



Advanced Lubricants Technology

## PRODUCT INFORMATION

### PERENNIAL MINCOOL MEF ( ENHANCED BIOCIDES EP WATER SOLUBLE CUTTING COOLANT-NON STAINING ON SENSITIVE ALUMINIUM )

#### DESCRIPTION

**PERENNIAL MINCOOL MEF** is an enhanced biocides, long life, high lubricity and high performance metalworking fluid. It is manufactured from carefully selected paraffinic base oils, lubricity agents, corrosion inhibitors, emulsifiers and biocides. It is formulated with the high levels of extreme pressure and lubricity additives to give excellent machining performance in most arduous machining operations. It is truly multipurpose whilst remaining cost effective. It is also for application in machine shop cutting all type of **ferrous** and **non ferrous** metals. It has exceptional emulsion stability and anti-corrosion properties. Inhibited with biocides to reduce bacterial growth under normal condition and its low foaming makes. **PERENNIAL MINCOOL MEF** in water gives a stable milky white emulsion at all temperature.

#### APPLICATIONS

**PERENNIAL MINCOOL MEF** is safe on all metals and works extremely well on both soft and hard aluminium leaving a shiny finish. Besides, it also protects sensitive aluminium parts from water staining for intermediate processing. It is also used on difficult operations and metals such as Nickel, Inconel, Hastelloy, stainless steel, etc.

**PERENNIAL MINCOOL MEF** is recommended for all heavy duty applications on steels, yellow metals and other non-ferrous materials. It is formulated with high lubricity additives which allow the product to be used for tapping operations on steel and for general machining of aluminium alloys.

**PERENNIAL MINCOOL MEF** is free from nitrites, phenols and sulphurised activities.

Depending on the severity of the operation, the following general guidelines may be used :

Machining Operation :	Recommended Dilution
Grinding ( Heavy Stock removal )	5 – 10%
Turning, Drilling, Sawing, Milling,	5 – 10%
Reaming, Deep Hole Boring	5 – 10%

The correct method of mixing is to add the recommended amount of concentrate to clean water, stir thoroughly, then add the mixture to the machine coolant system.

#### PERFORMANCE

**PERENNIAL MINCOOL MEF** offers the following benefits :

- Outstanding machining performance on non-ferrous and ferrous metals, including stainless steels
- High resistance to bacterial degradation / Stable in a wide range of diluent water qualities
- No sticky deposits on machine tool slides and fixtures
- Resistant to bacterial and tramp oil degradation / High emulsion stability
- Emulsion provides excellent corrosion protection to both the machine tool surface and components being machines
- Having selected additives which is suitable for **non ferrous** metals, especially non white staining to sensitive aluminium parts
- Working solutions have an extremely low odor of toxicity

#### TECHNICAL DATA

Type	: Mineral oil
Density, g/ml	: 1.01
Color, ASTM	: Amber ( MilkyWhite at 1:25 )
pH of 3% dilution	: 9.20
Corrosion test IP 287	: 0 at 1:25
Emulsion stability IP 263	: No oil at 1:25

The above details is typical and does not constitute a contract in terms of properties