

XTREME MAG 440

Machining Fluid for Magnesium and High Magnesium Aluminum Alloys

Performance Benefits

- Reduces fluid usage and residues due to extreme hard water tolerance.
- Lower risk of fire than other water based fluids due to low hydrogen generation
- Operator friendly- virtually no odor in use and very mild to the skin
- Suitable for use on other non-ferrous metals such as aluminum, bronze, brass, and copper
- Long fluid life in both central systems and individual sumps
- Low foaming
- Clean parts and machine tools
- Easily waste treatable using standard metalworking fluid waste treatment systems
- Bimetallic corrosion protection for parts and machine tools

XTREME MAG 440 is a revolutionary new cutting fluid for the machining of wrought and cast magnesium alloys as well as high magnesium content aluminum alloys such as MIC-6. This fluid was specifically formulated to solve the issues of instability, short fluid life, and separation associated with machining magnesium.

The lubrication package in **XTREME MAG 440** results in optimum cutting performance and excellent surface finishes. The product employs state of the art raw materials to prevent the rotten egg odors seen with many soluble oils and semi-synthetic fluids.

Typical Characteristics

Appearance.....Clear, yellow liquid
 Appearance of emulsion.....Translucent
 Density.....8.09 lbs./gal
 pH of emulsion @ 5%.....8.5 - 8.9

XTREME MAG 440 does not contain as an ingredient: Chlorine, Diethanolamine, Formaldehyde Release Biocides, Mercury, Nitrite, Phenols, Phosphates, Silicones, Sulfur, or Triazine.

Recommended Dilutions

Even though XTREME MAG 440 is extremely hard water tolerant, making up with DI water or mineral free water will improve sump life, reduce concentrate usage, reduce carry off, and improve corrosion protection. Add the coolant concentrate to the water: NEVER THE REVERSE.

Machining: 4 - 12%

Concentration Control

The chart below was prepared using an Atago Master M refractometer and dilutions of XTREME MAG 440 in distilled water. Refractometer readings can vary with the type of water and refractometer used. Atago Master M refractometers are available from QualiChem, Inc.

CONCENTRATION %:	4	5	6	7	8	10	12
REFRACTOMETER READING:	3.6	4.5	5.4	6.3	7.2	9.0	10.8

Packaging

XTREME MAG 440 is packaged in 310-gallon, one-way tote tanks and 55-gallon, non-returnable steel drums. Bulk and 5-gallon pails are also available.