



Product Data Sheet

400 CUTTING OIL

PREMIUM, CHLORINE-FREE CUTTING OIL

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400 Cutting Oil is formulated to cover a wide variety of machining operations and metals. The chlorine-free cutting oil technology benefits the machine operator, the machine tool and machining efficiency.

In service **400 Cutting Oil** offers the following benefits:

- ◆ Excellent lubricity and good extreme pressure properties
- ◆ Minimized chip-to-tool weld
- ◆ Light colour and low odour
- ◆ Improved tool life and workpiece finish
- ◆ Corrosion / rust protection of part and machine
- ◆ Low smoke / mist tendency

Product Applications

400 Cutting Oil are formulated to allow several machining applications and various metallurgy and machining severity to be covered with one fluid. They can be used with all types of tooling including High Speed Steel, Carbide, Titanium-Nickel and Ceramic. They are compatible with each other and can be blended in all proportions. However, since the product contains active sulphur, it is not recommended for use with copper containing alloys.

They contain an anti-mist additive that helps to eliminate fogging and stray mist in the workplace. This is particularly important with the drive to lower workplace oil mist exposure levels and applications where the formation of hydrocarbon aerosols needs to be minimized to reduce fire hazards. All grades are also formulated to provide a smooth part surface finish for the intended application.

Cutting Oil 400 is an active, low viscosity general purpose cutting oil that can be used to machine most ferrous and non-ferrous alloys in all types of cutting applications (turning, threading, milling, forming, drilling and sawing). It is recommended for use in automatic and CNC screw machines where multiple cutting operations are performed using alloys with moderate-to-high machinability properties.

Product Maintenance and Handling

400 Cutting Oil are manufactured from quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact with the skin, splashing into the eyes or ingestion. Please refer to the Material Safety Data Sheet for further information.

Note: This product is NOT controlled under the Canadian WHMIS legislation.

Typical Properties

| Cutting Oil Grade | 400 | |
|-----------------------------------|------|--|
| Density @ 15°C, kg/m ³ | 878 | |
| Colour, ASTM | 1.5 | |
| Flash Point, °C | 196 | |
| Kinematic Viscosity, cSt @ 40°C | 32.4 | |
| Chlorine, wt. % | None | |
| Copper Corrosion, 3 hrs. @ 100°C | 4C | |
| Total Sulphur, wt% | 2.40 | |

The typical properties shown above are representative of current production. Some are controlled by manufacturing and performance specifications while others are not. All may vary within modest ranges.