetic, high performance, high efficiency fluid for transmissions with dry e-Motors. It is an advanced EV Transmission Fluid that helps extend the life of the drivetrain system and helps vehicles go further<sup>1\*</sup> on a single charge. This next generation transmission fluid supports the requirement towards increasing torque levels and maximum efficiency.

#### **FEATURES & BENEFITS**

Castrol ON EV Transmission Fluid D2 has the following advantages:

- Excellent balance of reduced fluid viscosity and extremely good gear and bearing protection
- · Very good cold flow properties
- · High shear stability
- · Excellent thermal and oxidative stability.

#### SPECIFICATIONS/APPROVALS

Suitable for use in the following EV transmissions with dry motors:

- · Audi Q3 e-tron, Q4 e-tron, Q5 e-tron
- BYD ATTO 3, HAN, DOLPHIN
- · Cupra Born
- Hongqi E-HS
- Hycan Z03
- · Jaguar i-Pace
- · Lixiang One
- Nio EC6, EL6, EL7, ES6, ET5, ET7
- Pininfarina Battista (rear axle)
- Polestar 2

Pack Size

· Rimac Nevera (rear axle)

- · Rivian R1S, R1T
- · SEAT Mii
- · Skoda Citigo-E iV, Enyaq iV
- · Smart EQ ForTwo, EQ ForFour
- Volvo XC40 Recharge, C40 Recharge
- VW iD.3, iD.4, iD.5, iD.6, iD.Buzz
- · VW e-Up!, e-Golf
- · Weltmeister W6
- · Xpeng P7, G9





Item Code
 3437503
 3434055

 Barcode
 9310084036200
 9310084035494

<sup>\*</sup> Castrol EV Fluids benefits are demonstrated in bespoke testing and development.

<sup>&</sup>lt;sup>1</sup> vs mass market EV factory fill fluid.





# Castrol Coolants product transitions

At Castrol, we know that keeping things simple is critical for your success. It's one of the reasons we're undertaking one of the biggest updates ever simplifying our portfolio whilst we continue deliver the best products, with latest industry and OEM approvals, whilst eliminating unnecessary complexity.

We appreciate that change can take some getting used to so don't forget that your local Castrol Technical Helpline is only ever a phone call away to ensure you've got the right product for the right application.

OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
RADICOOL SF Premix	208L	3417111	RADICOOL SF Premix	205L	3430230	2024
DADICOOL CE	20L	3417623	DADICOOL CE	20L	3424712	2024
RADICOOL SF	208L	3417624	RADICOOL SF	208L	3437260	2024





# RADICOOL SF / RADICOOL SF PREMIX (PLEASE REFER TO TRANSITION TABLE)

A long-life coolant based on monoethylene glycol with advanced organic acid inhibitor technology. In contrast to traditional antifreeze coolants, Castrol RADICOOL SF does not contain amines, nitrites, phosphates, silicates or other inorganic inhibitors.

Castrol RADICOOL SF provides excellent corrosion protection particularly to those engines employing light metals. It is suitable for a wide range of OEMs.

Castrol RADICOOL SF works over a wide operating temperature range for effective engine cooling in all climates, and offers freezing protection between -18°C and -37°C depending on concentration. Castrol RADICOOL SF Premix has been diluted to 50% concentration with distilled water, providing freezing protection down to -37°C.

#### **FEATURES & BENEFITS**

- Special inhibitor package enables longer drain intervals with excellent protection against corrosion, cooling system blockage, overheating and freezing
- · Suitable for use in engines employing cast iron, aluminium, copper or combinations of these metals used in modern engine designs. It is also compatible with all standard rubber hoses, gaskets and seals used within the cooling system
- · Possesses a longer operational life by allowing extended drain intervals of 3 years plus
- · Longer drain intervals mean reduced cost and less possibility of harm to the environment
- Excellent protection against cavitation corrosion and effective water pump lubrication, reducing wear and noise
- Additive technology used prevents the build up of calcium deposits (scale) from use of hard water, thereby reducing possibility of radiator blocking and restricted flow of coolant. This technology also improves the fluid's heat transfer properties ensuring engines run at optimum temperatures
- · Contains a bittering agent to deter from accidental ingestion.

#### SPECIFICATIONS/APPROVALS

- ASTM D3306(III)
- ASTM D4985
- ASTM D6210
- BS 6580:2010
- MAN 324 Typ SNF

- DTFR 29D110 (MB 326.3)
- VW TL 774F (G12+)
- Deutz DQC CB-14
- DAF 74002

#### **SUITABLE FOR**

- Toyota
- Holden
- Ford
- VW/Audi/Skoda G12+ ('97-'08)
- Lexus

- Land Rover
- Isuzu
- Chrysler
- Jaguar
- Haval

	RADICOOL SF PREMIX			
Pack Size	1L	5L	20L	205L
Item Code	3424607	3424606	3419844	3430230
Barcode	9310084032226	9310084032233	9310084031076	9310084035135

	RADICOOL SF	
Pack Size	20L	208L
Item Code	3424712	3437260
Barcode	9310084032202	9310084036255







## RADICOOL P-OAT / RADICOOL P-OAT PREMIX

Castrol RADICOOL P-OAT is a nitrite, amine, borate and silicate free antifreeze coolant for vehicles requiring Phosphated Organic Additive Technology (P-OAT), such as those from Japanese and Korean manufacturers. Aqueous solutions of Castrol RADICOOL P-OAT act as both antifreeze and coolant and offer excellent corrosion protection to all metal parts found in the cooling systems of internal combustion engines.

Castrol RADICOOL P-OAT should be used at concentrations of between 33% and 50% dilution with distilled or de-ionised water to give optimum corrosion protection and freezing protection between -16°C and -37°C.

#### **FEATURES & BENEFITS**

- Suitable for use with a wide range of engines including those of aluminium, cast iron or combinations of those two metals. Also suitable for cooling systems made of aluminium, copper or their alloys
- · Suitable for Japanese and Korean vehicles requiring P-OAT coolants
- · Suitable for use where a coolant meeting Ford WSS-M97B57-A1 (Concentrate) or Ford WSS-M97B57-A2 (Premix) is required
- Protects for up to 3 years and has the following advantages:
  - Excellent corrosion protection to protect metals used in cooling systems.
  - Superior cavitation protection prevents pitting wear of the cooling system.
  - Improved heat transfer through removal of silicates in the formulation.
  - Suitable for a wide range of applications, including automotive and heavy

- ASTM D3306 (I)
- ASTM D6210
- JASO JIS K2234
- · Suitable for use in vehicles from Japanese and Korean manufacturers

•	Suitable for use where a coolant
	meeting Ford WSS-M97B57-A1 is
	required.

	RADICOOL P-OAT			
Pack Size	5L	20L	60L	205L
Item Code	3429906	3429903	3429905	3429904
Barcode	9310084035012	9310084034985	9310084035005	9310084034992

	RADICOOL P-OAT PREMIX	
Pack Size	1L	5L
Item Code	3431625	3431624
Barcode	9310084035029	9310084035036





## RADICOOL SI-OAT / RADICOOL SI-OAT PREMIX

A long-life coolant for the latest vehicles requiring Organic Acid inhibitor Technology (OAT) with added silicates. Castrol RADICOOL Si-OAT acts as both antifreeze and coolant and offers excellent corrosion protection to all metal parts found in the cooling systems of internal combustion engines.

Castrol RADICOOL Si-OAT should be used at concentrations of between 33% and 50% dilution with purified water to give optimum corrosion protection and freezing protection between -18°C and -37°C depending on concentration. Castrol RADICOOL Si-OAT Premix has been diluted to 50% concentration with distilled water, providing freezing protection down to -37°C.

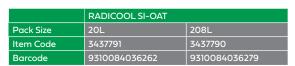
#### **FEATURES & BENEFITS**

- Formally approved by MAN for use in those vehicles specifying MAN 324 Type Si-OAT coolants, including those vehicles built after Dec 2012
- Also suitable for use in older vehicles previously using MAN 324 Type NF and MAN 324 Type SNF fluids
- Approved for use in VW, Audi, Porsche, Skoda, Bentley, Lamborghini and Seat vehicles requiring VW TL-774G approval (G12++). It is also compatible with older VW TL-774C (G11) and VW TL-774F (G12+) type fluids and can be used where VW TL-774J (G13) fluid is recommended
- Suitable for all Mercedes-Benz vehicles manufactured after 10/2011
- Protects for up to 3 years and has the following advantages:
- Excellent low temperature protection
- Provides superior protection against all forms of corrosion
- Minimises deposit formation, because of its phosphate free formulation
- Approved for use in Euro 6 generation truck and bus engines
- Does not contain amines, nitrites, phosphates or borates.

- ASTM D3306 (I) (Concentrate)
- · ASTM D3306 (III) (Premix)
- ASTM D4985
- · BS6580:2010
- JASO JIS K2234

- MAN 324 Type Si-OAT
- MB-Approval 325.5 (Concentrate)
- MB-Approval 326.6 (Premix)
- VW TL- 774G (G12++)

uck and bus engines	
hates or borates.	



	RADICOOL SI-OAT PREMIX
Pack Size	208L
Item Code	3437794
Barcode	9310084036286







#### RADICOOL NF / RADICOOL NF PREMIX

REPLACES ANTIFREEZE NF

An antifreeze coolant formulated using hybrid OAT technology that is free of nitrites, amines and phosphates.

It provides excellent protection against corrosion, and because it contains no phosphate, the problems of deposits in some performance engines are eliminated.

Castrol RADICOOL NF should be used at concentrations of between 33% and 50% dilution with purified water to give optimum corrosion protection and freezing protection between -18°C and -37°C depending on concentration. Castrol RADICOOL NF Premix comes pre-diluted to 50% concentration, providing freezing protection down to -37°C.

# Castrol RADICOOL Para Company Para Company

#### **FEATURES & BENEFITS**

- Protects for up to 5 years/ 9000 hours or 600,000km
- · Excellent low temperature protection
- · Provides excellent protection against corrosion
- · Efficient lubrication of water pumps
- · Compatible with conventional seal and hose materials used in engine cooling systems.

#### SPECIFICATIONS/APPROVALS

- ASTM D3306, ASTM D4985
- BS BS6580:2010
- JASO JIS K2234
- MAN 324 Typ NF
- MB-Approval 325.0

#### **SUITABLE FOR**

- · BMW, Mini
- Mercedes-Benz, Smart (up to 2011)

	RADICOOL NF	RADICOOL NF	
Pack Size	20L	205L	
Item Code	3376394	3376395	
Barcode	9310084022722	9310084022739	

	RADICOOL NF PREMIX
Pack Size	205L
Item Code	3377131
Barcode	9310084022746

- DTFR 29C100 (MB 325.0)
- MTU MTL 5048
- VW TL-774C (G11)
- · Deutz DQC CA-14 (Radicool NF)
- Deutz DQC CA-15 (Radicool NF Premix)
- VW, Audi, Skoda, Porsche, Bentley, Lamborghini, Seat (up to 1997)



### **COOLANTS**



# RADICOOL CONCENTRATE / RADICOOL PREMIX

A general purpose ethylene glycol based coolant with corrosion inhibitors to protect aluminium alloys, copper and cast iron engine components.

Suitable for older cars and light commercial vehicles with petrol and diesel engines (prior to 2000).

CONCENTRATE: Mix with equal parts of water for optimum performance.

#### **FEATURES & BENEFITS**

- · Contains no nitrites, amines or phosphates
- · Effective engine cooling without boiling
- Protection against corrosion in the alloys used in the cooling systems of modern vehicles
- Protection against freezing down to -19°C for Premix, and between -18°C and -36°C for Concentrate depending on concentration
- · Protection against electrolysis
- · Protection against cavitation corrosion
- · Efficient lubrication of water pumps
- Compatible with conventional hose and seal materials used in engine cooling systems.

#### SPECIFICATIONS/APPROVALS

· BS 6580:2010

ASTM D3306 (I) (concentrate only)

	RADICOOL CONCEN	RADICOOL CONCENTRATE		
Pack Size	6x1L	3x5L	20L	205L
Item Code	3424673	3424672	3424670	3381902
Barcode	9310084032110	9310084032134	9310084032141	9310084022708

	RADICOOL PREMIX	
Pack Size	6x1L	3x5L
Item Code	3424638	3424637
Barcode	9310084032158	9310084032165





### **COOLANTS**



### PREMIUM COOL PLUS / PREMIUM COOL PLUS 50

Low silicate ethylene glycol based engine coolant – phosphate and amine free formulation providing extended service life protection for lead solder, aluminium, yellow metal and ferrous alloys.

For US, European and Japanese turbocharged and naturally aspirated diesel engines, particularly wet liner engines, operating in on-highway and off-road environments and arduous city stop-start driving conditions.

Not generally recommended for petrol engines. For Mercedes Benz, use Radicool NF.

#### **FEATURES & BENEFITS**

- 1,000,000km/8000hrs/4 years (whichever occurs first) service life in heavy duty diesel engines
- Fully conforms to the warranty requirements of most major HD diesel engine OEM's
- Covers the needs of a wide range of engines meaning less coolants need to be stocked, assists rationalisation
- · Guaranteed performance in the widest range of diesel engines
- · Compatible with most commercial SCA's.

- PCP = concentrate use as recommended by the manufacturer but not as less than 40% or more than 55% in heavy duty diesel engines
- PCP50 = premix pre-diluted to 50%, ready to use, do not dilute further
- Australian Standard: AS2108-2004
- ASTM D3306(I) (Premium Cool Plus), ASTM D3306 (III) (Premium Cool Plus 50), ASTM D4985 (Premium Cool Plus), ASTM D6210, AS/NZS 2108-2004 (Premium Cool Plus), AS 2108-2004 (Premium Cool Plus 50)

	PREMIUM COOL PLUS		
Pack Size	20L	205L	
Item Code	4101161	4101162	
Barcode	9310084006296	9310084009471	

	PREMIUM COOL PLUS 50	
Pack Size	205L	
Item Code	4100008	
Barcode	9310084015434	







### **BRAKE FLUIDS**



#### **BRAKE FLUID DOT 3**

Suitable for use in disc and drum brakes and hydraulic clutch systems where a non-petroleum based DOT 3 fluid is specified. Certain Japanese vehicles may stipulate DOT 3 brake fluids.

It is NOT recommended where DOT 4, Super DOT 4 or DOT 5 brake fluids are specified.

#### **FEATURES & BENEFITS**

- · High level of protection against wear
- Fully compatible with other brake fluids meeting FMVSS 116 DOT 3, DOT 4
- · Proven track record in braking systems over many years of reliable service.

#### SPECIFICATIONS/APPROVALS

- FMVSS 116 DOT 3
- ISO 4925 Class 3
- JIS K 2233 Class 3
- SAE J1703
- AS 1960.1-2005 Grade 1

Pack Size	6x500ML	
Item Code	3377668	
Barcode	9310084019999	



#### **BRAKE FLUID DOT 4**

Castrol Brake Fluid DOT 4 is suitable for use in all brake fluid systems in cars, motorcycles, and light commercial vehicles (LCV's) requiring either a DOT 3 or DOT 4 product (excluding brake systems where a mineral based fluid is specified). It can be used with either disc or drum brakes including vehicles fitted with ABS systems. It is also suitable for use in hydraulic clutch systems.

Meets the latest Holden low temperature brake fluid viscosity requirements.

NOTE: For vehicles operating under heavier loads or extreme conditions, Castrol React Performance DOT 4 brake fluid is strongly recommended.

#### **FEATURES & BENEFITS**

- High boiling point easily meets or exceeds U.S. FMVSS DOT 3 and DOT 4 wet/dry specialisation requirements
- · High vapour lock temperature greater protection against brake fluid vaporization
- Advanced corrosion protection better protection against corrosion caused by absorbed moisture, that can contribute to lower maintenance costs
- High temperature stability provides a greater margin for safety because the product performance will not fade under higher temperatures
- Rubber swell control contributes to efficient operation of the braking system components
- Compatible with all other brake fluids that meet either DOT 3 or DOT 4 Specification.

- FMVSS 116 DOT 4
- ISO 4925 Class 4
- JIS K 2233 Class 4

- SAE J1703
- SAE J1704
- AS 1960.1-2005 Grade 2

Pack Size	6x500ML	3x4L	20L
Item Code	3377669	3377671	3377670
Barcode	9310084020216	9310084020209	9310084022500





### **BRAKE FLUIDS**



#### **REACT PERFORMANCE DOT 4**

Castrol React Performance DOT 4 is a performance, high boiling point polyglycol type brake fluid designed to provide superior braking performance in a variety of vehicles, especially those that operate at higher temperatures or under increased loads.

