TRIM® VHP® E814

Low foaming, Chlorine-free, Long-life Emulsion

GENERAL DESCRIPTION

TRIM[®] VHP[®] E814 is a low- to no-foam, chlorine-free, long-life, soluble oil. This versatile emulsion performs well in most machining and grinding applications but excels in high-pressure environments where many fluids fail. VHP E814 allows you to realize the maximum productivity benefits from your high velocity, through-the-tool coolant delivery systems. The stable and predictable performance of VHP E814 makes it the first choice for high quality, consistent parts manufacturing.

ADVANTAGES

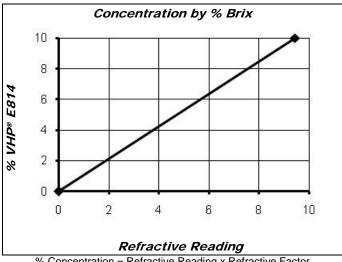
- Stable, low-foam formula extends useful life without need for tank side defoamer additions
- Nonchlorinated, extreme-pressure (EP) additives control built-up edge
- Delivers excellent material removal rates and finishes on applications as difficult as gun drilling
- Proven performer in difficult creepfeed grinding operations
- Easily recycled or disposed of without special handling or equipment
- Contains no DEA, chlorine, nitrites, or phenolic compounds
- Forms stable emulsion in hard water environments

APPLICATION GUIDELINES

- VHP E814 can be recycled and run effectively for long periods of time.
- Higher concentrations are recommended on soft, gummy materials and for lower-speed operations where friction reduction and control of built-up edge are critical.
- Concentrations at or above 7% provide the best sump life.
- 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)Amber	Flash Point>200°F (93°C) (ASTM D93-08 PMCC)
Color (working solution)White	pH (Typical Operating as a range) 8.9-9.3
OdorMild Amine	Coolant Refractometer Factor % Brix 1.1
FormLiquid	Titration Factor (CGF-1 Titration Kit)1.130



% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 1.1

RECOMMENDED METALWORKING CONCENTRATIONS

Light-duty machining and grinding	4%-6%
Moderate-duty machining	6%-8%
Heavy-duty machining	
Very heavy-duty machining	
Recommended concentration range	

MIXING INSTRUCTIONS

- Using DI or mineral-free water will improve sump life, reduce concentrate usage, reduce carryoff, and improve corrosion inhibition. Product will form a stable emulsion in hard water up to 40 grains per gallon.
- Emulsion products such as VHP E814 work best if mixed with room temperature water. Add the coolant concentrate to the water; NEVER THE REVERSE.
- Using premixed coolant as makeup will improve performance and reduce coolant purchases. The makeup concentration you select should balance the water evaporation rate with the coolant carryout rate. (Adding makeup coolant at 30%-40% of the desired working concentration will generally maintain the proper concentration in the sump.)

HEALTH & SAFETY

See the most recent SDS at 2trim.us/s/?i=1278-en-US-US.



NOTES

- Use Master STAGES™ Whamex™ for a quick and thorough pre-cleaning of your machine tool and coolant system.
- Before using 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 E814 working solution is a white emulsion.
- Packaging: North America 5-gallon pail, 54-gallon drum, 270-gallon recyclable bin.

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