



# TRIM<sup>®</sup> VHP<sup>®</sup> E320

*Very High-pressure, High-lubricity Emulsion*

## GENERAL DESCRIPTION

TRIM<sup>®</sup> VHP<sup>®</sup> E320 is a specialized heavy-duty chemical emulsion (or soluble oil) coolant concentrate. This product is a proven performer in heavy-duty machining, grinding, and some stamping operations. It is particularly effective in creepfeed grinding of steel and super alloys with either conventional or CBN wheels. It will run in very high-pressure situations with little to no foam.

## ADVANTAGES

- Compatible with a very wide range of materials, but is particularly effective on high-strength steel and super alloys
- Low-to-no foam even in very high-pressure operations like creepfeed grinding, Ejector<sup>®</sup> drilling, and gundrilling or gunreaming
- Superior cleaning and EP lubrication characteristics to assist in fast, deep cuts with plated CBN wheels in high-production steel grinding and slotting operations
- Very good anti-weld properties without the use of chlorinated EP additives
- Keeps machines very clean while leaving a soft fluid film for ease of cleaning and reduced machine maintenance costs
- Requires no special disposal or recycling techniques

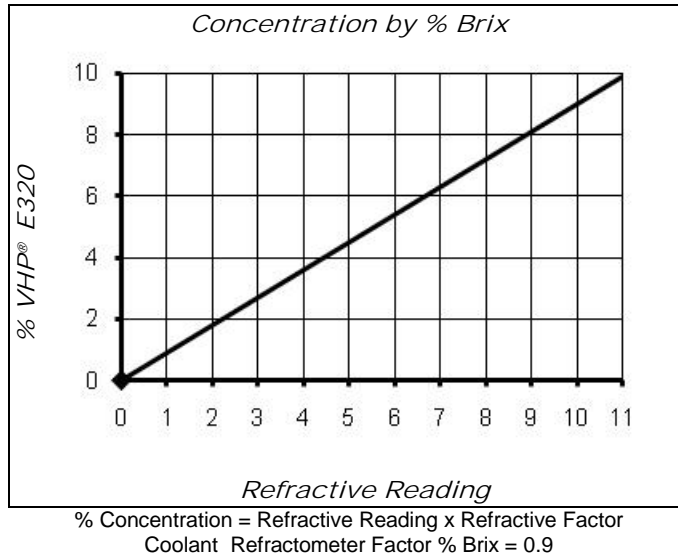
## APPLICATION GUIDELINES

- Higher concentrations of VHP<sup>®</sup> E320 (up to 7.5%) increase both boundary and EP lubrication.
- Not recommended on long runs of most cast irons.
- Maintenance of sufficient concentration is critical to long sump life and ease in filtration.
- Not recommended on very reactive metals like magnesium and zirconium.
- Contact your Master Chemical Authorized Distributor or District Sales Manager for assistance in recycling this product.
- For additional product applications information including performance optimization, please contact your Master Chemical Authorized Distributor at [2trim.us/distributors.php](http://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](http://www.masterchemical.com).

## PHYSICAL PROPERTIES (TYPICAL DATA)

Color (concentrate) ..... Olive green  
Color (working solution) ..... Milky white  
Odor ..... Mild, oily  
Form ..... Liquid

Flash Point ... 331°F (166°C) (ASTM D92-12B COC)  
pH (Typical Operating as a range) ..... 8.2-8.9  
Coolant Refractometer Factor % Brix ..... 0.9



**RECOMMENDED METALWORKING CONCENTRATIONS**

- Moderate to heavy-duty machining ..... 5%-7.5%
- Moderate to heavy-duty grinding ..... 5%-7.5%
- Creepfeed grinding ..... 7.5%
- Recommended concentration range ..... 5%-7.5%

**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. Adding makeup coolant at 40%-60% of the desired working concentration will generally maintain the proper concentration in the sump.
- Using DI or mineral-free water will improve sump life, reduce concentrate usage, reduce carryoff, and improve corrosion inhibition.
- Specialty emulsion products such as VHP® E320 work best by adding the coolant concentrate to the water (never the reverse) to help insure that the best possible emulsion is formed.

**HEALTH AND SAFETY**

See the most recent SDS at [2trim.us/s/?i=1032-en-US-US](http://2trim.us/s/?i=1032-en-US-US).



**NOTES**

- Before using this product on any metals and applications not specifically recommended, consult Master Chemical Corporation.
- This product should not be mixed with other metalworking fluids or metalworking fluid additives, except as recommended by Master Chemical Corporation, as this may reduce overall performance, result in adverse health effects, or damage the machine tool and parts. If contamination occurs, please contact Master Chemical Corporation for recommended action.
- VHP® E320 working solution is a milky white emulsion.
- Packaging: North America – 5-gallon pail, 54-gallon drum, and 270-gallon tote bin and tank wagon lot.
- Packaging: Europe/Asia – 20-litre pail, 204-litre drum, and 1000-litre IBC.

The information herein is given in good faith and believed current as of the date of this Data & Information sheet and should apply to the current formula version. Because conditions of use are beyond our control, no guarantee, representation, or warranty expressed or implied is made. Consult Master Chemical Corporation for further information. For the most recent version of this document, please go to this URL: [2trim.us/di/?i=116](http://2trim.us/di/?i=116)