Suitable for use in all brake fluid systems in cars, motorcycles and light commercial vehicles (LCV's) requiring either a DOT 3, DOT 4 or Super DOT 4 product.

Do not use: in brake systems where a mineral oil based fluid is specified.

#### **FEATURES & BENEFITS**

- High boiling point: Exceeds US FMVSS DOT 3 and DOT 4 specification requirements
- · High vapour lock temperature
- Outstanding protection against corrosion caused by absorbed moisture that can cause rusting and failure of components
- Rubber swell control: Contributes to efficient operation of the braking system components
- Compatible with all other brake fluids that meet either DOT 3, DOT 4 or Super DOT 4 specifications.



FMVSS 116 - DOT 4
 SAE J1703
 ISO 4925 Class 4
 SAE J1704

JASO JIS K2233 • AS 1960.1-2005 Grade 3

Pack Size	6x500ML	20L
Item Code	3377737	3377735
Barcode	9310084020247	9310084022760

#### **REACT SRF RACING**

Castrol React SRF Racing brake fluid is a high performance brake fluid of special value in competitive motorsport where extreme braking conditions are encountered.

It has been especially formulated to maximise braking performance under arduous competitive conditions. In order to achieve the optimum benefits in such applications, patented silicon ester materials have been employed in a unique Castrol formulation.

It is suitable for all disc and drum brake systems used in motorsport with the exception of those for which a mineral oil is prescribed.

#### **FEATURES & BENEFITS**

- Race Proven: Widely used in racing, from Formula One, sports cars, V8 Supercar and Grand Prix and Superbike motorcycles
- · High Boiling point exceeds the boiling point requirements of DOT 5 brake fluids
- · High Vapour Lock Point.

- · JASO JIS K2233 Class 4
- US FMVSS 116 DOT 3 and DOT 4
- Pack Size
   6x1L

   Item Code
   3379573
- SAE J1703
- ISO 4925 Class 4











#### **RED RUBBER GREASE**

Specifically formulated for rubber to rubber lubrication where any effects such as hardening or swelling of the rubber must be avoided. It therefore can be used on automotive hydraulic brake and clutch components where compatibility with natural rubber and SBR seals are involved. It may also be used to assist the assembly of natural and synthetic rubber components for automotive brakes or clutch systems and suspension units.

#### **FEATURES & BENEFITS**

- · Excellent stability at high temperatures
- · Good corrosion resistant properties
- · Excellent compatibility with both natural and synthetic rubber components.

#### SPECIFICATIONS/APPROVALS

· Lucas Girling – TS-2-34-04

NLGI 2.5

Pack Size	6x500G	
Item Code	3354820	
Barcode	9310084020063	



Castrol High Temperature Grease is a high performance, multipurpose lithium complex grease developed using an optimised combination of high quality mineral oil, proprietary thickener technology and a specially selected additive system enabling reliable performance across a wide range of temperatures whilst exposed to a variety of operational loads, speeds and environmental conditions. It is intended for use in a wide range of plain and rolling element bearings within both the Automotive and Industrial markets, especially targeting those applications where upper operating temperatures are likely to exceed the limits of conventional, lithium thickened greases.

#### **FEATURES & BENEFITS**

- Excellent thermal and mechanical stability
- Good extreme pressure and anti-wear properties provide the potential for prolonged component life
- · Good water resistance and corrosion protection.

#### SPECIFICATIONS/APPROVALS

NLGI 2

Pack Size	12x400G
Item Code	3426062
Barcode	4008177072215









#### PREMIUM HEAVY DUTY

Designed for plain and roller bearing applications operating at temperatures beyond the limits of conventional Lithium greases.

The excellent stability, load carrying and high temperature performance of Castrol Premium Heavy Duty make it particularly suitable for use in wheel bearings of vehicles operating at high speeds over long distances, or where prolonged heavy braking is likely to give higher than normal hub temperatures.

Castrol's primary recommendation for vehicles operating with disc brakes. It is also recommended for general purpose greasing on a wide range of industrial plant, particularly if operating under conditions of high load and temperature.

#### **FEATURES & BENEFITS**

- Excellent thermal stability and wide temperature range
- · Reduced oil separation and resistance to hardening under pressure
- · High load carry capacity
- · Good water resistance
- Excellent EP and anti-wear properties protects equipment against extreme loading and assists in minimising bearing component wear
- An optimized combination of Lithium thickener, highly refined base oil and specially selected base oil offers excellent all-round operating performance.

#### SPECIFICATIONS/APPROVALS

· Lithium Complex

• NLGI 2

· Blue and Tacky

Dropping Point 260°C

Pack Size	12x450g	6x500g	2x2.5KG	20KG	55KG	180KG
Item Code	3377124	3384329	3377122	3377123	3377125	3377121
Barcode	9310084020117	9310084024184	9310084020100	9310084022661	9310084022678	9310084022654

#### SPHEEROL BTX 2

A high performance grease developed for use in a wide range of mining and industrial applications

It combines excellent extreme pressure, anti wear agents and corrosion inhibitors. Engineered to provide outstanding protection of ball and roller bearings in high speed load applications.

#### **FEATURES & BENEFITS**

- Water resistant containing a powerful corrosion inhibitor to protect lubricated machinery parts under wet conditions
- A unique combination of extreme pressure and antiwear agents, corrosion and oxidation inhibitors in a proven adhesive lithium complex base.

#### SPECIFICATIONS/APPROVALS

- · Lithium complex grease
- Drop Point 250°C

NLGI 2

Pack Size	450G	20KG	180KG
Item Code	3413942	3413941	3413940
Barcode	9310084029417	9310084029400	9310084029394









**⇒**Castrol

EPL 2

#### SPHEEROL EPL RANGE

Castrol Spheerol™ EPL is a range of greases which comprises lithium based products, containing highly refined mineral oils, fortified with extreme pressure (EP) additives as well as corrosion and oxidation inhibitors. These greases have been formulated with additives that provide good film strength under medium to high loads.

#### **FEATURES & BENEFITS**

- High mechanical stability the grease keeps its consistency in service ensuring long lubricant life
- Good adhesion continuous lubrication and reduced consumption as film stays between lubricated surfaces
- Good water resistance the grease film remains on the surface even in the presence of water
- Resistant to copper and steel corrosion helps prevent rust and oxidation on metal surfaces
- Excellent EP and anti-wear properties protects equipment against extreme loading and helps minimise bearing component wear.

#### SPECIFICATIONS/APPROVALS

# SPHEEROL EPL 00

- Lithium
- Amber to Brown appearance
- NLGI 00
- Semi fluid

### SPHEEROL EPL 0

- Lithium
- Amber to Brown appearance
- · NLGI 0
- Dropping Point, Minimum 160°C

# SPHEEROL EPL 1

- Lithium
- Amber to Brown appearance
- · NLGI1
- Dropping Point, Minimum 190°C

# SPHEEROL EPL 2

- Lithium
- Amber to Brown appearance
- · NLGI 2
- Dropping Point, Minimum 190°C

	Spheerol EPL 00	Spheerol EPL 0	
Pack Size	20KG	2x2.5KG	20KG
Item Code	3364626	3364320	3364319
Barcode	9310084015113	9310084014956	9310084014949

	Spheerol EPL1
Pack Size	20KG
Item Code	3364339
Barcode	9310084014970

	Spheerol EPL 2	
Pack Size	20KG	180KG
Item Code	3364326	3364324
Barcode	9310084015168	9310084015144





#### SPHEEROL HTB

Non-melting bentone clay based grease suitable for very high temperature applications up to 140C.

Ideal for front wheel bearings in cars with disc brakes operating at very high temperatures.

#### **FEATURES & BENEFITS**

- · Bentone based so it is suitable for a wide working temperature range
- · Suitable for heavy and shock loading capabilities
- · High thermal stability giving enhanced service life.

#### SPECIFICATION / TECHNICAL DATA

• NLGI 2

· Bentone clay

Pack Size	20KG
Item Code	3371031
Barcode	93100840018411



#### SPHEEROL LMM

Heavy duty grease combining molybdenum disulphide with extreme pressure additives.

For use where shock load protection is required for automotive ball joints and constant velocity joints.

#### **FEATURES & BENEFITS**

- Good load carrying capacity protects equipment against extreme loading and helps prevents damage caused by shock loading and excessive vibration
- · Good water resistance
- Resistant to copper and steel corrosion helps prevent rust and oxidation on metal surfaces
- High mechanical stability the grease keeps its consistency in service, ensuring long term protection
- Good adhesion continuous lubrication and reduced consumption as film stays between lubricated surfaces.

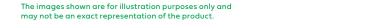
#### SPECIFICATIONS/APPROVALS

- Lithium
- Dark grey, smooth
- NLGI 2
- Dropping Point, Minimum 180°C

Castrol Product Catalogue NZ | Q2 2025

Pack Size	450g	500g	20KG
Item Code	3371755	3371756	3371754
Barcode	9310084018350	9310084018374	9310084018343









#### SPHEEROL SBX 2

Lithium complex grease primarily designed to meet the SKF requirements for sugar mill roller bearing grease.

The extreme load capacity makes it ideal for bucket pins, plain bearings and other heavy duty applications in the mining, sugar milling and general industrial industries. Suitable for low speed bearings and some open gear applications.

The 5% molybdenum disulphide in Castrol SBX Grease meets certain minimum requirements of OEM's such as Caterpillar and Komatsu.

#### **FEATURES & BENEFITS**

- Advanced EP additives
- Corrosion protection
- Good pumpability at low temperatures
- Helps maintain a separating film between gear tooth surfaces
- · Excellent load carrying ability
- · Metal surfaces will not corrode
- · Does not breakdown when washed
- Water resistant



#### SPECIFICATIONS/APPROVALS

- Lithium Complex
- NLGI 2
- Drop Point 250°C

	SPHEEROL SBX 2		
Pack Size	12x450g	20KG	180KG
Item Code	3413947	3413946	3413945
Barcode	9310084029257	9310084029233	9310084029226

#### SPHEEROL ULTRATAK

Multipurpose lithium complex grease which has special properties in wet environments.

Primarily suited for earthmoving bucket pins, ball, roller and plain bearings under high load.

#### **FEATURES & BENEFITS**

- Excellent all round performance offering improved performance and protection
- · Outstanding load carrying and anti-wear properties
- · Special properties in wet conditions with dramatic decrease in water washout
- Excellent resistance to corrosion even in salt water conditions.

#### SPECIFICATIONS/APPROVALS

Lithium Complex

Drop Point 200°C (min.)

NLGI 2

· 4 Ball Weld 800kg typical

Pack Size	450g	20KG	180KG
Item Code	3414147	3414146	3414145
Barcode	9310084029745	9310084029738	9310084029721











#### **HYSPIN AWH-M RANGE**

High quality range of shear stability, high viscosity hydraulic fluids with excellent anti-wear performance.

Suitable for use in a diverse range of hydraulic systems that are subject to wide variations in temperature.

For use in off-highway and marine applications and indoor manufacturing equipment.

#### **FEATURES & BENEFITS**

- $\boldsymbol{\cdot}$  Can be used over a wide temperature range with good shear stability
- Excellent anti-wear performance provides extended wear protection
- · Reduced downtime, prolonged lubricant life.

#### SPECIFICATIONS/APPROVALS

- DIN 51502 classification HVLP
- ISO 6743/4 Hydraulic Oils Type HV
- Parker Hannifin (Denison) HF0, HF1 & HF2
- Eaton E-FDGN-TB002-E

#### Meets:

- · DIN 51524 Part 3
- Cincinnati Lamb (Milacron) P 68-69-70
- US Steel 126 & 127

	Hyspin AWH-M 15	Hyspin AWH-M 32	Hyspin AWH-M 46	
Pack Size	205L	205L	20L	205L
Item Code	3410218	3402966	3358426	3503217
Barcode	9310084026546	9310084490279	9310084490422	9310084490477

	Hyspin AWH-M 68		Hyspin AWH-M 100
Pack Size	20L	205L	205L
Item Code	4103807	3402988	3900149
Barcode	9310084490620	9310084490675	9310084490972





#### HYSPIN AWS RANGE

High quality mineral oil based hydraulic fluid containing zinc for industrial equipment including injection moulding plus a wide range of machinery including presses, machine tools (CNC machines), certain gearboxes, bearing lubrication systems and many more applications requiring an oil with good anti-wear and anti-oxidant properties.

Suitable for gear, vane and piston type hydraulic pumps, except those containing silver or cadmium.

#### **FEATURES & BENEFITS**

- Optimise machine performance
- · Extended life of seals
- · Reduced downtime, increased productivity
- · Reliability and extended pump life.

#### SPECIFICATIONS/APPROVALS

- · DIN 51502 classification HLP
- ISO 6743/4 Hydraulic Oils Type HM
- Parker Hannifin (Denison) HF0, HF1 & HF2
- Eaton E-FDGN-TB002-E

#### Meets requirements of:

- DIN 51524 Part 2
- · Fives Cincinnati P68, P69 & P70
- ASTM D6158 HM
- ISO 11158 HM
- US Steel 126
- GB 11118.1 L-HM (General and High Pressure)

	Hyspin AWS 10		Hyspin AWS 22 Superclean	
Pack Size	20L	205L	20L	205L
Item Code	4103277	4103272	3370579	3370578
Barcode	9310084331022	9310084331077	9310084332227	9310084016929

	Hyspin AWS 32	
Pack Size	20L	205L
Item Code	3334429	4102391
Barcode	9310084333224	9310084333279

	Hyspin AWS 46		
Pack Size	20L	205L	1000L
Item Code	3372340	4102060	4102097
Barcode	9403044102296	9310084334672	9310084334696

	Hyspin Avv 3 00	
Pack Size	20L	205L
Item Code	3375782	3358048
Barcode	9310084336829	9403044102319
	Hyspin AWS 100	
Pack Size	201	
Pack Size	20L	205L
Item Code	4102331	4102330

	Hyspin AWS 150	
Pack Size	20L	205L
Item Code	4102372	4102071
Barcode	9310084335020	9310084335075





#### HYSPIN HVI RANGE

The Castrol Hyspin™ HVI range of high viscosity index (VI) oils is based on a carefully selected ashless (formulated without zinc) additive system designed to meet and exceed the most exacting performance standards. Hyspin HVI oils are intended for severely stressed hydraulic systems requiring a high level of anti-wear performance and fine filtration. The Castrol Hyspin HVI range is fully compatible with elastomer materials commonly used for static and dynamic seals, such as nitrile, silicone and fluorinated (e.g. Viton) polymers.

#### Applications include:

- Outdoor equipment which are likely to operate over wide temperature ranges, such as machinery subjected to cold start up conditions and high temperature continuous running. Examples include off-highway and marine applications
- Indoor manufacturing equipment that incorporates control systems requiring minimal viscosity change with temperature. Examples include precision machine tools.

#### **FEATURES & BENEFITS**

- High viscosity index and low pour point enables the product to be used over a wide temperature range. Good shear stability means no excessive loss in viscosity due to mechanical shearing
- Excellent anti-wear performance provides extended wear protection for hydraulic pumps. Reduced down time due to unscheduled maintenance and savings from replacement part costs
- Excellent water separation and hydrolytic stability means reduced down time through prolonged lubricant life and increased equipment reliability
- Excellent thermal and oxidative stability provides reliable performance and extended oil life in severe applications. Minimal deposit formation gives a cleaner system and reduced frequency of filter changes.

- DIN 51502 classification HVLP
- · ISO 6743/4 Hydraulic Oils Type HV
- Parker Hannifin (Denison) HF0, HF1 & HF2
- Eaton E-FDGN-TB002-E

*	Meets	requirements	of:
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- · DIN 51524 Part 3
- · Cincinnati Lamb (Milacron) P 68-69-70
- US Steel 126 & 127

	Hyspin HVI 15
Pack Size	205L
Item Code	3413654
Barcode	9310084028984

	Hyspin HVI 32
Pack Size	205L
Item Code	3410703
Barcode	9310084027864

	Hyspin HVI 46	
Pack Size	20L	205L
Item Code	3408463	3408464
Barcode	9310084026416	9310084026423

	Hyspin HVI 68	
Pack Size	20L	205L
Item Code	3413418	3413417
Barcode	9310084028700	9310084028717

	Hyspin HVI 100
Pack Size	205L
Item Code	3414015
Barcode	9310084029271





#### **HYSPIN ZZ RANGE**

A range of non-zinc, mineral oil based hydraulic fluids proven to be resistant to the effects of "dieseling" in highly stressed systems such as plastic injection moulding.

Designed for use in all hydraulic systems in high temperatures exposed to water ingress or where a high level of filterability is required.

Also useful where silver and/or cadmium components are used or where the risk of environmental damage due to spillage (non-zinc) is a concern with normal zinc antiwear additives.

