Castrol[®] Syntilo[®] 75 EF

High-speed performance with better finishes and tool life



Castrol® Syntilo® 75 EF cutting fluid uses **hybrid lubrication technology** - it has all the performance benefits of a synthetic with less aggressiveness to paints, seals and elastomers like a soluble. It's versatile in both hard or soft water, forming a stable solution that is low foaming for grinding, general machining and drilling of cast iron and alloy steel.

Castrol® Syntilo® 75 EF is formulated to help you:

- Reduce coolant usage, achieve superior corrosion performance at low concentration
- Increase machining speeds/feeds to improve production rates without swarf buildup and loss of precision
- Maintain coolant stability and condition with fewer top ups and less interventions
- Maintain a clean working environment and reduce coolant waste disposal

Applicable sectors

Aerospace, Automotive, Construction, Heavy Industry, Job Shops, Machine Manufacturing, Primary and Secondary Metals, Precision and High-speed Machining

Multi-purpose product capabilities

When your business performs a variety of operations over a range of different metals, using a single coolant often seems unachievable and with compromises between quality, practicality and the demand of your business.

Developed to solve multiple challenges, Castrol® Syntilo® 75 EF is friendly to paints and machines, making it able to work across an entire factory and reduce the amount of lubricant required. It can take you from a position of compromise to one of strength. It's a hard-working synthetic coolant that delivers consistent performance and high-quality finishes, while reducing the risk of metal incompatibility.

Typical characteristics

Concentrate	
Mineral Oil	No
Appearance	Light Yellow
Synthetic lubricant	Yes
MEA	No
Boron	No
Secondary Amine	No
Chlorine	No
Chlorides	No
Biocide	No

Emulsion Properties

Refractometer Factor	2.0
Concentration (%)	Grinding 6-10%; General Machining 5-10%
Appearance	Translucent to Milky
pH – 5% in DI Water	9.6
Cast Iron Chip Break Point	3%
Water Tolerance, gpg	3-35







Challenge:

Coolant life

Castrol® Syntilo® 75 EF resists microbial growth and contamination to extend fluid life in central systems and individual sumps. You can meet the demands of high-speed machining and extreme temperatures while rapidly reducing annual coolant usage and without the risks associated with neat oil technology.

Increase productivity:

- Efficient tramp oil removal extends system life
- Significantly reduce coolant drag-out due to enhanced wetting characteristics

Lower costs:

- Longer life fluid with lower waste disposal volumes and frequency
- Fewer top-ups, low concentration for reduced product usage

Safer working environment:

 Bacteria resistant technology reduces odors and eliminates need for biocides



Challenge:

Tool life

Castrol® Syntilo® 75 EF combines lubrication qualities with the cooling properties of water. This ensures that it reduces extreme temperatures while lubricating at the cutting edge. You can achieve high speed performance with better finishes and extended tool life.

Increase productivity:

- Reduces cycle times without loss of precision
- Settles chips quickly to prevent grinding wheel build up

Lower costs:

- Machine friendly chemistry provides excellent compatibility with paints, plastics and elastomers
- Superior corrosion protection avoids repairs or replacements

Safer working environment:

 Eliminates sticky residues on shop floors, machine tool surfaces and machined parts



Challenge:

Multiple coolants, multiple-metal machining

Castrol® Syntilo® 75 EF delivers consistent performance across multiple machining processes and ferrous metals. You can run your shop on a single coolant, simplify operations and make it easier to meet business demands.

Increase productivity:

- Reduce the risk of metal incompatibility with different coolants
- Maximize tool life and deliver consistent surface finishes

Lower costs:

- Reduce complexity and manpower requirements by using a single fluid
- Less downtime and manpower for coolant changeout

Safer working environment:

 Increase operator acceptance versus neat oil, lower fire risk

