

Castrol® Hysol® 33 FF

Cost-effective performance across multiple metals

Hysol 33 FF is a high-performance semi-synthetic metalworking fluid built for versatility across multiple metals. Whether you're machining steel, aluminum, or other alloys, it delivers consistent results with excellent lubricity and cooling. Backed by Castrol's trusted reputation, Hysol 33 FF offers premium performance at a cost-effective price—making it the smart choice for shops that demand quality without compromise.

Castrol® Hysol® 33 FF is formulated to help you:

- Consolidate fluids and eliminate the risk of top-up errors while simplifying inventory
- Extend sump life to reduce downtime and manpower for coolant changeout
- Reduce foam over in recommended water conditions
- Avoid the need for tank-side biocides with an integrated additive for microbial resistance.
- Deliver consistently high quality surface finishes balanced with efficient production

Ideally suited for General Machining and Grinding

Hysol 33 FF is specifically developed for shops seeking a single fluid solution with broad multi-metal compatibility. By enabling the use of one fluid across various materials, it helps streamline operations, reduce the number of coolants in use, and minimizes the risk of cross-contamination or errors during top-ups. With fewer coolant changeouts required, shops benefit from reduced downtime and less manpower dedicated to maintenance—boosting productivity and operational efficiency.

Applicable sectors

Automotive, Agriculture, Construction, Engine Manufacturing, Heavy Industry, Job Shops, Machine Manufacturing, Primary and Secondary Metals, Precision Machining

Typical characteristics

Concentrate

Mineral Oil	Yes
Appearance	Amber
Chlorides	No
Chlorinated Paraffin	No
Sulfur	No

Emulsion Properties

Refractometer Factor	1.54
Concentration (%)	Grinding 4-7%; General Machining 5-8%
Appearance	Clear to slight hazy
pH – 5% in DI Water	9.2
Cast Iron Chip Break Point	3%
Water Tolerance, gpg	6 - 35

castrol.com/metalworking-us

888-CASTROL



Multi-metal compatibility
at a cost advantage

Castrol[®] Hysol[®] 33 FF



Challenge: Coolant life

Castrol[®] Hysol[®] 33 FF is formulated with a resilient additive technology that resists the negative effects of bacterial growth and contamination. Your metalworking systems maintain performance, so you can rely on them to work harder for longer.

Increase productivity:

- Anti-corrosion properties to protect machine tools and parts
- Reduce frequency of coolant top-ups

Lower costs:

- Reduce maintenance for cleaning contaminated systems
- Coolant lasts longer with lower waste disposal



Challenge: HSE performance

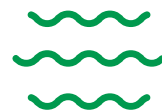
Castrol[®] Hysol[®] 33 FF includes a bacteria-resistant technology that reduces the need for tank side biocides. It helps meet your local legislative requirements and improves worker safety and acceptance.

Increase productivity:

- Reduces the volume of waste fluid that needs to be treated
- Cleaner workplace and less chemical handling

Lower costs:

- Reduces the need for additives such as biocides and pH boosters
- Reduces stoppage due to foam



Challenge: Hard water stability

Castrol[®] Hysol[®] 33 FF is designed to operate across a range of water hardness. It resists foaming and scum formation and its emulsion stability reduces maintenance needs and simplifies operations.

Increase productivity:

- Reduce downtime for cleaning, coolant refresh and filter changes
- Reduce stoppages due to foam

Lower costs:

- Extend tool life, reduce need for maintenance and spares
- Eliminate need for water treatment