#### **FEATURES & BENEFITS**

- Contains oxidation and corrosion inhibitors with antifoam and demulsification additives
- High antiwear performance, allowing pumps to operate at high temperatures without excess water
- Zinc and heavy metal free, providing non contaminated waste water for environmentally friendly disposal
- Excellent water tolerance will not break down in presence of water nor form deposits. Therefore, can be used in operations where water ingress occurs
- Thermal stability allows it to be used in high temperature applications.

- Viscosity: 46, 68
- DIN 51502 classification HLP
- ISO 6743/4 Hydraulic Oils Type HM
- Parker Hannifin (Denison) HF0, HF1 & HF2
- Eaton E-FDGN-TB002-E

- \* Meets requirements of:
- DIN 51524 Part 2
- · Fives Cincinnati P68, P69 & P70
- ASTM D6158 HM
- ISO 11158 HM
- US Steel 126
- GB 11118.1 L-HM (General and High Pressure)

	Hyspin ZZ 46 Superclean	Hyspin ZZ 68 Superclean
Pack Size	205L	205L
Item Code	3414453	3414577
Barcode	9310084029912	9310084030017







#### INDUSTRIAL GEAR BOXES

#### **ALPHA SP RANGE**

High quality, mineral oil based extreme pressure gear oils.

Recommended for the lubrication of industrial gear boxes using forced circulate or splash and oil bath lubrication.

#### **FEATURES & BENEFITS**

- Sulphur-phosphorous EP additives provide good load carrying ability, reducing gear tooth wear
- · Withstands elevated temperatures for extending service life
- · Corrosion inhibitors provide ongoing protection of gear teeth
- Excellent demulsification properties help to maintain full lubricating film with no loss of performance
- · Anti-foam additives maintain full lubricating film.

- Viscosity range: 68, 100, 150, 220, 320, 460, 680
- · DIN classification CLP
- · DIN 51517 Part 3
- AGMA 9005 E02
- AIST 224

- David Brown S1.53.101 Type E
- Flender Rev 16 for Helical-, Bevel- and Planetary Gear Units (ISO VG 150 - 460)

	Alpha SP 68	Alpha SP 100
Pack Size	205L	205L
Item Code	4102211	3343129
Barcode	9310084403071	9310084403279

	Alpha SP 150		
Pack Size	20L	205L	1000L
Item Code	4102212	3336184	4103645
Barcode	9310084403422	9310084403477	9310084008382

	Alpha SP 220	
Pack Size	20L	205L
Item Code	4102746	4102754
Barcode	9310084403620	9310084403675

	Alpha SP 320	
Pack Size	20L	205L
Item Code	4102123	4102142
Barcode	9310084403828	9310084403873

	Alpha SP 460	
Pack Size	20L	205L
Item Code	4103644	4102210
Barcode	9310084404023	9310084404078

	Alpha SP 680	
Pack Size	20L	205L
Item Code	4102786	4102791
Barcode	9310084404221	9310084404276





#### INDUSTRIAL GEAR BOXES

#### ALPHASYN PG RANGE

Synthetic gear oil primarily intended for use in worm reduction gear boxes, where the low coefficient of friction of the polyalkylene glycol (PAG) base fluid improves efficiency and consequently reduces power consumption and operating temperatures.

Meets requirements of most OEM's that allow the use of PAG based gear oils.

#### **FEATURES & BENEFITS**

- High VI makes it suitable for operations over a wide temperature range
- Low coefficient of friction reduces energy consumption and lowers operating temperatures, leading to longer oil life
- Good thermal and oxidative stability provides reliable operation and extended operating life when compared to mineral oil based products.

#### SPECIFICATIONS/APPROVALS

Viscosity: 220

	Alphasyn PG 220
Pack Size	20L
Item Code	3409328
Barcode	9310084026249

#### **ALPHASYN EP RANGE**

High quality synthetic lubricant based on poly-alphaolefin (PAO) fluids & sulphur/phosphorus.

Extreme pressure additive technology providing good thermal and high load carrying capacity.

#### **FEATURES & BENEFITS**

- Excellent equipment protection with minimal wear and tear provides long term equipment performance and reliability
- Synthetic gear oil that provides excellent high temperature stability to extend machine service life
- EP additives protect gears at high temperatures, reducing bearing and gear tooth wear
- · High viscosity index provides high film strength at elevated temperatures.

- Viscosity range: 150, 220, 320, and 460
- DIN Classification CLP-HC
- Meets the requirements of:
- DIN 51517 Part 3
- AGMA 9005 F16

- AIST 224
- · David Brown S1.53.101 Type E
- Flender Gear Units Rev 16 for Helical-, Bevel- and Planetary Gear Units ISO VG 150 - 680

	Alphasyn EP 150	Alphasyn EP 220	
Pack Size	20L	20L	205L
Item Code	3365125	4102794	4102033
Barcode	9310084014314	9310084400520	9310084400575

	Alphasyn EP 320		Alphasyn EP 460	
Pack Size	20L	205L	20L	205L
Item Code	4102796	4102795	4103659	4102959
Barcode	9310084400322	9310084400377	9310084400926	9310084400971





#### AIR COMPRESSOR OILS

#### AIRCOL SR RANGE

Range of synthetic based, high performance air compressor oils formulated to provide a significantly longer service life in modern oil flooded rotary screw compressors, especially when compared to conventional mineral oil based products.

Suitable for use in all single and two stage oil flooded rotary screw compressors, both stationary and portable types.

#### **FEATURES & BENEFITS**

- · Very low deposit forming tendency, extends service life of filters and separators
- Meets the requirements of Atlas Copco 8000 hour oil drain interval
- Outstanding oxidation stability and antiwear performance providing long lubricant and equipment life.

- · Viscosity: 46 and 68 available
- DIM 51506 classification VDL
- ISO 6743/3- DAG, DAH and DAJ for rotary air compressors
- · Meets requirements of Atlas copco 8000 hour oil drain intervals
- Kaeser

	Aircol SR 46	Aircol SR 68
Pack Size	20L	20L
Item Code	3348769	4102201
Barcode	9310084414626	9310084414824



# **%**

#### AIR COMPRESSOR OILS

#### AIRCOL CM RANGE

The Castrol Aircol™ CM compressor oil range of high quality lubricants are based upon highly refined mineral oil, enhanced with additive technology providing excellent thermal and oxidative stability and good load carrying capacity, compared to other products in the same class.

Castrol Aircol CM grades are formulated without zinc additives (ashless oils), recommended for the lubrication of rotary screw and reciprocating compressors.

- · Viscosity: 32, 46, 68, 100
- · ISO 6743-3 compressor oils
- DAA and DAB for reciprocating (piston) and drip free rotary air compressors
- DAG and DAH for oil-flooded rotary screw air compressors
- Meet the requirements of the DIN 51506 VDL classification for reciprocating compressors having air discharge temperatures up to 220°C.

	Aircol CM 32
Pack Size	20L
Item Code	3427161
Barcode	9310084032912

	Aircol CM 46	
Pack Size	20L	205L
Item Code	3427971	3427972
Barcode	9310084033193	9310084033209

	Aircol CM 68		
Pack Size	3 x 4L	20L	205L
Item Code	3427998	3427997	3427996
Barcode	9310084033216	9310084033223	9310084033230
Tun Code	19310084033213		

	Aircol CM 100	Aircol CM 100	
Pack Size	20L	205L	
Item Code	3427163	3427164	
Barcode	9310084032912	9310084032929	





#### **HEAT TRANSFER OILS**

#### **PERFECTO HT 5**

Castrol Perfecto HT 5 is based on a solvent-refined, high viscosity index mineral oil specially selected for its high thermal and oxidation stability.

#### **FEATURES & BENEFITS**

- Tightly controlled specification helps minimise deposits in heat exchangers in order to maintain heat transfer efficiency
- High operating temperature capability in closed systems with temperatures up to 320°C permitted.

- Castrol Perfecto HT 5 is primarily intended for use in closed heat transfer systems with bulk temperatures up to 320°C. It can also be used in open systems at much lower bulk oil temperatures
- Castrol Perfecto HT 5, because of its solvency and high thermal stability serves as excellent Turbine Flushing oil.

Pack Size	205L
Item Code	3415697
Barcode	9310084034909







#### FIRE RESISTANT HYDRAULIC FLUIDS

#### **ANVOL WG 46**

Castrol Anvol™ WG 46 is an HF-C type water-glycol fire resistant hydraulic fluid, containing anti-wear additives and corrosion inhibitors. It provides excellent protection against rust and vapor phase corrosion.

In hydraulic pump tests, Castrol Anvol WG 46 has shown high levels of anti-wear performance. Its foam resistance, low temperature flow, emulsion stability and storage stability are also excellent.

#### **FEATURES & BENEFITS**

- Excellent anti-wear performance: gives wear protection and reduces downtime from unscheduled maintenance
- Excellent Fire resistance: cannot be ignited in spray ignition tests
- Excellent glycol in water stability: true solution means longer service and storage life
- Outstanding corrosion protection: provides protection below the liquid surface and in the vapour phase
- Exceptionally low pour point: ensures consistent performance over a wide temperature range.



Castrol Anvol WG 46 meets the fire resistance requirements of:

- 7th Luxembourg Report
- · FM Global 6930

Pack Size	200L
Item Code	3432123
Barcode	9310084035128





#### **ROCK DRILL OILS**

#### MAGNA RD RANGE

For use in mining, quarrying, constructions, road works, tunnelling and excavations.

Consist of selected mineral oils specially compounded with lubricity fortifiers, corrosion inhibitors, emulsifiers and tackiness additives.

Recommended for the following well-known companies including Gardner-Denver, Atlas Copco and SIG.

#### **FEATURES & BENEFITS**

- · High film strength
- · Ability to absorb excess water when 'wet air' or wet drilling attachments are present
- · Provide a suitable seal between piston and cylinder
- Reduced wear, helps maintain maximum percussion efficiency and allows operation in conditions of high or low temperatures
- · Preferentially adhere to metal surfaces and resist blow-off
- · Improved protection wear against wear caused by poor lubrication
- · Reduced wear, allows operation in conditions of high or low temperatures.

#### SPECIFICATIONS/APPROVALS

· ISO Viscosity Grade 150, 320

	MAGNA RD 150
Pack Size	205L
Item Code	3413490
Barcode	9310084028779

MAGNA RD 320
1000L
3410774
9310084016851





#### **TURBINE OILS**

#### PERFECTO X RANGE

The Castrol Perfecto X turbine oil range of lubricants is based upon premium quality mineral oils enhanced with rust and oxidation inhibitors to give maximum protection at high temperatures.

Castrol Perfecto X grades are recommended for industrial gas turbines where the lubricant is likely to be exposed to very high localised temperatures. They are also suitable for the lubrication of steam turbines and Combined Cycle generating systems where the steam and gas turbines share a common supply.

Castrol Perfecto X grades possess excellent air release performance, a high resistance to foaming and excellent water separation properties.

#### **FEATURES & BENEFITS**

- High resistance to oxidation and thermal degradation provides a very long life lubricant because of low deposit/ lacquer formation
- Excellent water separation and corrosion inhibition mean reduced down time through prolonged lubricant life and increased equipment reliability
- · Excellent air release properties mean they meet the requirements of all turbine manufacturers
- Suitable for the lubrication of both gas and steam turbines makes them applicable for Combined Cycle generating stations.

#### SPECIFICATIONS/APPROVALS

Castrol Perfecto X range meet or exceed the requirements of:

- BS 489: 1999
- DIN 51515 Part 1 (L-TD)
- DIN 51515 Part 2 (L-TG)
- · General Electric
- · GEK 32568k
- GEK 46506E
- GEK 107395A
- Alstom HTGD 90117
- Siemens TLV 9013 04
- Siemens TLV 9013 05

	PERFECTO X 32		PERFECTO X 46	
Pack size	20L	205L	20L	205L
Item Code	3426205	3414529	3426206	3414528
Barcode	9310084032806	9310084029974	9310084032813	9310084029981

	PERFECTO X 68		PERFECTO X 100	
Pack size	20L	205L	20L	205L
Item Code	3427103	3413637	3428488	3428487
Barcode	9310084032882	9310084028991	9310084033315	9310084033322





#### **TURBINE OILS**

#### PERFECTO XEP 46 SUPERCLEAN

Castrol Perfecto XEP 46 Superclean turbine oil is formulated from severely hydro treated premium mineral base stocks, together with a complex additive system to provide requisite anti wear performance and oxidative stability.

Castrol Perfecto XEP 46 Superclean is primarily intended for the lubrication of highly loaded industrial gas turbines, aero derivative power turbines & driven machinery and turbo machinery where the lubricant is exposed to high local temperatures during operation and the heat soaking period during run down. It possesses the requisite air release, foaming and water separation properties for steam turbines, making them suitable and compliant for gas and steam turbines in single train sharing a common oil reservoir.

#### **FEATURES & BENEFITS**

- · Meets or exceeds a wide range of both steam and gas turbine specifications
- Designed for a wide range of applications making it possible to rationalise grades without risk of misapplication
- · Excellent thermal / oxidation stability
- · Good water separation and corrosion inhibition performance.

#### SPECIFICATIONS/APPROVALS

Meets or exceeds the requirements of:

- · BS 489: 1999
- DIN 51515 Part 1 (L-TD)
- DIN 51515 Part 2 (L-TG)
- · General Electric
- GEK 28143b
- · GEK 32568k
- GEK 46506E
- GEK 101941A
- GEK 107395A
- · General Electric Oil & Gas

Pack Size	205L
Item Code	3440922
Barcode	9310084037092

- ITN 52220.02
- ITN 52220.03
- · Alstom HTGD 90117
- Siemens
- TLV 9013 04
- TLV 9013 05
- MAT812108
- MAT812109
- · Solar ES 9-224 AA Class II





#### STEAM RECIPROCATING ENGINE OILS

#### MAGNA CL 460

Castrol Magna CL 460 is a compounded oil suitable for cylinder lubrication in reciprocating compressors dealing with "wet" petroleum gases. Castrol Magna CL 460 is formulated for the cylinders and bearings of older type gas engines. It is blended with fatty (compounded) agents, which provide improved load carrying properties, enabling the oil to be used for other duties, particularly where higher loads occur or where moisture is present.

	MAGNA CL 460
Pack size	205L
Item Code	3413500
Barcode	9310084028786





#### **CIRCULATING OILS**

#### MAGNA ZN 100

Castrol Magna™ ZN 100 is formulated from premium quality refined base oils and contains anti-wear and tackifying additives. It is suitable for application as a general lubricant to chains, slides, sprockets, and bearings used in the sawmill industry.

- · Minimises throw off, especially on large fast moving Sawmill Chain Systems
- Minimises wear on chains, slides, bearings and may be applicable for lightly loaded gearboxes
- May be dispensed from central lubrication system.

	MAGNA ZN 100
Pack Size	209L
Item Code	3379713
Barcode	9403044104351





#### CIRCULATING OILS

#### MAGNA CTX WT RANGE

The Castrol Magna CTX WT Range are a series of premium quality circulating oils that represent a significant advancement in circulating oil technology. These oils are manufactured from the highest quality base oils and are formulated with an advanced technology anti-wear additive system, designed to extend service life in a broad range of systems operating under high impact and high shock loading. Castrol Magna CTX WT oils are designed to provide maximum rust and oxidation resistance while allowing the oil to rapidly separate from water, providing exceptional demulsibility characteristics.

Castrol Magna CTX WT oils are engineered for use in MORGOIL™ back-up roll bearing systems (both ferrous and non-ferrous), such as those manufactured by Morgan Construction Company, Danieli, SMS Demag and others. They are also suitable for use on other primary mill and mini-mill bearing application systems.

#### **FEATURES & BENEFITS**

- Advanced technology anti-wear additive package: Passes FZG stage 12+ and provides noncorrosive anti-wear protection in high impact and high shock load applications.
- Excellent demulsibility: Rapid water separation and hydrolytic stability means increased corrosion protection and reduced down time through prolonged lubricant life, and increased equipment reliability.
- Superior thermal and oxidative stability: Provides reliable performance and extends oil life in severe applications.
- Minimal deposit formation: Cleaner system and reduced filter change frequency.
- Protection against rust and corrosion: Prevents corrosive activity on bearings and metal surfaces.
- Environmentally friendly: Does not contain zinc, phenol, or heavy metals.

#### SPECIFICATION/APPROVALS

Viscosities: 100, 220, 460

These oils meet or exceed:

- Morgoil Lubricant Specification Rev. 1.1 (27 Jan 2005)
- · Morgoil 'Super-Demulsibility' Lubricant Specification Rev. 2.4
- · Danieli Standard 0.000.001 Rev. 14.

