



MACHINERY COOLANT

APPLICATION AREAS

- Tapping
- Boring
- Grinding
 - Milling
- Reaming
- Threading
- Machining
 - Sawing
 - Turning









PRODUCT DATA SHEET

KEY FEATURES AND BENEFITS

- Synthetic lubricant base
- Biodegradable
- Superior heat dissipation
- Excellent lubricity
- Internal resistance to microbial attack

PACKAGING

20L 208L

DIRECTIONS

Before adding 380 to any reservoir, remove old coolant, chips and other resideual matter from the system. Thoroughly rinse the reservoir with water until the pH is within .1 of make up water. Mix the concentrated 380 into water. Do not add water to the concentrate. Pour the diluted coolant into a clean reservoir. Do not mix 380 with any other coolant. Diluations in excess of 4% are not recommended since the corrosion protection provided by 380 and it's internal resistance to bacterial attack will be reduced. Coolant Maintenance: 380 is designed for minimum maintenance. For maximum life, its is recommended that the concetration be checked regularly using a refractometer to insure that the mix ration is correct. Tank side additives are availabel to control foam and bacterial contamination.

DESCRIPTION

Chesterton® 380 Machinery Coolant is a high-performance, low maintenance, synthetic metal working fluid. It provides superior lubricity and cooling for a variety of machining operations. It is recommended for alloy steels, cast irons and exotic metals. Machinery Coolant will provide protection against bacterial growth and is very tolerant to hard water. It is usable for a broad range of machining operations ranging from slow speed applications to high speed turning. It is ideal for high precision, high quality and custom machining operations. The excellent lubricity and coolant properties of 380 reduce heat in the chip formation process, which extends tool life when compared to conventional soluble oils and semi-synthetics.

TYPICAL PHYSICAL PROPERTIES	
Appearance	Clear, Colorless Liquid
Flash Point (ASTM D 93)	None
Specific Gravity	1.08
Solubility in Water	Complete
Odor	Mild
pH (Concentrate)	9.4
pH 4%	9.2
Boiling Point	100°C (212°F)
Hard Water Stability	1000 ppm
Fire Point (ASTM D 92)	None
Freezing Point	-4°C (25°F)
Freeze Thaw Stability	Passes 3 cycles

Before using this product, please refer to Safety Data Sheet (SDS).

MACHINERY COOLANT

Concentration Check 7.0 6.0 REFRACTOMETER READING, BRIX 5.0 4.0 3.0 2.0 1.0 0 2.0 4.0 6.0 8.0 10.0

PERCENT CONCENTRATION

Recommended Starting Dilutions	Stainless Steel High Alloy Steel	Carbon Steel	Cast Iron
Broaching	10%	7%	5%
Drilling	5%	4%	4%
Grinding	4%	4%	4%
Machining	5%	5%	4%
Milling	5%	4%	4%
Reaming	10%	7%	5%
Sawing	10%	7%	7%
Tapping	10%	7%	5%
Turning	5%	4%	4%

Suggested Uses	
Operations	Metals*
Broaching	Alloy 20
Drilling	Aluminum
Grinding	Brass
Machining	Bronze
Milling	Carbon Steel
Reaming	Cast Iron
Sawing	Copper
Tapping	Hastelloy [†]
Turning	High Alloy Steel
	Stainless Steel
	Titanium

^{*}Not recommended for use with magnesium †Haynes International, Inc. Registered Trademark

