TRIM® HD

Heavy-duty Synthetic

GENERAL DESCRIPTION

TRIM® HD is a synthetic (chemical surface active) coolant concentrate used for general machining and grinding of ferrous materials. It utilizes a heavy-duty, chlorinated EP additive package for improved performance on stainless steel, super alloy, and most soft aluminum.

ADVANTAGES

- Provides rapid and effective cooling and reduces machining forces through the use of EP additives and boundary lubricants
- Has superior anti-weld action to control built-up edge and chip welding
- Compatible with all ferrous and most nonferrous materials
- Broad range of applications by using different concentrations for different applications
- Fully compatible with most nonmetallic materials
- A superior product for low-speed, high-pressure operations such as production band sawing and drilling
- Will keep your machines clean while leaving a soft, fluid film that protects the bare metal parts of your machine tools
- Contains no oil

APPLICATION GUIDELINES

- The minimum recommended concentration is 5% on all materials; however, higher concentrations give better sump life, tool life, and corrosion control.
- HD at higher concentrations or in the neat form is effective in light-to moderate-duty stamping, drawing, and forming.
- HD works best when used in high-speed machining situations; however, at higher concentrations (7.5% plus), it exhibits significant levels of slip lubrication.
- HD is not recommended for use on reactive metals (i.e., magnesium or zirconium).
- For additional product applications information, including performance optimization, please contact your Master Chemical Authorized Distributor at 2trim.us/distributors.php, your District Sales Manager, the Tech Line at 1-800-537-3365, or visit our web site at www.masterchemical.com.

PHYSICAL PROPERTIES (TYPICAL DATA)

Color (concentrate)	Cream
Color (working solution)	Opaque
Odor	Mild pine
Form	Gel
Flash Point	Nonflammable (COC)
pH (Typical Operating as a range)	8.3-8.9
Coolant Refractometer Factor % Brix	2.7
Titration Factor (CGF-1 Titration Kit)	0.640

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TECH SERVICE HOTLINE
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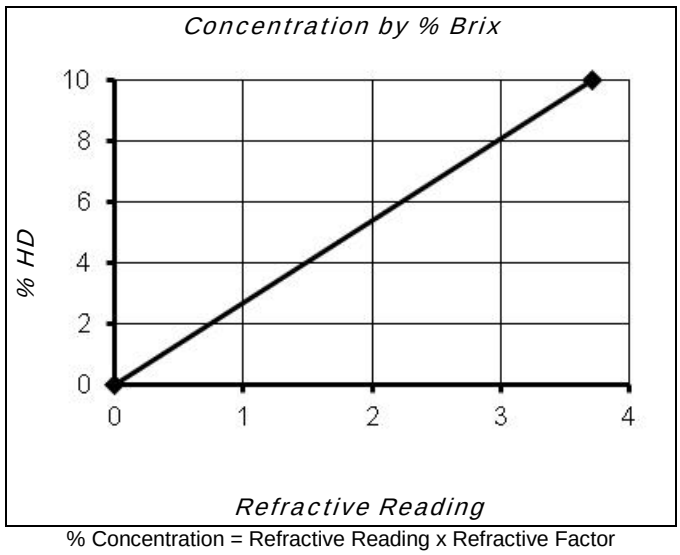
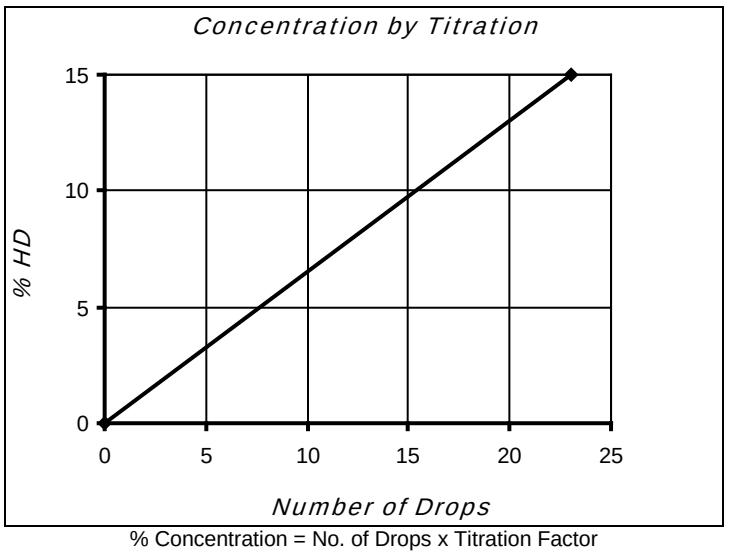


% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 2.7



% Concentration = No. of Drops x Titration Factor
Titration Factor = 0.640

RECOMMENDED METALWORKING CONCENTRATIONS

Light-duty machining and grinding..... 5%-6%
Moderate-duty machining and grinding 6%-8%
Heavy-duty machining and grinding 8%-10%
Design application range 4%-15%

MIXING INSTRUCTIONS

- Using premixed coolant as makeup will improve coolant performance and reduce coolant purchases. The makeup concentration that you select should balance the water evaporation rate with the coolant carryout rate. However, adding makeup coolant at 20%-40% of the desired working concentration will generally maintain the proper working concentration.
- The use of DI or mineral-free water will improve sump life, reduce concentrate usage, reduce carryoff, and improve corrosion inhibition.

HEALTH AND SAFETY

For further information, see the most recent SDS at 2trim.us/s/?i=1076-en-US-US.

NOTES

- Before using on any metals or applications not specifically recommended, consult Master Chemical.
- This product should not be mixed with other metalworking fluids or metalworking fluid additives, except as specifically recommended by Master Chemical Corporation, as this may reduce the overall performance of the product as well as result in adverse health effects and damage to the machine tool and parts. If inadvertent contamination should occur, please contact Master Chemical Corporation for recommended action.
- HD working solution is an opaque.
- Packaging: North America – 1-gallon jug, 5-gallon pail, 54-gallon drum, and 270-gallon tote bin.
- Packaging: Europe/Asia – 20-litre pail, 204-litre drum, and 1000-litre IBC.