



# TRIM<sup>®</sup> VHP<sup>®</sup> E210

*Very High-pressure, Chlorine-free Emulsion*

## GENERAL DESCRIPTION

TRIM<sup>®</sup> VHP<sup>®</sup> E210 is a specialized, heavy-duty chemical-emulsion, soluble-oil, coolant concentrate. This product is a proven performer in heavy-duty machining, grinding and some stamping operations. It will even run in very high-pressure situations with little-to-no foam.

## ADVANTAGES

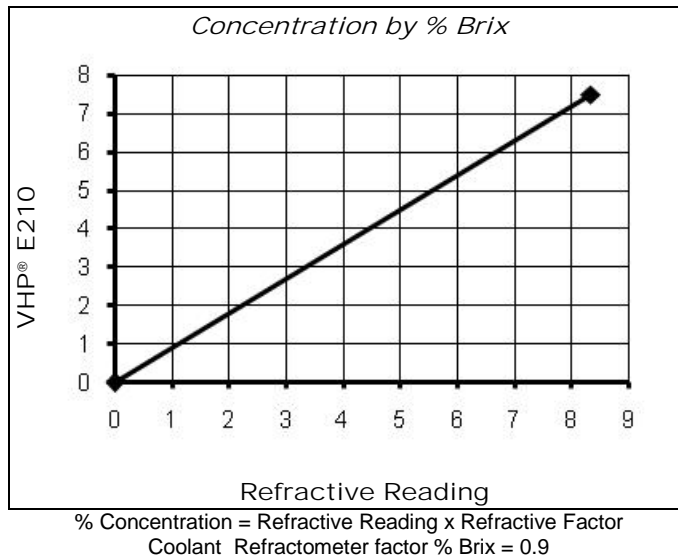
- Is compatible with a very wide range of material including steels, stainless steels, and aluminum alloys
- Low-to-no foam even in very high-pressure operations such as creepfeed grinding, Ejector<sup>®</sup> drilling, and gundrilling or gunreaming
- Has sufficient boundary lubrication to do roll-form threading in many materials
- Superior anti-weld properties without chlorinated EP additives
- Will keep 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 E210 working solutions increase both boundary and EP lubrication.
- VHP E210 is not recommended on long runs of most cast irons.
- Maintenance of sufficient concentration is critical to long sump life and ease in filtration.
- Most filtration problems can be traced to either a low operating pH or tramp oil contamination.
- VHP E210 is not recommended on very reactive metals such as magnesium and zirconium.
- Contact your Master Chemical Authorized Distributor or District Sales Manager for assistance in recycling this product.
- Prolonged contact with concentrations in excess of 7.5% may result in skin irritation.
- 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  | Flash Point .....                            | >350°F (177°C) (ASTM D93-08) |
| Color (Working Solution) ..... | Milky, white | pH (Typical Operating as a Range) .....      | 8.2-8.9                      |
| Odor .....                     | Mild, oily   | Coolant Refractometer Factor % Brix .....    | 0.9                          |
| Form .....                     | Liquid       | Titration Factor (CGF-1 Titration Kit) ..... | N/A                          |



### 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 carryoff rate. Adding makeup coolant at 40%-60% of the desired working concentration will generally maintain the proper concentration in the sump.
- The use of DI or mineral-free water will improve sump life, reduce concentrate usage, reduce carryoff, and improve corrosion inhibition.
- Emulsion products such as VHP E210 work best if they are mixed 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=1174-en-US-US](http://2trim.us/s/?i=1174-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 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 E210 working solution is a milky white emulsion.
- 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.

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=114](http://2trim.us/di/?i=114)