	MAGNA CTX 100 WT
Pack size	1000L
Item Code	3410648
Barcode	9310084027147
	MAGNA CTX 220 WT
Pack size	205L
Item Code	3411067
Barcode	9310084027802

	MAGNA CTX 460 WT	
Pack size	205L	1000L
Item Code	3413645	3413646
Barcode	9310084028830	9310084028823





#### **SLIDEWAY OILS**

#### MAGNA SW 32

Castrol Magna SW 32 is a specially formulated slideway lubricant to provide all-round performance with good stick-slip and load carrying performance. It combines controlled frictional characteristics with high film- strength and high load carrying properties to eliminate 'stick-slip'.

Castrol Magna SW 32 is a light viscosity, combined hydraulic and slideway lubricant. Applications include lightly loaded slideways, such as those found on small centre lathes, and combined hydraulic and slideway systems such as in reciprocating grinding machines.

- · Good lubricity prevents stick-slip of slideways
- · High load carrying capacity prevents wear of highly loaded slideways
- Good demulsification and cutting fluid compatibility can be used in the presence of water or water-based metalworking fluids.

	MAGNA SW 32
Pack size	20L
item Code	3409468
Barcode	9310084026270





#### **SLIDEWAY OILS**

#### MAGNA SW D RANGE

The Castrol Magna SW D Range is specially formulated for the lubrication of slideways on machine tools. These oils are fortified with selected oiliness, extreme pressure additives, and a special material to impart tackiness and adhesiveness.

Castrol Magna SW D lubricants are noted for their ability to overcome the stick-slip motion ordinarily associated with slow moving tool parts. They reduce machine tool carriage chatter and possess the necessary adhesive characteristics to prevent squeezing out of the lubricant.

Castrol Magna SW D can be used on all horizontal and vertical slideways where a high-quality demulsifying lubricant is required for slideway protection, and to maximize coolant life. The outstanding frictional characteristics of the products prevent stick-slip, improving surface finish and tolerances of machined components and reducing rejection rates.

Castrol Magna SW D meets the exacting demands in the applications such as planers, grinders, horizontal boring machines, shapers, jig borers, and milling machines. It can also be used as a combined hydraulic and slideway oil.

#### **FEATURES & BENEFITS**

- Outstanding demulsifying properties helps prevent soluble oil emulsions on plastic slideway surfaces
- · Avoids downtime and expensive slideway repair or replacement
- Exceptional resistance to stick slip helps to ensure highly accurate and repeatable machining
- · High quality output is maintained
- · Protects metals against staining and corrosion.

#### SPECIFICATION/APPROVALS

· Viscosities: 68, 220

- · Meets the requirements of:
  - Cincinnati Lamb (Milacron) P-47, P-50 and P-53 (depending on viscosity grade)
  - DIN 51502 CGLP
  - DIN 51524 Part II (July 2004) including ISO 13357-1/-2 filtration test
- · Suitable for Müller Weingarten equipment as hydraulic oil.

	MAGNA SW D 68	
Pack size	20L	205L
item Code	3412391	3413017
Barcode	9310084028205	9310084028328
	MAGNA SW D 220	

	MAGNA SW D 220	
Pack size	20L	205L
item Code	3410650	3410649
Barcode	9310084027871	9310084027888





#### INDUSTRIAL GREASE

#### **MOLUB-ALLOY 6040 RANGE**

#### **EP GREASES**

Castrol Molub-Alloy<sup>™</sup> 6040 greases are extreme pressure (EP) multi-service lubricants designed to give outstanding performance in a wide variety of applications. They may be used in either journal or antifriction bearings in the most demanding industrial applications under extreme environmental conditions.

Castrol Molub-Alloy 6040 is manufactured from the highest quality petroleum oil and thickened with a unique calcium complex sulfonate unsurpassed for mechanical shear stability. Castrol Molub-Alloy 6040 greases are compounded with chemical additives for EP characteristics and with select Castrol Molub-Alloy lubricating additives for thin-film, high-pressure anti-wear protection. They are also inhibited against high temperature oxidation and corrosion.

#### **FEATURES & BENEFITS**

- · Corrosion and oxidation inhibitors maximise rust protection and grease life.
- Operating temperature range of -40°C to +140°C
- The load carrying and anti-wear capabilities of Castrol Molub-Alloy™ 6040 exceed conventional complex greases
- Castrol Molub-Alloy™ 6040 multi-service greases offer excellent oxidation resistance and resist washing
  out, even under adverse water contamination. This product has been designed to work with aggressive
  process waters
- Reduced friction due to the effect of the Castrol Molub-Alloy additives is most evident under boundary
  and mixed-film lubrication conditions. This benefit is most pronounced where frequent start-up, slow
  speeds or high and unexpected heavy loads are encountered
- Overall savings are derived from the above and result from less labor and downtime, smoother, more
  efficient operation with longer parts life and extended lubrication cycles.

#### Additional Information

Castrol Molub-Alloy™ 6040 greases should not be mixed with greases using a different thickener. Relubrication intervals should be increased gradually to ensure the complete removal of the previous lubricant and to use additives to their full advantage.

Castrol Molub-Alloy™ 6040 greases can be applied with grease guns or automatic dispensing systems.

	MOLUB-ALLOY 6040/150	
Pack Size	12x450GM	16.8 KG
Item Code	3361340	3335336
Barcode	9310084014246	9310084025303

	MOLUB-ALLOY 6040/460	MOLUB-ALLOY 6040/460-11/2		
Pack Size	12x450GM	20 KG	181.5 KG	
Item Code	3424827	3424826	3424825	
Barcode	9310084032301	9310084032295	9310084032288	





#### INDUSTRIAL GREASE

#### **MOLUB-ALLOY 860 RANGE**

MULTI-PURPOSE HIGH PERFORMANCE GREASE

Castrol Molub-Alloy™ 860 ES greases are high-performance multi-service lithium complex greases formulated from premium petroleum base oils, lubricating solids and a combination of corrosion inhibitors specifically chosen for protection against corrosive process waters. These are designed to extend the service life of bearings in heavy-duty applications and at elevated temperatures. Castrol Molub-Alloy 860 ES greases provide an appropriate oil film for applications at slower to moderate speeds, higher loads, and/or higher temperatures sustained for longer periods of time.

The load carrying and anti-wear capabilities of Castrol Molub-Alloy 860 ES greases exceed conventional complex greases.

High performance is the result of chemical additives working synergistically with select Castrol Molub-Alloy lubricating solids which are dispersed uniformly throughout the grease. These lubricating solids offer their greatest benefit at slow speeds or when bearings endure heavy loads and shocks. Solids also protect newly machined bearing surfaces during the critical period of 'running in'. Good bearing surfaces are essential for long service life.

- Excellent friction reduction characteristics due to Castrol Molub-Alloy solid lubricants easier start-up, reduced heat, and reduced energy leading to longer bearing life
- Exceptional water resistance coating film stays on the surface in the presence of water, even when exposed to the action of hot and chemically active process water
- Excellent EP and anti-wear properties protects equipment against extreme/shock loading and helps minimise bearing component wear and hence extends equipment life
- Excellent mechanical stability and adhesion grease keeps its consistency in service ensuring long-term protection and reduced consumption as the film stays between lubricated surfaces
- Outstanding oxidation/thermal stability and high dropping point provides reliable performance and extended lubricant life in high-temperature applications
- Formulated to address environmental concerns it is free of antimony, barium, lead, and zinc.

	MOLUB-ALLOY 860/460-2 ES	MOLUB-ALLOY 860/220-2 ES
Pack Size	181.4KG	181.4KG
Item Code	3411669	3409979
Barcode	9310084027567	9310084026584





#### INDUSTRIAL GREASE

#### **MOLUB-ALLOY 777 ES**

HIGH PERFORMANCE GREASE

Castrol Molub-Alloy™ 777 ES greases are designed for very heavy duty service in extreme environments.

They are blended and compounded to withstand heavy and shock loading, commonly found in the steel/primary metals, construction, mining, and forest products industries.

Castrol Molub-Alloy 777 ES greases are made using a blend of high quality petroleum oils, polymers and Castrol Molub-Alloy lubricating solids. These lubricating solids work synergistically with chemical anti-wear and extreme pressure (EP) additives to reduce contact temperatures and wear while providing outstanding protection under extreme pressure and shock load conditions.

Rust and oxidation inhibiting characteristics are maximised to ensure effective rust protection and the long life of the grease.

- Excellent friction reduction characteristics due to Castrol Molub-Alloy solid lubricants –
  easier start-up, reduced heat, and reduced energy leading to longer bearing life
- Excellent mechanical stability grease keeps its consistency in service ensuring long term protection
- · Easily pumpable in central lubrication systems
- Excellent water resistance coating film stays on the surface even in the presence of water
- · Protects against copper and steel corrosion
- Excellent EP and anti-wear properties protects equipment against extreme/shock loading and helps minimise bearing components wear and extend equipment life.

	MOLUB-ALLOY 777-1 ES	
Pack Size	20KG	181.4KG
Item Code	3391457	3410104
Barcode	9310084025273	9310084026645

	MOLUB-ALLOY 777	MOLUB-ALLOY 777-2 ES		
Pack Size	12x450G	20KG	181.4KG	Bulk
Item Code	3378492	3380201	3410638	3378517
Barcode	9310084020964	9310084021374	9310084027093	N/A





#### INDUSTRIAL GREASE

#### **MOLUB-ALLOY 1000 HT**

**EXTREME TEMPERATURE GREASE** 

Castrol Molub-Alloy™ 1000 HT (previously called Molub-Alloy™ 1000) extreme temperature grease utilises synthetic base oils in conjunction with a blend of lubricating solids selected for high temperature service. The synthetic fluids in Castrol Molub-Alloy 1000 HT were selected for their controlled low volatility, minimum residue after evaporation and high VI for additional film strength at elevated temperatures.

The combination of synthetic fluids and a unique thickening system offers physical stability in prolonged service at high temperatures. Castrol Molub-Alloy 1000 HT remains more pliable than conventional high temperature greases.

As a result of the higher viscosity, synthetic base fluids used in Castrol Molub-Alloy 1000 HT, the film strength at elevated temperature is superior to that of petroleum base oils. It is also formulated with a combination of rust and oxidation inhibitors for prolonged service life without relubrication.

- Excellent friction reduction characteristics due to Castrol Molub-Alloy solid lubricants – easier start-up, reduced heat, and reduced energy leading to longer bearing life
- Synthetic base fluid and unique thickening system the combination of synthetic fluids and a unique thickening system offers physical stability in prolonged service at high temperatures. This combination makes Castrol Molub-Alloy 1000 HT more pliable than conventional high temperature greases, leading to longer bearing life, extended lubrication cycles and uninterrupted service
- Castrol Molub-Alloy 1000 HT grease is engineered for prolonged service from 177°C to 288°C. Castrol Molub-Alloy 1000 HT also withstands intermittent exposure to temperatures up to 343°C
- Formulated to address environmental concerns it is free of antimony, barium, lead, and zinc.

	MOLUB-ALLOY 1000 HT	
Pack Size	12x450G	15.8KG
Item Code	3410350	3410349
Barcode	9310084026850	9310084026843





# **%**

#### INDUSTRIAL GREASE

#### TRIBOL GR 100 PD RANGE

HIGH PERFORMANCE BEARING GREASE

Castrol Tribol GR 100 PD is a range of lithium based greases containing highly refined mineral oils, enhanced with the MicroFlux Trans (MFT) additive system. The MFT additive technology provides optimum wear protection and an extremely low coefficient of friction even under extremes of pressure, vibration, shock loads, at high or low speeds or varying micro-smoothing of the friction surfaces.

Typical applications include bearings of spinning and grinding spindles, gear motors exposed to shock loads, screening / wood shaping machines, bearing surfaces of printing plates, spreader rolls, roll neck bearings in steel mills, bearings with changing rotational directions or slewing movements, and are also used in curved teeth couplings and centralised lubricating systems.

- High load bearing capacity extends the operating period under high loads leading to optimum wear protection
- Superior lubrication and surface smoothing effects due to MFT can reduce failures, leading to less downtime and repair work. PD technology can prolong the life of damaged components
- Establishment of a protective layer of MFT this additive system can effectively increase the load bearing area, reducing unit pressures, operating temperatures and wear, increasing service life of both parts and lubricant
- Improved bearing surfaces for longer service life result from the 'running in' effect of MFT
- Extremely low coefficients of friction generating energy savings and reduced noise levels.

	TRIBOL GR 100-1 PD
Pack Size	18KG
Item Code	3409422
Barcode	9310084026294

	TRIBOL GR 100-2 PD
Pack Size	450G
Item Code	3399300
Barcode	9310084026058







Castrol Motorcycle product transitions

At Castrol, we know that keeping things simple is critical for your success. It's one of the reasons we're undertaking one of the biggest updates ever simplifying our portfolio whilst we continue deliver the best products, with latest industry and OEM approvals, whilst eliminating unnecessary complexity.

We appreciate that change can take some getting used to so don't forget that your local Castrol Technical Helpline is only ever a phone call away to ensure you've got the right product for the right application.

OLD PRODUCT NAME	OLD PACK SIZE	OLD ITEM CODE	NEW PRODUCT NAME	NEW PACK SIZE	NEW ITEM CODE	TIMING
Daylar 1 (T 10) ( / 0	6x1L	3384361		1L	3434507	
Powerl 4T 10W-40	3x4L	3384362		4L	3434506	2027
Power1 Racing 4T 10W-40	3x4L	3418672	D 111111 1 (T10)4/ (0			
D 1/T10W /0	20L	3384363	Power1 Ultimate 4T 10W-40	20L	3434508	2024
Powerl 4T 10W-40	205L	3384364		205L	3434505	
Powerl Racing 4T 10W-40	205L	3384358				
Power1 Racing 4T 5W-40	4L	3356991	Power1 Ultimate 4T 5W-40	4L	3434502	2024
D 10 : 07	6x1L	3384385	D 311111 1 27	1L	3440639	02.25
Power1 Racing 2T	3x4L 3384364	3384364	Powerl Ultimate 2T	4L	3440640	Q2-25





#### **POWERI RACING 2T**

Full synthetic 2-stroke engine oil with proven performance in extreme race conditions.

It is specifically designed for the latest generation of high output air and water-cooled Japanese and European 2-stroke on and off road motorcycle engines.

It may also be used in Go-Kart racing engines, or wherever Castrol ACTIV 2T is recommended.

#### **FEATURES & BENEFITS**

- High protection formula enhances throttle response for fast acceleration
- · Significantly reduced exhaust smoke
- Suitable for both oil injection and premix lubrication, up to a fuel/oil ratio of 50:1.

#### SPECIFICATIONS/APPROVALS

- JASO FD
- · ISO-L-EGD
- APITC+

Pack Size	6x1L	3x4L
Item Code	3384385	3384384
Barcode	9310084029011	9310084029004



#### **POWERI ULTIMATE 4T 5W-40**

(PLEASE REFER TO TRANSITION TABLE)

Castrol POWER1 ULTIMATE, with Full Synthetic technology, is engineered for outstanding performance across 5 critical areas.

Castrol POWER1 ULTIMATE's 5-in-1 formula delivers outstanding performance and acceleration.

Castrol POWER1 ULTIMATE 4T 5W-40 is suitable for all makes of 4-stroke bikes, both carburettor or fuel injected where API SN (or below) and JASO MA or MA2 are recommended.

Complies with requirements of catalyst equipped engines.

When choosing oil, please refer to your owner's handbook and the product specifications.

#### **FEATURES & BENEFITS**

The 5-in-1 formula of full synthetic Castrol POWER1 ULTIMATE 4T 5W-40 delivers a range of benefits including:

- 1. Excellent acceleration\*
- 2. Excellent protection
- Smooth riding
- 4. Temperature control
- 5. Enduring performance.

#### SPECIFICATIONS/APPROVALS

- API SN
- JASO MA-2

Pack Size	4L
Item Code	3434502
Barcode	9310084035548





<sup>\*</sup>Acceleration benefits will be subject to riding style and oil viscosity grade



#### POWERI ULTIMATE 4T 10W-40

(PLEASE REFER TO TRANSITION TABLE)

Castrol POWER1 ULTIMATE, with Full Synthetic technology, is engineered for outstanding performance across 5 critical areas.

Castrol POWER1 ULTIMATE's 5-in-1 formula delivers outstanding performance and acceleration.

Castrol POWER1 ULTIMATE 4T 10W-40 is suitable for all makes of 4-stroke bikes, both carburettor or fuel injected where API SN (or below) and JASO MA or MA2 are recommended.

Complies with requirements of catalyst equipped engines.

When choosing oil, please refer to your owner's handbook and the product specifications.

