

Castrol® Hysol® MB 50

Your answer to the challenges of modern manufacturing



Multi-applications, multiple metals and harsh operating conditions make it difficult to keep metal-working fluids stable. Tramp oil, swarf and waste can leach into the system and promote bacterial growth, reduce the life of the fluid, compromise performance, and ultimately cause the system to fail. Combating this requires constant maintenance intervention that add complexity and cost to your operations. Castrol® Hysol® MB 50 makes a difference in the way you work, saving you time and money.

Castrol® Hysol® MB 50 is formulated to help you:

- Extend fluid life through a robust pH buffer package
- Reduce maintenance burden and machine downtime
- Minimize metalworking fluid usage, limit waste and reduce overall chemical spend
- Increase tramp oil rejection for easier removal, cleaner running systems and increased part cleanliness

Applicable sectors

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

Typical characteristics

Concentrate

Mineral Oil	High
Ester	Yes
Boron	Yes
Amine	Yes
Chlorides	No
Biocide	No

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 operations.

Developed to solve multiple challenges, Hysol® MB 50 can take you from a position of compromise to one of strength. It gives you the advantages of a single multi-metal, multi-purpose metalworking fluid with all of the expertise of Castrol® engineering behind it.

Emulsion Properties

Refractometer Factor	1.1
Concentration (%)	5 - 10
Appearance	Translucent Milky
pH – 5% in DI Water	9.3 - 9.8
Cast Iron Chip Break Point	3%
Water Tolerance, gpg	5-35

Address your machining
challenges with

Castrol[®] Hysol[®] MB 50



Challenge: Coolant life

Castrol[®] Hysol[®] MB 50 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:

- Less downtime for cleaning
- Reduce frequency of coolant top-ups

Lower costs:

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

Safer working environment:

- Bacteria-resistant technology reduces the need for tank side biocides



Challenge: Multiple coolants, multi-metal machining

Castrol[®] Hysol[®] MB 50 delivers consistent performance across multiple machining processes and metals. You can run your shop on a single coolant, simplify operations and make it easier to meet business demands.

Increase productivity:

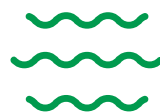
- Deliver consistently high quality surface finishes balanced with efficient production
- Eliminate risk of errors during top-ups with different coolants in the shop

Lower costs:

- Less downtime and manpower for coolant changeout
- Lowers inventory complexity by reducing the amount of metal-working fluids that are needed

Safer working environment:

- Reduce use of additives such as biocides and pH boosters



Challenge: Water hardness tolerance

Castrol[®] Hysol[®] MB 50 is designed to operate across a range of water hardness (100 – 600 ppm CaCO₃). It resists foaming and provides superior emulsion stability, reducing maintenance needs and simplifying 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
- Reduce water treatment management

Safer working environment:

- Cleaner workplace and less chemical handling