

MASTER-SOL 3220

HEAVY DUTY SOLUBLE OIL

Description

Master-Sol 3220 is a heavy duty oil designed with high quality chlorinated additives for machining all ferrous and non-ferrous material. This formulation exhibits excellent corrosion protection and is chemically balanced for excellent hard water tolerance. Master-Sol 3220 contains bio-resistant additives to control rancidity by eliminating the growth of bacteria and fungi.

This product is formulated to cover a wide range of temperature dependent applications. The primary lubricating function is the activation of chlorinated species to form a metallic-halide complex which reduces the coefficient of friction. Secondary lubricating functions are created by oil and long chain fatty amides which activate at lower temperatures.

Monitoring

Operating ratios for Master-Sol 3220 are optimum when used at a 5%-10% dilution. With more severe operations, a higher concentration may be used. Monitoring can be performed through titration or refractive index. Consult your Precision Fluids representative.

Features & Benefits

- Extends tool life
- Excellent rust protection
- No phenols or nitrites
- For all machining operations
- Forms stable emulsion

Health & Safety

See the most recent MSDS which is available directly from Precision Fluids, your local salesman, or authorized distributor. Precision Fluids uses only raw materials not listed as carcinogenic by IRAC.

Physical Data

Appearance:	Liquid, Blue
Specific Gravity:	0.96
Lbs./Gal.	8
pH, 5% dilution:	9.3
Nitrites, Phenols:	None
Chromates:	None
Flash Point:	330°F Min.

Outstanding Stability

Whether Master-Sol 3220 is used in hard or soft water, it maintains a stable emulsion.

Biological Control

Master-Sol 3120 is designed with additive stabilizers to extend sump life by the elimination of bacteria.

Mixing Instructions

1. Always add concentrate to water.
2. When adding concentrate to water, the mixture should be vigorously stirred.
3. Never add water to concentrate as an inverted emulsion may occur.
4. Always observe proper care when dealing with chemical concentrates.

Refractive Index Monitoring

Percent	Ratio	Refractometer Reading
5	19 to 1	5
10	9 to 1	10
15	5 to 1	15
20	4 to 1	20

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