#### **FEATURES & BENEFITS**

The 5-in-1 formula of full synthetic Castrol POWER1 ULTIMATE 4T 10W-40 delivers a range of benefits including:

- 1. Excellent acceleration\*
- 2. Excellent protection
- 3. Smooth riding
- 4. Temperature control
- 5. Enduring performance.

#### SPECIFICATIONS/APPROVALS

- API SN
- JASO MA-2

Pack Size	1L	4L	20L	205L
Item Code	3434507	3434506	3434508	3434505
Barcode	9310084035586	9310084035579	9310084035562	9310084035555



<sup>\*</sup>Acceleration benefits will be subject to riding style and oil viscosity grade



#### **POWERI ULTIMATE 2T**

(PLEASE REFER TO TRANSITION TABLE)

Castrol POWER1 ULTIMATE 2T is a full synthetic engine oil for use in modern, high speed, high performance 2-stroke engines. Its fast burn, high protection formula is designed to release the full potential from highly tuned motorcycle engines.

Castrol POWER1 ULTIMATE 2T is suitable for all modern, high performance 2-stroke motorcycle engines from European and Japanese manufacturers. It is designed for both oil injection and pre-mix lubrication, as per manufacturers' instructions, up to a fuel/oil ratio of 50:1.

#### **FEATURES & BENEFITS**

- · Fast burning, high protection formula.
- Designed for both oil injection and pre-mix systems up to 50:1
- Excellent engine cleanliness.
- · Exceptional resistance to seizure.

Pack Size	6x1L	4L
Item Code	3440639	3440640
Barcode	9310084036859	9310084036866





#### **ACTIV 2T**

Modern, high quality 2-stroke engine oil suitable for use in all 2-stroke Japanese and European motorcycle engines.

#### **FEATURES & BENEFITS**

- Provides continuous protection against the build-up of carbon deposits on the engine and spark plug, ensuring fast and reliable starting
- · Improved piston and combustion chamber cleanliness.

#### SPECIFICATIONS/APPROVALS

- JASO FD
- · ISO-L-EGD

Pack Size	6x1L	3x4L
Item Code	3413904	4100596
Barcode	9310084029516	9310084003530



#### **ACTIV 4T 15W-50**

Modern high quality engine oil specifically for 4-stroke engines.

Developed with wear protection formula ensures continuous protection throughout the drain interval so that you can start and go in confidence.

#### **FEATURES & BENEFITS**

- ${\boldsymbol \cdot}{}$  Significantly reduces engine wear during start-up and warm-up
- Improved engine cleanliness, promoting longer engine life
- Enhanced gear wear protection for transmission gears.

#### SPECIFICATION / TECHNICAL DATA

- JASO MA-2
- API SL

Pack Size	6x1L	3x4L	205L
Item Code	3384527	3384526	3384525
Barcode	9310084028977	9310084003516	9310084024252





#### **CHAIN SPRAY O-R**

High performance chain lubricant that provides overall protection and longer service life to motorcycle chains and sprockets.

Suitable for motorcycle chains and sprockets and suitable for standard O-Ring and X-Ring chains. It is also useful on spark plug threads and nut and bolt threads subject to high temperatures.

#### **FEATURES & BENEFITS**

- Outstanding lubrication and protection under extreme conditions
- · Resistant to water wash-off
- · Protection against corrosion and aggressive environments
- · Reduced friction helping to maximise power transfer and reduce wear.

Pack Size	6x250G
Item Code	3377680
Barcode	9310084020384



#### FOAM AIR FILTER OIL

Specially formulated for applications to "wet type" foam air filters fitted to 4 and 2-stroke engines.

#### **FEATURES & BENEFITS**

• Provides excellent performance in preventing airborne dirt and abrasive particles from passing through the air intake system into the combustion chamber.

Pack Size	6x300G
Item Code	3357643
Barcode	9310084012839





## **Boating fluids**



#### **BOATING**



#### **OUTBOARD 2T**

Self-mixing fully tested and approved TC-W3 $^{\text{TM}}$  standard 2-stroke outboard oil.

Recommended for all water cooled outboard motors, including Force, Mariner, Johnson, Evinrude, Mercury, Chrysler, Suzuki, Tohatsu and Yamaha. It is suitable for premixed fuel oil or for direct oil injection systems.

It can be used with fuel/oil ratios of up to 100/1 (as specified by the engine manufacturer).

#### **FEATURES & BENEFITS**

- Superb anti-wear properties to ensure excellent engine protection
- Exceptional overall engine cleanliness and reduced spark plug fouling
- Excellent corrosion and storage protection.

#### SPECIFICATIONS/APPROVALS

NMMA TC-W3

Pack Size	3x4L	6 x 1L
Item Code	3377729	3377726
Barcode	9310084024047	9310084020292





#### **GARDEN**



#### **GARDEN 2T**

A 2-stroke engine oil recommended for 2-stroke lawnmowers, lawn edgers, chainsaws and stationary engines.

#### **FEATURES & BENEFITS**

- The formula is very clean burning. This means cleaner combustion chambers, exhaust ports and mufflers
- · Good piston and cylinder lubrication
- Mixes rapidly with fuel, dyed blue for easy identification. With unleaded petrol, the fuel/oil mix turns a pale green colour.

#### SPECIFICATIONS/APPROVALS

API TC

Pack Size	12x200ml	6x1L	3x4L	20L
Item Code	3379988	3379986	3379987	3379989
Barcode	9310084022944	9310084022968	9310084022951	9310084022937

# Castrol GARDEN

#### **GARDEN 4T 10W-30**

Castrol Garden 4T 10W-30 is a modern engine oil for garden machinery with a formulation that ensures enhanced engine cleanliness and durability. Is suitable for four stroke gasoline engines in lawn care and garden equipment where the manufacturer recommends API SN or earlier specifications. It is also suitable for diesel engines requiring API CF lubricants or earlier.

#### **FEATURES & BENEFITS**

- · Multigrade 10W-30 enables reliable engine start-up year round
- · Fights deposits and maintains engine cleanliness
- Excellent protection against engine wear and corrosion
- Suitable for a wide range of garden equipment with 4-stroke gasoline or diesel engines requiring API SN/CF or earlier specification.

#### SPECIFICATIONS/APPROVALS

API SN/CF

Pack Size	6x1L
Item Code	3421498
Barcode	9310084031526

#### **CUTTER BAR AND CHAIN LUBRICANT**

Cutter Bar and Chain Lube is a non-drip product for use in chainsaw bars and chain lubrication. It is designed to provide optimum protection and lubrication of chainsaw bars and chains. Its balanced formulation contains a tackiness additive which minimises oil loss due to throw-off. This results in reduced wear and lower oil usage.

#### **FEATURES & BENEFITS**

- · Suitable for both manual application and automatic oiling systems
- · Resists centrifugal throw-off under heavy cutting and high speeds
- · Reduces wear and prevents abrasion resulting from sawdust, soil and grit
- · Prevents gum formation on chains and guides.

Pack Size	6x1L	3x 4L	20L	205L
Item Code	3425537	3364186	3374803	3358785
Barcode	9403044104634	9403044101466	9403044102838	9403044102517











#### **BIOTRANS QB**

High foaming biodegradable detergent for removing dirt, traffic haze, oil and grease from all vehicles.

May be used for washing boats and motorcycles.

#### **FEATURES & BENEFITS**

- Has quick-break properties to assist in waste water disposal via separator equipment
- · Suits a multitude of applications which can reduce inventory of products on site
- · Suitable for use in hard, soft and salt water environments
- · Enables thorough cleaning of surfaces and can be foamed.

#### TECHNICAL DATA/DIRECTIONS FOR USE

· Suitable for manual or machine applications, including pressure cleaners

Pack Size	20L
Item Code	3369084
Barcode	9310084014604



#### CARECLEAN LIME

Water based, heavy-duty hand cleaner with a pleasant lime fragrance developed to remove a range of soils and provide excellent skincare and conditioning.

Well suited to a range of industries where it is a very effective hand cleaner for the removal of a wide range of soils including grease, grime, soot, ink and many other contaminants.

Ideal for manufacturing, rural and handyman applications.

#### **FEATURES & BENEFITS**

- Contains optimum concentration of natural abrasive beads to gently massage the skin removing ingrained dirt and grease without being too harsh in removing the skin's natural oils
- · Contains aloe vera to enhance soothing and conditioning of the skin
- Multi-purpose reduces the need for numerous hand cleaners.

#### TECHNICAL DATA/DIRECTIONS FOR USE

- Colour: green
- Apply approx. 5ml to hands that have not been pre-moistened and massage into skin
- Rinse off with cold or warm water

Pack Size	4x4L	3x5L	20L
Item Code	3334599	3410663	3410664
Barcode	9310084004582	9310084027109	9310084027116







#### MOP S

Effective oil and liquid absorbent based on a granular inert diatomaceous earth sourced in Australia.

Industry uses include absorption requirement in garages, workshops, tanneries, packaging, oil/paint stores, lift wells, mastic floors. Can also be used in pattern making and floor ash trays.

Domestic uses include pet trays, oil drip trays, organic gardens, snail deterrent, potting, laundry, garbage bin, cellars and aquariums.

#### **FEATURES & BENEFITS**

- · Safe, hygienic, handy and has many applications
- · Health and safety acceptable as non-flammable in itself
- · Easy to transport as solid but light in weight
- · Starts absorbing immediately for effective spill clean-up
- Excellent absorbency and will draw up approx. its own weight in oil.

#### TECHNICAL DATA/DIRECTIONS FOR USE

- · Colour: whitish brown inert neutral and odourless granular product
- · 30L bag will cover approx. 14sqm to a depth of 3mm
- Replace when saturation is reached black colour where soaking up oil.
   Dark brown when acids, water and other liquids are spilt.

Pack Size	30L
Item Code	3343275
GTIN-13	9310084005633



#### MULTI-PURPOSE DEGREASER

For degreasing and cleaning ferrous and non-ferrous metals, glass, wood, ceramics and concrete.

Ideal for cleaning engines, machines, workshop floors and automotive components.

#### **FEATURES & BENEFITS**

- · Formulated using biodegradable emulsifiers
- · Convenient and ready to use, just spray on and wash off with low pressure water
- Washes off easily with water then separates so that excess oils and dirt can be retained in a grease trap
- One product for most degreasing operations
- · No "oily" residue.

#### TECHNICAL DATA/DIRECTIONS FOR USE

- · Can be used with brush, swab, spray or an immersion tank
- · General purpose degreasing and cleaning use neat.

Pack Size	20L	205L
Item Code	4105342	4105357
Barcode	9310084533020	9310084533075





#### **TECHNICLEAN AS 62**

Castrol Techniclean™ AS 62 is a fast drying, low aromatic solvent cleaner. It has excellent solvency power and is compatible with all metal substrates and most non-metal substrates.

Techniclean AS 62 has been developed specifically as an alternative to chlorinated solvent cleaners and traditional high aromatic-containing hydrocarbon solvent cleaners.

#### **FEATURES & BENEFITS**

- Excellent solvency power against animal, vegetable and mineral fats and oils and very low surface tension, allowing the fluid to penetrate into difficult to reach areas – improves parts cleanliness and reduces re-work
- · Fast drying, residue-free finish increases productivity and minimises scrap-rate
- Based on a solvent with low aromatic content improves environment for workforce
- No waste water is produced and solvent can be recycled by distillation highly effective and yet economical.

Pack Size	20L	205L
Item Code	3413976	3413975
Barcode	9310084029301	9310084029318



#### TECHNICLEAN GALVPACK PB

Castrol Techniclean™ Galvpack PB is a blend of detergent additives that exhibits excellent stability in hot alkaline solutions.

Techniclean Galvpack PB is designed to be used as a detergent package in combination with strong alkaline builders and acids in dip applications.

It improves the cleaning properties of alkaline soak tanks and pickling baths in a range of industries, including galvanising, plating and engine reconditioning.

#### **FEATURES & BENEFITS**

- \* Excellent wetting and cleaning of metal surfaces in hot caustic soak tanks,  $> 80\,^{\circ}\text{C}$
- · Excellent stability in hot alkaline solutions
- Stable in acid solutions where it also improves the performance of pickling baths.

Pack Size	1000L
Item Code	3414121
Barcode	9310084029547





#### **CALIBRATION OIL 4113**

**DIESEL INJECTOR TEST FLUID** 

Castrol Calibration Oil 4113 is a low viscosity mineral oil-based calibration and storage oil for diesel fuel injectors, conforming fully with ISO 4113 and Lucas CAV 7-10-106 (now obsolete) specifications. The rust preventative properties of this oil are such that, without cleaning of the equipment after calibration, proper functioning of the equipment is ensured after one year's storage in normal conditions.

Whilst Castrol Calibration Oil 4113 contains no harmful additives it is a light mineral oil and will have a de-fatting effect upon unprotected skin. Use of a barrier cream or other protection is recommended when in contact with this product.

Pack Size	20L	
Item Code	3337286	
Barcode	9310084458521	



#### DIESEL EXHAUST FLUID



#### **ADBLUE**

Castrol AdBlue® is a high quality AUS/32 Diesel Exhaust Fluid conforming to the ISO 22241 specification.

Made under license from Verband der Automobilindustrie e.V. (VDA).

#### TECHNICAL DATA/DIRECTIONS FOR USE

The ISO 22241 specification consists of five sections. Castrol AdBlue® conforms to all sections of ISO 22241 as outlined below.

ISO 22241-1:2019 Diesel engines -- NOx reduction agent AUS 32 --

Part 1: Quality requirements

ISO 22241-2:2019 Diesel engines -- NOx reduction agent AUS 32 --

Part 2: Test methods

ISO 22241-3:2017 Diesel engines -- NOx reduction agent AUS 32 --

Part 3: Handling, transportation, and storage

ISO 22241-4:2019 Diesel engines -- NOx reduction agent AUS 32 --

Part 4: Refilling interface

ISO 22241-5:2019 Diesel engines -- NOx reduction agent AUS 32 --

Part 5: Refilling interface for passenger cars

#### **INSTRUCTIONS FOR USE**

- · Fill into the designated tank for DEF/AUS. Do not fill into diesel/ fuel tanks
- Once opened, the container should be consumed in full to avoid contamination and negative impact on product quality
- Avoid contamination with fuel or oil. Use a dedicated spout to pour Castrol AdBlue<sup>®</sup> into the tank
- · Keep away from dust and dirt.

Pack Size	6x1L	10L	20L	1000L
Item Code	3423684	3423681	3423682	3428015
Barcode	9310084031878	9310084031892	9310084031908	9310084033254







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#### Low speed pre-ignition phenomenon

Today's modern engines are designed to deliver higher levels of performance, improved fuel economy and emissions benefits than ever before. Common approaches being introduced are downsizing, turbocharging and gasoline direct injection engines.

These strategies place higher stress on the engine due to higher operating temperatures. At low speeds and high loads, the fuel-air mixture in the cylinder ignites early, resulting in a higher pressure than expected in the cylinder. This causes engine knock, reduced engine performance and in severe cases, may lead to engine damage such as broken spark plugs and cracked pistons. This phenomenon is called Low-Speed Pre-Ignition - LSPI which typically occurs when an engine is under high load at low rpm (i.e., driving slowly and then rapidly accelerating).

#### Contributed factors to LSPI

Unlike conventional knock, an LSPI event cannot be predicted and corrected by adjusting spark timing.

Research has pointed out that LSPI arises from interactions between lubricants, fuels, and engine design/operation. As such, mitigating pre-ignition involves altering the design of the engine or lubricant to help avoid this emerging issue.

In relation to engine lubrication, there are also a number of documented analysis where they look to understand the effects of key components in a modern lubricant to LSPI. Components that have a significant impact on LSPI have been categorised as: quencher (decrease LSPI activity), promoter (increase LSPI activity), and neutral (no change in LSPI activity) are summarised in below table.

NLGI Number	Appearance	Consistency Food Analog	Appearance
Detergent	Calcium Sodium	Magnesium	
Friction Modifier			Molybdenum
Antiwear			ZDDP
Vi Improver		V	
Anti- oxidation			√

#### New engine oil specification

In order to not only minimise the LSPI phenomenon but also provide better engine protection as well as oxidation stability and deposit control, the two latest oil specifications API SP and ILSAC GF-6 were introduced in May 2020.

There are five new engine tests introduced for API SP compared to API SN PLUS to ensure that engines requiring API SP capable engine oil are robust for the latest generation of engine hardware.

- Sequence IIIH Measure viscosity control (resists thickening), oil oxidation
   resistance and engine deposit control
- Sequence IVB This is a new engine test for engine wear
- Sequence VH A new test for engine cleanliness and sludge
- Sequence IX LSPI API SP requires slightly more stringent control of LSPIevents.
   API SN and prior specifications do not have any testing for LSPI
- Sequence X A new requirement for timing chain wear protection.

