CHESTERTON
Global Solutions, Local Service.

OPTICOOL 372(E)

Description

OPTICOOL 372(E) is a proven, universal, water miscible metal working fluid. It is ideal where lubricity is important and operations severe. The OPTICOOL 372(E) is suitable for a broad range of metal cutting operations.

When mixed with water, OPTICOOL 372(E) forms a stable emulsion providing for effective machining operations. OPTICOOL 372(E) improves productivity by reducing the time to process metals, increasing the quality of the workmanship and increasing tool life. OPTICOOL 372(E) offers cost effective dilution rates, corrosion inhibiting properties, extreme pressure additive package and hard water stability.

Composition

OPTICOOL 372(E) is compounded with the most effective extreme pressure and anti-weld additives. These additives along the base lubricant provide both hydrodynamic (barrier film) and boundary lubrication, which effectively extend tool life and improve surface finish. A biological preservation package provides microbial control virtually eliminating any adverse effects on the skin.

OPTICOOL 372(E) does not contain nitrites, boron, phenols, sulfur, mercurials, formaldehyde or chlorinated additives.

Properties

- Stable emulsion for long lasting use
- Unique base oil technology
- Extreme pressure capability
- Minimizes rancidity and odors
- Lowers disposal and downtime costs
- Corrosion protection
- Virtually eliminates adverse skin effects

Suggested Uses

- Broaching
- Deep Drilling
- Reaming
- Sawing
- Tapping
- Fine Threading
- Milling
- Turning
- Grinding
- Stamping
- Drawing

Directions

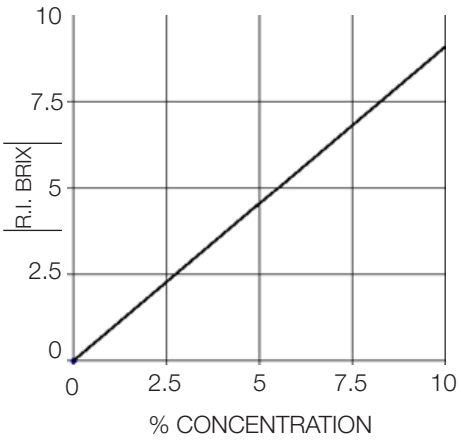
OPTICOOL 372(E) should be added to water at the recommended starting point. It is important that the coolant be added to water. Do not add water to the coolant.

Before adding OPTICOOL 372(E) to any reservoir remove old coolant, fines and residues from the system. Drain the old coolant from the sump, charge the system with Chesterton 218 HDP Cleaner at 5% concentration. Circulate the cleaner for up to 2 hours through all lines, tool holders and work pieces.

Dilutions in excess of 40:1 are not recommended since the corrosion protection and resistance to bacterial attack will be reduced.

Typical Physical Properties	OTICOOL 372(E)
Form	Liquid Concentrate
Appearance 5% Water	Milky
Solubility in Water	Complete
Flash Point (concentrate)	>100°C
Freeze Thaw Stability	Pass
pH Concentrate	N/A
pH (5% Concentration)	9.9
Base Fluid	Mineral Oil
Residue	non-sticky, re-emulsifiable
Specific Gravity	0.959

Concentration Check



Recommended Starting Dilutions

	Alloy Steels	Steel	Aluminum
Boring	10%	5%	5%
Drilling	10%	5%	5%
Milling	10%	5%	5%
Reaming	10%	5%	5%
Tapping	10%	5%	5%
Turning	5%	5%	5%
Stamping	10%	10%	10%
Drawing	10%	10%	10%

Coolant Maintenance

Concentration of the fluid changes constantly during use due to evaporation and "drag out" on chips. Volume loss to evaporation is 100% water. For maximum performance, the concentration should be monitored and maintained on a regular basis. The Brix chart above gives the approximate relationship between coolant concentration and refractometer reading.

Often it is helpful to monitor the sump's pH. If the pH is or drops, below, 8.5 the sump is imbalanced and requires conditioning. Adding fresh coolant or Opticool additives restores the pH level, maximizing coolant performance.

Clean Up

Residual Coolant on parts, equipment and machine tools is easily removed by rinsing with water.

Safety

Before using product, review the Safety Data Sheet (SDS) or the appropriate safety sheet for your area.

Waste Dispoasl

If permitted by local or state regulation, the product may be discharged into a waste disposal system, but only after the water insoluble fraction is removed with acid-alum or alum-polymeric demulsifiers.

If reclamation is not possible, check with local authorities on proper procedures for disposal.

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