

MONROE HD

HEAVY DUTY WATER SOLUBLE CUTTING AND GRINDING FLUID

MONROE HD is a heavy duty water extendable sulfur-chlorinated metalworking coolant formulated to offer outstanding performance in difficult machining and grinding operations involving hard-to-work metals such as stainless steel, tool steels and high nickel alloys. **MONROE HD** may be used on all metals except magnesium, copper and some bronze alloys, which may be stained.

MONROE HD will perform as well as straight oil in most applications.

ADVANTAGES

- Used to Replace Straight Oils in Most Operations
- Increases Tool Life
- Excellent Corrosion Inhibition
- Excellent Finish in Machining and Grinding Operations
- Better Cooling than Oils
- More Economical than Straight Oil

APPLICATIONS

MONROE HD is suited for all types of machining processes including turning, milling, tapping, reaming, broaching, hobbing, and sawing.

This product also works well in the various grinding processes, including centerless, cylindrical, surface, internal, belt, and disc.

MONROE HD

PROPERTIES

Appearance - concentrate	Dark brown viscous liquid
Appearance - dilution	Tan milky liquid
Residual Film	Soft, Fluid
pH @ 20:1 (5%)	9.5 ± 0.3
Specific Gravity @ 60° F.	0.96 ± 0.01
Lbs/ Gallon	8.1 ± 0.1
Total Sulphur, wt%	2
Total Chlorine, wt%	6
Flash Point - PMCC	None

CONCENTRATION

MONROE HD

CONCENTRATION	3% (1:33)	4% (1:25)	5% (1:20)	6% (1:17)	7% (1:14)	8% (1:12)	9% (1:11)	10% (1:10)
REFRACTOMETER READING	3.4	4.5	5.6	6.7	7.8	9.0	10.1	11.2

An optical refractometer may be used for determining concentration. These numbers are typical and are not to be construed as specifications.

RECOMMENDED STARTING DILUTIONS

Centerless, ID, OD, Surface Grinding	33:1 (3%)
Milling, Drilling, Turning	20:1 (5%)
Tapping, Reaming, Sawing	10:1 (10%)

When mixing coolant, it is best to use an automatic proportioner which accurately and thoroughly mixes coolant. **Always** replenish the coolant with a **mixture** of coolant and water, not just coolant or water. **Never** add coolant concentrate directly to the sump.

Material Safety Data Sheets are available for all products.

All reasonable care has been taken to ensure that the above information is accurate as of the date of printing.

2/05



36 Draffin Road, Hilton, NY 14468 Phone: 800-828-6351 585-392-3434 Fax: 585-392-2691
EMERGENCY NUMBERS: CHEMTREC (800) 424-9300 Monroe Fluid Technology (800) 828-6351
Website: <http://www.monroefluid.com>