ILSAC GF-6 provides low-speed pre-ignition and timing chain wear protection while improving piston cleanliness and fuel economy. This performance standard includes two separate specifications: GF-6A which is backward-compatible with the existing ILSAC viscosity grades and GF-6B will be defined for 0W-16 viscosity grade oils only.

In ASPAC, Castrol have upgraded PCO portfolio include both EDGE, MAGNATEC and GTX range to meet the latest engine oil specification since beginning of 2022.







Please connect with your local marketing team for a further detail plan.



## ACEA engine oil sequences for light duty engines.



#### What is ACEA?

ACEA is a European Automobile Constructors' Association that represents Europe's 16 major car, van, truck, and bus manufacturers. They are the European equivalent of the American Petroleum Institute (API).

The ACEA oil sequences define the minimum quality level for service fill engine oil. Service manuals often recommend ACEA as well as API and JASO specifications. If a manufacturer mandates an ACEA specification, using products without the required ACEA specification may provide inadequate engine protection, shorten the life of after treatment devices and void the manufacturer's warranty.

For lubricant marketers to claim ACEA specifications, they must submit a letter of conformance to ATIEL. Castrol is a proud member of ATIEL and a signatory to ATIEL's letter of conformance. You can check whether a lubricant marketer is a signatory at www.sail-europe.eu

#### **ACEA** classes

The ACEA defines the following engine oil classes,

ACEA A/B for gasoline and light duty diesel engines.

ACEA C for gasoline and light duty diesel engines with

after treatment devices\*

**ACEA E** for heavy diesel engines.

\*After treatment devices include three-way catalytic converters, diesel particulate filters (DPF), gasoline particulate filters (GPF).

#### What is new for 2021?

2021 saw the introduction of new and updated light duty ACEA sequences to better serve changing engine technologies.

The new sequences focus on LSPI prevention, as well as turbocharger deposits, wear, and fuel economy. All existing sequences have been revised, either discontinued or updated.

#### Discontinued Categories - A3/B3, C1.

These can no longer be claimed after May 2023. ACEA A3/B4 can be used where ACEA A3/B3 was required. ACEA C1 has no direct replacement, however manufacturers such as Jaguar and Land Rover can continue with OEM or alternative specifications where required.

#### Introduced Categories - A7/B7, C6.

These categories are based on A5/B5 and C5 respectively. They offer higher performance by including tests for LSPI prevention, timing chain wear, turbocharger deposits and improved fuel economy.

#### Updated Categories - A3/B4, A5/B5, C2, C3, C4, C5

(all existing categories that have not been discontinued). These have revised requirements for sludge, piston cleanliness, valve train wear and fuel economy.

#### How are ACEA categories different?

ACEA categories are governed by a set of parameters.

Key parameters are HTHS viscosity and SAPS. Lower HTHS viscosity provides better fuel economy, while lower SAPS provides longer life for after treatment devices. See Figure 1. The terms low, medium, and high SAPS, refer to the ACEA limits on certain additives that can be used to formulate an oil.

HTHS	SAPS Level			
	Low	Medium	High	
Low		C5 C6		
Mid		C2	A5/B5 A7/B7	
High	C4	C3	A3/B4	

#### Figure 1

APS – Sulphated Ash Phosphorus and Sulfur.

HTHS – High Temperature High Shear.

C6 and A7/B7 include LSPI protection.

A3/B4 does not have a fuel economy requirement.

#### Combined performance claims

Multiple ACEA categories can be claimed for the same lubricant formulation where all the associated requirements are met.

Certain combined claims are technically impossible due to mutually exclusive requirements. One such example is ACEA C3 (SAPS < 0.8) cannot be claimed with A3/B4 (SAPS >1.0).

Where both OEM approval and ACEA performance are specified, it is crucial both claims are met. For example, Castrol Magnatec Stop Start 5w-30 A5 is approved against Ford WSS-M2C913D. This specification is based on ACEA A5/B5 with the addition of Ford specific requirements for fuel economy and timing chain wear.

## The importance of industry and OEM relationships

Castrol works closely with several European OEMs, including Renault, Jaguar, Land Rover, and Ford, to develop advanced lubricants that meet all the requirements of each OEM.

This demonstrates Castrol's ongoing commitment to providing high quality lubricants that have been developed through key industry and OEM relationships.





#### **Technology Development**

Step type automatic transmissions (AT's) have undergone significant development with increasing gear ratios and longer service intervals, high performance friction materials and complex hydraulic shift systems. It is no surprise the Automatic Transmission Fluids (ATF's) have improved significantly to meet these demands and with reducing oil viscosity to assist with improved fuel economy.

CASTROL TRANSMAX ATF DEXRON VI-MERCON LV MULTIVEHICLE is one such fluid and due to these performance improvements, it is recommended for use in a wide variety of applications.

#### JASO M315:2015

TRANSMAX ATF DEXRON VI-MERCON LV MULTIVEHICLE exceeds the JASO 1A-LV performance requirements and is recommended for use against most Japanese OEM requirements.

There are many OEM first fill fluids and specifications required by Japanese OEM's. Each first fill fluid having subtle performance differences to deliver the desired outcome and performance for the OEM in question. However, fluids meeting JASO M315:2015 1A or 1A LV, are recognized by Japanese OEM's as acceptable service fill alternatives.

JASO M315:2015	1A	1A
Viscosity @100°C	≥6.5cSt	≥6.5cSt

Table 1: Viscosity requirements for JASO 1A & 1A LV

#### Improved wear control

TRANSMAX ATF DEXRON VI-MERCON LV MULTIVEHICLE exceeds the requirements of GM's DEXRON VI specification with approximately 15% increase in the wear control compared to the superseded DEXRON III-H, a higher viscosity fluid.

GM DEXRON WEAR	DEXRON IIIH	DEXRON VI
Sprag wear test	<60 mg wear	<50 mg wear
Viscosity @100°C	7.2cSt 6.4cSt Max	

Table 2: GM wear tests

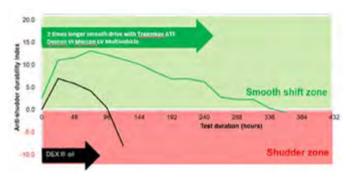
TRANSMAX ATF DEXRON VI-MERCON LV MULTIVEHICLE exceeds the requirements of FORD MERCON LV specification providing improved 4 ball wear results over the FORD MERCON V specification.

FORD WEAR TESTS	MERCON V	MERCON LV			
Four Ball Wear (wear scar)	0.61mm Max	0.5mm Max			
Viscosity @100°C	6.8cSt min	5.5-6.2cSt			

Table 3: Ford Wear Test

#### Improved friction durability

TRANSMAX ATF DEXRON VI-MERCON LV MULTIVEHICLE has significantly improved friction durability over typical DEXRON III oils delivering 2 time longer smooth shifts and anti-shudder control.



Smooth Shift Test (LVFA)

#### Backwards compatibility

GM recommend the use DEXRON VI approved oils in vehicles requiring earlier fluids from MY 2006. Note GM do not recommend DEXRON VI in manual transmissions where earlier DEXRON specifications were required.

Further confirmation of the back serviceability of TRANSMAX ATF DEXRON VI-MERCON LV MULTIVEHICLE is shown by Ford recommending the use of MERCON LV fluids where FORD MERCON approved fluids were recommended from 2003 MY vehicles - transmission models, 5R110 & 4F27E.



#### Guidelines for use

6 RATIOS OR GREATER

TRANSMAX ATF DEXRON VI-MERCON LV MULTIVEHICLE in 5 RATIOS AND LOWER

ATF DEX Merc MV, TRANSMAX Z or TRANSMAX Mercon V

As always check with your technical services team to ensure you are providing the correct recommendation.

#### References

Afton Chemical Specifications Handbook 09/18
Ford Mercon LV Specification 1 Jan 2014 revision
Ford Motorcraft Automatic Transmission Chart V15/ US



## Understanding and selection of driveline fluid.



#### Driveline fluid selection

Driveline fluids, like engine oils, are approved to industry standards such as API, SAE J2360 and MT-1 performance levels. These leading industry bodies and certifications determine the minimum requirements for fluids used in the majority of vehicles.

#### **API Service Designations in Current Use**

API GL-4: Lubricants intended for axles with spiral bevel gears operating under moderate to severe conditions of speed and load, or axles with hypoid gears operating under moderate conditions of speed and load.

API GL-5: Lubricants intended for gears, particularly hypoid gears, in axles operating under various combinations of high-speed/shock load and low-speed/high-torque conditions.

API MT-1: Lubricants intended for non-synchronised manual transmissions used in buses and heavy-duty trucks.

SAE J2360: Lubricants satisfy and exceed the requirements of API GL-5 and contains performance requirements that exceed those of API Category GL-5. For example, SAE J2360 has a requirement for elastomer compatibility and gear cleanliness after oxidation, that are not contained in API GL-5.

#### Why do oem defines their own standards?

OEMs are increasingly working with lubricant companies to define their own standards for lubricant performance. These fluids are tailored specifically for the components they manufacture. These standards ensure the lubricant delivers superior performance as they are developed for the engine or component manufactured by the OEM. Castrol has partnerships with major OEMs. This provides Castrol with an opportunity to begin developing lubricants years in advance of the release of a component when it exists only as a drawing.

This approach gives Castrol's Lubrication Engineers a unique insight into the tribology and specific requirements of the components so they can deliver a product that maximises performance and extends component life. This is Castrol Co-Engineering! To secure lubricant approvals often requires lengthy field trials that can last for up to five years.

#### Why its important to select right fluid?

With the continuous evolution of cars' technology over the past years transmissions have become more complex, demanding more technologically advanced fluids to ensure vehicle reliability.

Getting the right oil for your vehicle is key to ensuring drivelines operate as they are designed to and get the maximum protection under demanding conditions. Using the right oil Castrol, with over 100 years of experience in developing transmission and axle fluids and being the choice of many leading car and transmissions manufacturers for factory-fill products, offers a complete range of products which can meet your car's requirements.



Automatic transmission reveal.

Components such as these can be protected using an OEM approved driveline lubricant.

#### Fill for life fluids

OEMs are working to improve fuel efficiency and provide quality drivability. This has led to the development of OEM service fill specifications for driveline products. As competition for car sales increases, "filled for life" becomes a strategy to reduce the cost of ownership of a vehicle and improve its environmental impact by removing the need to change the oil, filters and screens in manual and automatic transmissions and in differentials and cooling systems. Typically, these filled for life fluids are extremely high quality synthetic oils or long life coolants with the relevant OEM approval.

#### CastrolL Transmax, Smooth Drive Technology

Whether a car is automatic or manual, Castrol TRANSMAX range has the right transmission fluid for the vehicle, providing enhanced protection to all moving parts which enables longer transmission life.

The advanced Castrol TRANSMAX range features Smooth Drive Technology™ with active control molecules that automatically adjust their friction level with changing pressures and speed. This ensures the transmission is constantly served the right level of friction at any given moment – protecting the parts and delivering a smoother drive for longer.you are providing the correct recommendation.







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## Hybrid/electric vehicles and Castrol products



#### What is hybrid, EV & PHEV technology?

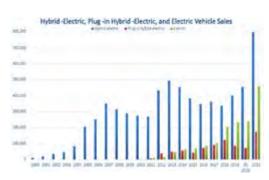
Hybrid electric vehicles are powered by an internal combustion engine and one or more electric motors, which use energy stored in batteries. A hybrid electric vehicle cannot be plugged in to charge the battery. Instead, the battery is charged through regenerative braking and by the internal combustion engine.

However, all-electric vehicles, also referred to as battery electric vehicles (BEVs), have an electric motor instead of an internal combustion engine. The vehicle uses a large traction battery pack to power the electric motor and must be plugged in to a wall outlet or charging equipment, also called electric vehicle supply equipment (EVSE).

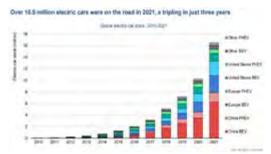
Plug-in hybrid electric vehicles (PHEVs) use batteries to power an electric motor and another fuel, such as petrol, to power an internal combustion engine (ICE). PHEV batteries can be charged using a wall outlet or charging equipment, by the ICE, or through regenerative braking. The vehicle typically runs on electric power until the battery is depleted, and then the car automatically switches over to use the ICE.

#### Hybrid and EV demand

Although hybrid electric vehicles were first on the market, electric vehicles have quickly gained popularity.



Ref: www.electrek.co



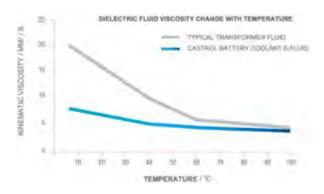
Ref: IEA Analysis, complemented by ACEA, EV Volumes, MarketLine

#### Castrol e-Fluids

Castrol is partnering with major manufacturers to ensure its lubricants deliver what drivers want, to go further on a single charge, enable longer life of transmission and driveline components, and ensure long-lasting battery health.

**Battery Coolant e-Fluid** has advanced properties to enable improved battery thermal management performance to keep batteries cooler, even in extreme conditions.

Castrol Dielectric Battery Coolant e-Fluid has a lower viscosity than conventional dielectric coolants, increasing cooling efficiency and protecting batteries against electrical breakdown.



#### e-Transmission Fluid

The demand on e-transmissions is more severe than conventional transmissions, with maximum torque delivered at low speeds and the increasing integration of electric motors into the transmission.

#### Wet Plus Transmission e-Fluid's

Specially developed technology, with its optimised friction levels for synchronizer systems and clutches.

#### Wet Transmission e-Fluid's

Low viscosity formulation is specifically developed to deliver low electrical conductivity, enhanced system protection and helps the e-motor run cooler enabling it to operate at high efficiency.

#### Dry Transmission e-Fluid's

Help overcome the challenges the drivetrain system faces by providing enhanced protection, reduce viscosity loss and fast release of entrained air.



**Grease e-Fluids** have a vital role to play in overcoming the challenges that electric vehicle components face during everyday drive.



## Understanding Coolant technologies.



#### What is Coolant?

The primary job of an engine coolant is to provide cooling by absorbing generated heat in engine components.

Coolants are composed of ethylene glycol (sometimes propylene glycol), purified water, performance additives and coloring dyes. Works of an engine can generate extreme heat which can catastrophic failure if it isn't equipped with an efficient heat transfer mechanism. Heat transfer is achieved by an advanced cooling system continuously circulating coolant around the engine's hot zones, absorbing heat and discharging it to the atmosphere via the radiator.

Coolants encounter very high surface temperatures are circulated at high velocity and are exposed to a variety of different types of metal and non-metal components. Hence there is great potential for chemical reactions and physical damage.

The second critical function of a coolant is to protect hot metal surfaces and other components from corrosion and degradation. In order to prevent engine damage and enable swift start-up, coolant must resist freezing in sub-zero temperatures, and boiling in summer heat. Two types of glycols are usually applied for engine coolants where both share similar cooling properties. Propylene glycol is categorized to be less toxic compare with ethylene glycol. While the later has better heat transfer due to its lower specific heat.

#### Concentrate or premix?

Coolants are sold in premixed, ready-to-use form or concentrate.

Concentrated coolants should never be used undiluted as heat transfer since it will be severely compromised. Water quality is very important for corrosion protection. Only de-ionized or soft tap water should be mixed with a coolant concentrate.

## Color is not an indicator of coolant performance

Early antifreeze products were often dyed green to aid leak detection.

Other colors now differentiate new technology coolant from the "conventional green" antifreeze. The color may be representative of an approved or OEM genuine product or simply a coolant manufacturer's choice. There is no standardized color system for coolants. Never select a coolant based on its color alone.

#### Types of Coolant

Coolants are generally categorized by their additive technology and level of approval to OEM and other performance specifications.

There are three broad classes of engine coolant technology:

 Conventional/Traditional - based on older technology and less expensive inorganic additives. Relatively short life due to depletion of the additives and limited stability and protection at high temperature e.g. Castrol PREMIUM COOL PLUS.

- OAT based on fully organic additives with very low depletion rate and deliver long service life. Very stable and offers superior corrosion protection at high temperatures and compatibility with all cooling system materials e.g. Castrol RADICOOL SF.
- Hybrid OAT combination of OAT type and selected inorganic additives that provide additional protection for certain component metallurgies under severe conditions. Several OEM approvals are restricted to hybrid-OAT-type technology e.g. Castrol RADICOOL NFand Castrol RADICOOL Si-OAT.

#### The risk of getting it wrong

Cooling system problems are one of the leading contributors of engine failure, a victim of a "set and forget" perception.

Proper coolant selection and maintenance are critical to trouble-free vehicle operation. A faulty cooling system may prevent effective warm-up of the engine, leading to poor lubrication and poor combustion control.





Minor cooling system corrosion generally becomes a major problem if left untreated. Problems can sometimes arise when different coolants are mixed-together. This is due to certain mineral-type additives being incompatible with each other if concentrations become unbalanced, extreme cases causing formation of solid deposits and cooling system blockage. Modern OAT type coolants tend to be much more tolerant of mixing with each other, nevertheless it is safe practice to avoid mixing different coolants together, and when replacing coolant to always fully drain and flush out the cooling system first.

#### Latest approved Coolant Technology

Industry standards define basic coolant performance. Most vehicle manufacturers add additional set of requirements onto the industry standards to define the higher performing coolants tailored to their engines and to enable extended warranty protection. To qualify a coolant for an approval, manufacturers must submit a sample for rigorous lab, engine and fleet tests designed by the OEM. This can take years to complete and is done at the coolant manufacturer's expense. If it run successfully, the product then determined to fulfil all the performance and warranty requirements of the manufacturer and earns a formal OEM approval. Only advanced coolants will pass these tests. Castrol Radicool Si-OAT is one such example, carrying formal approval from MAN, Mercedes Benz, Renault and Volvo. Coolants which only claim to "meet the requirements" of an OEM standard have not passed this comprehensive testing and qualification program. This is a much weaker indicator of performance, based on the marketer's own judgement.



## Understanding and selection of right grease.



### What is grease and the difference compared to oil?

Grease is formed by emulsifying liquid lubricant in a thickening agent like soap. The liquid lubricant in the grease generally is mineral oil or synthetic oil.

The key difference between oil and grease is the addition of thickening agent, typically a soap in grease. Generally, in room temperature and pressure, oil is in liquid form while grease would be in solid or semi-solid form.

Grease exhibits shear-thinning or pseudo-plastic fluid characteristic, which means that the viscosity of the fluid is reduced under shear. Once adequate force applied to shear the grease is achieved, the viscosity drops and approaches that of the base lubricant use in the formation of the grease.

Soap is the most common thickener or emulsifying agent for grease. The choice of the soap plays important roles in the performance of the grease like the operating temperature, water resistance, and chemical stability. Similarly, like liquid lubricants, grease is added with specific additives to improve the performance.

#### How to select a suitable grease

Like liquid lubricants, greases also are available in various grades and forms. In grease, the most important criterion for selection is the NLGI arade.

NLGI grade is the measure of the consistency or relative hardness of a grease used for lubrication, as specified by the standard classification of lubricating grease established by the National Lubricating Grease Institute (NLGI). The below table shows the NLGI number and compares each grade with everyday products of similar consistency.

NLGI Number	Appearance	Consistency Food Analog
000	Fluid	Cooking oil
00	Semi-fluid	Apple sauce
0	Very soft	Brown mustard
1	Soft	Tomato paste
2	"Normal" grease	Peanut butter
3	Firm	Vegetable shortening
4	Very firm	Frozen yoghurt
5	Hard	Smooth paté

The most common grease grade in automotive and industrial application is NLGI 2. This is followed by NLGI 1 and NLGI 3 grade grease. Other NLGI grades grease are usually required in other special application.

After selecting the right NLGI grade, the next evaluation is viscosity of the base oil in the grease. The base oil viscosity is measured in centistokes (cSt) at 40°C. Following rule of thumb, the higher the bearing/ component speed, the lower the base oil viscosity required. Thicker base oils are used in slower moving, heavily loaded applications.



Greases are usually formulated using mineral grade base oil. For grease formulated with synthetic base oil, it would enable the grease to reach higher or lower operating temperatures as well as wider operating temperature range compared to mineral base grease. In addition, synthetic base oil grease is used in application where extended relubrication intervals are required.

To improve performance, greases are improved by using additives. Example of additives are oxidation and rust inhibitors, extreme pressure additives, antiwear and friction-reducing additives.

The most widely used soap are lithium and calcium. Grease with lithium is preferred in general application as it has high dropping point and stable when carrying high load. Calcium grease is preferred for marine application due to its excellent water resistivity.

Castrol's specially formulated range of high-performance greases provide outstanding protection in all operating conditions and applications. We have developed some of the most advanced and high performing greases in the world, including for the International Space Station and the Mars curiosity rover.

The Technical team at Castrol have the experience and knowledge to help you make the most optimum choice on grease selection.





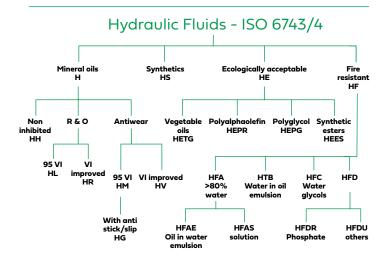
#### Hydraulic fluid requirements.

Nowadays, hydraulic fluids face challenging requirements and standards through equipment manufacturers and customers applications. Several applications will need specific characteristic to meet the standard of the industry, OEM, and regulatory requirements.

#### Classification of hydraulic fluid

There are several classifications which defines hydraulic fluid for hydrostatic applications:

- ISO 6743/4 or DIN 51524/3 –
   applied to mineral based fluid, biodegradable fluid,
   and fire-resistant hydraulic fluid
- ISO 12922 specifically applied to fire-resistant hydraulic fluid
- ISO 15380 specification for environmentally friendly hydraulic fluids
- · OEM requirements



## Mineral oil based hydraulic fluids – ISO 6743/4

ISO-L-HH: Mineral lubricants without corrosion inhibitors

• ISO-L-HL: HH lubricants with anti-rust and oxidation

additive

· ISO-L-HM: HL lubricants with anti-wear additive

• ISO-L-HR: HL lubricants with a high VI ISO-L-HV HM

lubricants with a high VI

ISO-L-HG: HM lubricants with shock resistant features

ISO-L-HS: Synthetic liquids

German OEMs usually also mention DIN 51524/3 standard which has slightly different specification from ISO 6743/4.

• DIN HL: Mineral oil with anti-rust and oxidation additive

· DIN HLP: HL oils with improved anti-wear properties

 DIN HVLP: HLP oils with improved temperature-viscosity behavior

 DIN HLPD: HLP oils with additives to improve detergency and dispersion capacity.

### Environmentally friendly hydraulic fluids – ISO 15380

• DIN HETG: triglycerides (vegetable not soluble in water)

• DIN HEES: synthetic ester non-water soluble

· DIN HEPG: polyglycols types soluble in water

DIN HEPR: polyalphaolefins and related hydrocarbon products.

#### Fire resistant hydraulic fluids – ISO 12922

 ISO HFAE: oil in water emulsions, mineral or synthetic ester (> 80% water content)

 ISO HFAS: mineral oil free, aqueous synthetic chemical solution (> 80% solution)

ISO HFB: water in oil emulsions, mineral content >40%

ISO HFC: water glycol solution, water content >35%

 ISO HFDR: water-free synthetic fluids consist of phosphate esters (not soluble in water)

· ISO HFDS: chlorinated hydrocarbons

ISO HFDT: mixture HFDU / HFDT

ISO HFDU: water-free synthetic fluids other than phosphate esters

#### **OEM** requirements

Several leading OEM components manufacturers such as Denison, Bosch and Vickers also issued their own standards usually related to thermal/oxidation stability, mechanical/dynamic behavior, and filterability. They also have their own in-house tests.



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### Heat transfer fluid and its applications.

#### Heat transfer system

A typical heat transfer system has 4 main components as below figure.

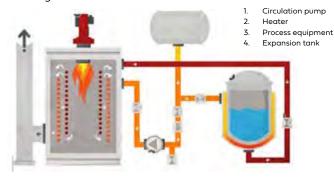


Figure 1: A typical design of heat transfer system

The circulation pump (1) pushes the heat transfer oil through an insulated piping to the heater (2) and to the process equipment (3). The expansion tank (4) on the system allows for the expansion and contraction of the hot oil as it heats up and cools down. Most heat transfer oil expand by up to 25% when heated to the maximum recommended bulk temperature. The tank will be ¼ full at ambient temperature and 34 full at system's normal operating temperature. The expansion tank should be installed at the highest point in the system and connected to the suction side of the pump.

#### Heat transfer fluid application



#### Requirement of heat transfer fluid

The temperature of the heat transfer oil is raised in the heater by (gas, oil, coal, firewood, etc). Therefore, heat transfer oil must have properties as follows to adapt the hot working conditions, carry the heat, & protect the systems – the pumps, valves, pipe, equipment, etc.

- High thermal stability
- 2. High heat capacity & transfer properties
- 3. High thermal conductivity
- 4. Low viscosity at operating temperature & pressure
- 5. Low corrosivity towards system materials
- Low volatility
- Low toxicity
- Available economically.

#### Deterioration of heat transfer oil

The service life and heat transfer efficiency of an oil are significantly affected by thermal cracking, oxidation, and contamination.

Therefore, to minimise the influence of the above processes on the heat transfer fluid, please note as following.

- Make sure that the oil passes through the heat exchanger at the correct design speed, arrange the location of the heater appropriately, etc. to avoid local overheating.
- Heat the fluid slowly, do not increase oil temperature too quickly.
- Do not turn off the system suddenly.
- Keep the oil temperature on the expansion tank no more than 60oC. Minimize the direct contact of hot oil with the air.
- Keep fluid clean by minimizing contamination into the system. For new system, clean the heat transfer system, remove contamination such as debris, dirt, welding slag... Do not test system pressure by water.

#### important notes while using heat transfer fluid

#### Before filling process

- Check the oil pipeline system, fix the leak points in the system.
- Check the expansion tank: The expansion tank volume must be large enough to hold the oil when the system is working, the expansion tank must be set high enough.
- Pump and heat transfer oil supply system must be suitable, ensure the flow rate, avoid causing local overheating.
- Arrange a backup electric power (generator) and backup pump in case the mains electric power failure causes the pump to stop working suddenly.



Duo pumps to prevent suddenly.

#### During filing process

- Check the positions of vents, exhaust, connections, electrical cables, connection bolts...
- Open the vent valves.
- Fill in the oil into the tank through the oil pump system at the lowest point to minimize gas entering the system. Stop filling when expansion tank is about 25% full.

Monitoring heat transfer fluid condition

The fluid should be tested according to 5 below parameters, at least twice per year.

- 1. Kinematic viscosity
- 4. Carbon residue
- 2. Flash point
- 5. Water by Karl Fischer.
- 3. Total acid number



## Troubleshooting of water-soluble cutting fluids.



#### Water-soluable cutting fluids

Water-soluble cutting fluid are used by diluting the concentrate with water to a proper concentration.

Therefore, the diluent solution of water-soluble cutting fluid (hereinafter referred to as "coolant") has almost no risk of fire compared to water-insoluble cutting fluid and is often used in production sites.

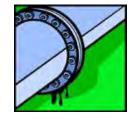
On the other hand, compared to neat cutting oil that can be used almost on top-up, water-soluble cutting fluids change their concentration over time, so it is necessary to monitor the coolant condition and top-up the new coolant. If this coolant management is not properly implemented, the coolant will be prone to degradation, which will have a negative impact on productivity.

Therefore, here we will explain troubleshooting for water-soluble cutting fluids whose coolant condition tends to change over time.

#### Contamination

Since cutting fluids are used in open systems, they are mixed with various substances as follows.

These contaminants often lead to coolant troubles, it may be possible to prevent problems ]by knowing in advance what substances will be mixed into the coolant.



- Tramp oils: slideway oils, hydraulic fluids, front-end oils (cutting fluid, rust preventive, cleaner, forging oils, etc.)
- Leaching from chips (magnesium, zinc, copper, iron, etc.)
- Powders: barrel abrasive (calcium, etc.), shot blasting (zinc, etc.), surface treatment (bonderite treatment)
- Dirt: washing water used for floor cleaning, etc.

#### Color is not an indicator of performance

#### Coolant-related troubles include those listed below.

Other colors now differentiate new technology coolant from the "conventional green" antifreeze. The color may be representative of an approved or OEM genuine product or simply a coolant manufacturer's choice. There is no standardised color system for coolants. Never select a coolant based on its color alone.

#### Types of problems

Coolants are generally categorized by their additive technology and level of approval to OEM and other performance specifications.

If these troubles occur immediately after the start of coolant use, we believe that it is necessary to review the oil agent.

Foaming - Rust

- Scum (floating substances)
- Deposits in workpieces and machines, stickiness
- Workpiece discoloration (aluminum discoloration, oil stains on steel)
- Clogging of filters and piping
- Emulsion separation and gelation
- Coolant discoloration
- Damage to rubber and plastic
- Mist and oil smoke
- Odor (putrid odor, component odor)
- Increased wastewater treatment load
- Rough hands, dermatitis
- Increase in oil usage.

#### What information needs to be collected

If coolant-related trouble occurs at your customer site, the following information will lead to the resolution of the problem promptly.

In other words, if you always grasp the following information, it will lead to trouble prevention and better product selection.

In addition, if there is coolant that is not causing problems on similar processing machines, it will help to investigate the cause of the problem by comparing it with the coolant of the trouble machine.

- Coolant condition: concentration, pH, bacteria, etc.
- Process type: drilling, tapping, etc.
- Workpiece: cylinder block, cylinder head, etc.
- Workpiece material: aluminum, steel, cast iron (the distinction between FC or FCD is important), etc.
- Previous process: water soluble or neat oil, anti-rust, barrel polishing etc.
- Diluted water quality (hardness, chlorine ions, etc.)
- Others: new machine (with anti-rust oil and grease),
- Lube oil leaks.

#### Tank-side additives

The use of tank-side additives is an effective way to solve coolant troubles, but there are a few things to be aware of.

For one thing, the concentration of ingredients is high, so it is necessary to pay particular attention to the human body when handling. On the other hand, if you make a mistake in selection or the amount of addition, the trouble may not be solved or another trouble may occur.

#### Summary

#### Summarising the troubleshooting of water-soluble cutting fluids:

- Find out when trouble occurs and whether the coolant condition changes, have the customer monitor the coolant.
- Collect information related to coolant and production processes, to grasp the cause of the problem, and
- Take corrective action



## Why is the storage and handling of lubricants important?

The implementation of good lubricant storage and handling practices can help deliver productivity, safety, and efficiency benefits for any operation. These practices ensure that your lubricants have not been compromised so they properly lubricate equipment to keep them running with minimal downtime whilst also helping to reduce waste.

The quality of your lubricant has a major impact on the life of equipment & subsequent cost of maintenance...



Source: FluidDefense systems

Here are some key points that should be considered when storing and handling lubricants:

## # Lubricants can become contaminated while in storage

A lubricants quality doesn't only change when in service, but also in storage. This is caused by exposure to dust, dirt, moisture, and other particles because of poor practice. In addition, long term exposure to adverse conditions such as high temperatures can affect a lubricants quality. It's imperative that they are stored in dedicated storage areas.

#### # Lubricants should be stored indoors

Indoor storage is always preferable however not always possible. If outside storage is the only option, store drums horizontally. Alternatively used drum covers which are an inexpensive option.



## # Use correct dispensing procedure equipment

Lubricants are most likely to be contaminated during dispensing. Good dispensing practices must be implemented to ensure cleanliness and minimise contamination from dust and other contaminates.

Also utilise Oilsafe dispensing containers when dispensing small quantities.



#### # At Castrol we can help design a best-inclass program

At Castrol we have a nationwide technical team with over 100 years of combined technical experience. One of our trained technical advisors can visit your site to conduct a thorough lubricants review. This will consider current practices, potential product rationalisation and review current infrastructure in place.

## # The benefits of proper storage and handling practices speak for themselves

The advantages of a best-in-class storage and handling program speak for themselves.

Look at this example below:

Refore



After





castrol.com 1 174

# Hybrid Performance Standard

#### What is HYSPEC?

HYSPEC is Castrol's new hybrid performance standard. It is important to understand that HYSPEC is not a new product or a competitor comparison, rather it is Castrol's internal standard that sets a benchmark that has been chosen to measure our hybrid oils against. This internal standard enables us to prove that our hybrid oils perform against the three HYSPEC factors: contaminants, engine intermittency and system efficiency.

#### Castrol e-Fluids

There are 3 different hybrid types, Mild, Full and Plug-in hybrids. **Mild hybrids:** 

Power derives mainly from the internal combustion engine, electric energy serves as a boost.

#### Full hybrids:

Self-charging hybrids which have powerful electric motors making them capable of providing a significant electric-only range.

#### Plug-in hybrids:

Similar with the full hybrids but the electric autonomy is further enhanced with the option of external recharge.

#### Common issues hybrids face

Hybrids operate differently from conventional cars. The switch between the internal combustion engine (ICE) and electric motor challenges oil in three key areas: contaminants, engine intermittency and system efficiency.

Contaminants: Hybrid engines run at cooler temperatures, which can lead to fuel and water build up in the oil. For example, at cooler temperatures, when the engine does not get hot enough to burn off any build up moisture, this can lead to formation of engine sludge and emulsions causing oil disruption and engine oil deterioration. Also fuel dilution, reduces the oil viscosity which in turn means less protection against friction and more wear.

**Engine intermittency:** Hybrids repeatedly switch between the electric motor and ICE so the engine can operate at low speeds at one moment only to ramp up to high engine speeds the other. In situations like this, if the oil cannot keep up with changes in speed and temperature, critical parts of the engine might not have enough oil coverage which increases the risk of metal to metal contact, wear, damage and decrease in engine performance over time.

**System efficiency:** Temperatures in hybrid vehicles are generally lower than conventional vehicles due to intermittent operation between the ICE and the electric motor. Lower temperatures may have as a result that the oil does not reach the optimum operating temperature and it will not be as efficient in reducing friction. This would reduce the overall engine efficiency, leading to an increase in fuel consumption and less effective charging of the battery.

#### **HYSPEC** benefits

After 25 years of development and partnering with OEMs and motorsport groups, Castrol has collected over 2 billion data points and has created their own hybrid standard , HYSPEC , which sets the benchmark for measuring our oils for hybrids across those three critical areas, contaminants, engine intermittency and system efficiency, delivering a greater than or equal to 25%\* average benefit across the results from the three areas and Castrol's bespoke test (MTM + Water method). Castrol oils featuring the HYSPEC logo demonstrate at least 25%\* benefit against the HYSPEC standard int those 3 critical areas discussed before:

**Contaminants:** HYSPEC oils are high performing oils that control the impurities and contaminants, maintaining optimal performance and reducing engine wear risk.

**Engine intermittency:** HYSPEC oils have been tested through wear, stability and cold temperature monitoring to ensure they offer high performance and wear protection when changing between IEC to electric motor and vice versa

**System efficiency:** HYSPEC oils contribute to system efficiency benefiting fuel economy\*\* and overall system efficiency.

## OK but is it all about efficiency and not performance?

Not at all! World-leading motorsport teams endorse Castrol HYSPEC. This sets an extreme environment where maximum performance is critical and where Castrol oils are tested giving us insights which can then be applied on the road.



#### The HYSPEC range

Refer to the Table of Contents in your Castrol Product Catalogue to discover the full range of HYSPEC tested products.

- \* Compared to minimum requirements set in industry specification and Castrol bespoke testing relevant to hybrid vehicle types,
- covering contaminants, engine intermittency and system efficiency

  \*\* Fuel economy results under road conditions may vary according to vehicle type, driving conditions and style.





#### What is ACEA?

ACEA is the European Automobile Constructors' Association that represents Europe's 14 major car, van, truck and bus manufacturers. They are the European equivalent of the American Petroleum Institute (API).

The ACEA oil sequences define the minimum quality level for service fill engine oil.

#### What is new for ACEA E Class?

ACEA E sequences were updated in 2022 and are now mandatory, replacing 2016 sequences. And for the first time in well over a decade, the ACEA have introduced two new ACEA categories - E8 and E11.

#### **ACEA E8 replaces ACEA E6.**

**ACEA E11 replaces ACEA E9.** 

#### ACEA E4 and ACEA E7 have updated requirements.

ACEA E1, E2, E3, E5, E6, E9 categories are all withdrawn (2022).

#### **New Categories**

E8 & E11 have revised requirements for use with biofuel, improved piston cleanliness, oxidation and aeration control. E8 has improved cylinder liner and top ring wear. E11 has enhanced soot related wear control.

#### **Updated Categories**

E4 & E7 have revised requirements for piston cleanliness. ACEA E7 describes the minimum performance requirement for heavy duty diesel engine oil.

These new and updated categories enhance engine oil performance and engine protection. They better serve changing engine technologies and regulatory requirements for reduced emissions and renewable fuels. They also better align with industry standards, reducing complexity.

Figure 1: ACEA categories

**Low SAPS** Can align **ACEA E8\*** with **API CK-4 ACEA E11** Mid / high SAPS Can align with **ACEA E4\*** API CI-4 **ACEA E7** 

#### How are ACEA categories different?

ACEA categories are governed by a set of parameters. Key parameters are SAPS and TBN. Low SAPS (E8, E11) provide longer life for after treatment devices. This is particularly important for engine technologies in markets with strict emissions standards e.g Euro VI. Higher TBN (E4, E7) provide better protection against acidic corrosion. This is particularly important for markets with high sulphur fuel (≥ 50 ppm). Table 1 provides an overview of applications that each category targets. Always follow the manufacturer's recommendations when selecting an engine oil.

SAPS – Sulphated Ash Phosphorus and Sulfur.

TBN – Total Base Number

Table 1: (Source: ACEA)

Engine Oil Sequence	Euro VI Stage IRb, IV, V	Euro I, II, III, IV, V Stage I, II, IIIa	EGR engine computibility	Exhoust treatment (DPF, SCR &	Fuel compatibility		How to read the table		
		Storge I, II, IIIa	- 60.0	Cathalyst)	High Sulfur*	Biodiesel**			
			1	/3	(8)	- 10	1	11	/ recommended
17	*		7	3	4		for some applications		
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#### Combined performance claims

Multiple ACEA categories can be claimed for the same lubricant formulation where all the associated requirements are met. For example, ACEA E4 and E7 are typically formulated to be medium and high SAPS lubricants, they have a S.A. limit  $\leq 2.0\%$ m/m. However, there is no minimum SAPS requirement for these categories so low SAPS formulations can also meet these categories if all other requirements are met.).

#### **Future ACEA Class**

The proposed **ACEA F** class is expected to support improved fuel economy. Fuel economy improvements are possible by reducing the HTHS viscosity from the current high 3.5cP @ 150C to a low 2.9cP @ 150C. This will align with the HTHS requirement for API FA-4 currently available.

#### Manufacturer requirements

ACEA categories are often used as baseline performance for OEM approvals. OEM specific requirements are included to build lubricant standards best suited to specific engine groups. For example, DTFR 115C110 (MB-Approval 228.51) will often be combined with ACEA E8, Volvo VDS 3 with ACEA E7.

If a manufacturer mandates an ACEA or OEM specification, using lubricants without the required specification may provide inadequate engine protection, shorten the life of after treatment devices and void the manufacturer's warranty.





#### Who is ATIEL?

ATIEL is the Technical Association of the European Lubricants Industry. It is a not-for-profit association under Belgian Law. ATIEL has functioned as the voice of the lubricant industry with its' members collective expertise pushing boundaries of engine oil innovation, benefiting vehicle manufacturers, consumers, and the environment. It has been working in action over the last 25 years.

ATIEL collaborate closely with ACEA (European Automobile Manufacturer's Association), additive suppliers and testing bodies ensuring lubricant standards meet the latest engine technologies and regulations.

ACEA sets the technical and quality standards called Oil Sequences for lubricants suitable for engines and vehicles.

ATIEL developed the European Engine Lubricant Quality Management System (EELQMS) to provide a comprehensive framework for lubricant marketers to design, develop, manufacture and market lubricants according to ACEA standards. It provides consumers with confidence in the quality of their lubricants.

## How does ACEA oil sequence performance works with ATIEL?

Lubricant marketers making claims against ACEA oil sequences are required by ACEA to sign a "Letter of Conformance" or LoC. It is administered by SAIL (Services to Associations and Industry in the Lubricants Sector). LoC confirms compliance with EELQMS and submits to ATIEL who administer the system.

### Can there be combined claims for the same lubricant such as C2/C3?

The answer is Yes. Combined claims for the same lubricant against 2 or more Categories within the ACEA oil Sequences are possible.

The advantages are making products as widely applicable as possible and reducing portfolio complexity.

It is only possible if "ALL" the associated chemical limits and physical test requirements are met.

#### Check out the Valid Compatible Change table.

Incompatible claims are when it is technically impossible due to conflicting demands of two or more categories. Or where it is highly unlikely due to minimal overlap in the physical and chemical properties required for that combination of Categories.

### When is the ACEA oil sequence claim invalid, partial or incomplete?

ACEA Sequences states that ALL test must be passed to make a performance claim. For example, a claim such as C2 (without fuel economy) is not a valid claim against ACEA C2 category. Or a claim such as C2 (without fuel economy)/C3 is not a valid combined claim.

A market survey activity conducted by ATIEL has identified several issues relating to invalid claims in the market such as technically impossible, highly improbable, incorrectly described, or misrepresented claims.

One reason may be due to lack of technical knowledge or misunderstanding of the ACEA Sequences. Othe reasons may be due to some confusion over requirements of different releases of ACEA Sequences i.e., 2012/2016/2023 and expiry dates.

The current issues of the Oil Sequences are ACEA 2022 for HD (Heavy Duty) and ACEA 2023 for LD (Light Duty).

ACEA performance claims are self-certifying so using ACEA "approved," "certified" or "recommended" are not valid ways of making an ACEA Claim. Also, combined claims should be separated. For example, A3/B3/B4 is not a valid claim but A3/B3, A3/B4 is a valid claim.

ACEA states the year is not to be included for example claim ACEA A3/B4 and NOT ACEA A3/B4-16 as the year and number is not intended for use on marketing information such as product data sheets and product labels.

#### Is there a claim validity period?

Yes, there is a validity period that applies to each of the ACEA sequences. ACEA has a published list of sequence expiry dates for ACEA 2023 LD and ACEA 2022 HD.

A formulation must meet the requirements of a valid ACEA sequence to maintain a current claim.

Since 1st May 2023, any NEW products for Heavy Duty must meet ACEA 2022. Until 1st May 2024 claims against ACEA 2016 were possible.

After 1st May 2024, any NEW products for Light Duty must meet ACEA 2023. Until 1st August 2025 claims against ACEA 2021 are possible.

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Source: ATIEL, ACEA Oil Sequences Chart 2024 – Valid Compatible Claims





#### Gas engine fuel types

A gas engine is an internal combustion engine powered by fuel gas, performing efficiently across diverse conditions, from cold climates to hot and humid climates.

These engines operate by burning several types of gases: sour gas that contains sulfur, sweet gas with low carbon dioxide and no sulfur, wet gas rich in components such as butane, and landfill or digester gas made up of methane and carbon dioxide, which often includes halogens such as fluorine and chlorine.

#### Lubricant condition monitoring

Analysing in-service lubricants offers the most efficient and economical way to assess the condition of natural gas engines. The following tests are included in a conditionmonitoring program for these engines.

- Viscosity
- Base number
- Acid number
- Glycol contamination
- Water contamination
- Insoluble
- Spectrochemical analysis
- Nitration/oxidation.

#### Why sulphated ash content is important

A vital aspect of selecting natural gas engine oils is their sulfated ash content. These engines typically create deposits such as varnish, sludge, and ash residue after oil combustion. While additives control varnish and sludge, they leave behind a grey, fluffy ash made up of metal sulfates from barium, calcium, phosphorus, zinc, magnesium, and boron.

Oil Category	Ash Content
Ashless	Less than 0.1%
Low Ash	0.1 - 0.5%
Medium Ash	0.5 - 1.5%
High Ash	Greater than 1.5%

Lubricant manufacturers balance additive concentrations to sufficiently prevent valve recession without causing detrimental deposits or impairing catalyst performance.



Figure: Common Valve Recession in a Natural Gas Engine

Chart/pictures ref: www.machinerylubrication.com

#### Castrol products

#### **Duratec MX**

SAE 40 gas engine oil with a medium ash content (0.7% wt.) and is formulated for use in spark ignition and dual-fuel gas engines, such as Jenbacher series 2 & 3, Deutz, MAN and Guascor engines running on different fuel gases.

#### **Duratec M**

SAE 40 gas engine lubricant contains a medium ash content of 0.75% by weight. Duratec M is recommended for use in Perkins (formerly Dorman), Guascor and Waukesha engines operating at normal coolant temperatures.

#### **Duratec L**

A low ash (0.45% wt.) gas engine lubricant designed for natural gas engines including Jenbacher, Rolls Royce, Wärtsilä, Caterpillar, Perkins and Waukesha, operating with gas free of aggressive components like halogens and hydrogen sulphide.

#### **Duratec A**

Designed for engines that need low or zero ash formulas, the fuel gas free of corrosive elements like halogens and hydrogen sulphide. Duratec A is designed for use in a wide range of equipment including Ajax, Clark, Cooper-Bessemer and Worthington.

#### **Duratec LD**

With only 0.5% weight ash content, Duratec LD is formulated using modern additives and synthetic technology base oils to slow down oil degradation and prolong oil drain intervals. Duratec LD is designed for use in Jenbacher, Rolls Royce, Waukesha & MWM.

#### **Engine manufacturers**

- INNIO Jenbacher | Engine types 2, 3, 4 & 6
- Waukesha
- Caterpillar
- Perkins
- Wärtsilä
- Rolls Royce
- Deutz
- MWM.





For product recommendations tailored to your engine model, operations and the type of fuel gas being used, please refer to the OEM manual or contact the Castrol technical helpline at 1300 557 998.





#### ACEA C5 SAE OW-20

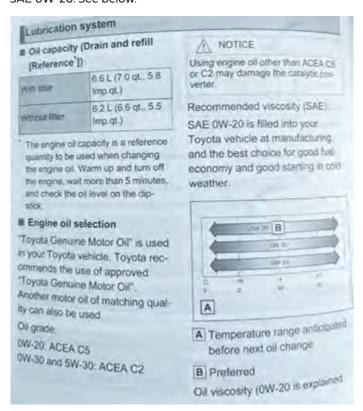
Toyota have reconfirmed the main engine oil to be used in current model Prado is an oil meeting ACEA C5 with SAE viscosity grade. Eg: Castrol EDGE OW-20 C5 and Castrol MAGNATEC OW-20 C5.

#### SAE 5W-30 ACEA C2 oils for towing

Several of our Toyota dealers have been getting requests from owners of the new Prado to put a thicker oil in the engine as they are towing or driving long distances in higher ambient temperatures and looking to us to provide guidance on the right oils to use.

#### ACEA C2 0W-30 or ACEA C2 5W-30

Both of the above grades are acceptable alternatives for the Prado and over the same temperature range as the SAE OW-20. See below.



#### Castrol MAGNATEC SUV 5W-30 C3

As Castrol MAGNATEC SUV 5W-30 C3 has recently been approved to both ACEA C3 and now ACEA C2 it makes this product the ideal choice to offer dealers for use in Land Cruiser vehicles which are subject to towing heavy loads or operating in arduous conditions.

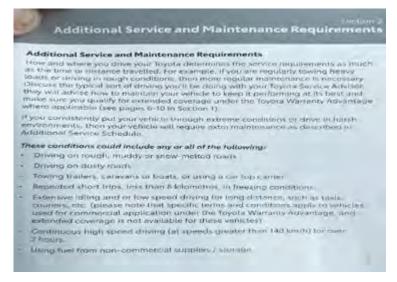
#### Castrol MAGNATEC 0W-30 D

Castrol MAGNATEC OW-30 D is also acceptable for use in the Land Cruiser as the above document shows.

#### Reduced Service intervals

Under severe service intervals is normal practice for OEM's to reduce the service periods to ensure optimal component life is maintained.

Conditions such as towing heavy trailers, driving in dusty conditions etc are conditions that place increased demands on the vehicle, cause the vehicle to use more fuel leading to increased contamination levels in the engine oil. It should not be a surprise that the service intervals are reduced accordingly and the OEM guidance under these conditions should be followed.



#### Toyota recommended oils

Please note the preferred oil to used in these vehicles remains ACEA C5 SAE OW-20.





## Disclaimer Despite our efforts, the information contained in this brochure may not be accurate, up to date or applicable to the circumstances of any particular case. We have taken every reasonable precaution to ensure that the steps outlined in this brochure section are safe. However, the information is for general use and it is your sole responsibility to ensure that the product you use is appropriate for your application. Current as at Q2 2025. We cannot accept any liability (other than for fraudulent misrepresentation or for any death or personal injury resulting from our negligence) for any inaccuracies or omissions in this brochure and any decisions you make or actions you take based on information contained in this brochure are your sole responsibility. Neither Castrol Limited, nor its affiliates or subsidiaries accept liability for any direct, indirect, special, consequential or other losses or damages of whatsoever kind (other than fraudulent misrepresentation or for any death or personal injury resulting from our negligence) arising out of the use of the information contained in this brochure. For professional, plain language advice about Castrol products, call our: Technical Help Line New Zealand: 0800 10 40 60 To make any comments about Castrol products and services call: Customer Service and Orders: 0800 CASTROL (227 876) File Version: Q2 2025 V1.0

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