



RIM[®] C320

High-lubricity Synthetic

GENERAL DESCRIPTION

TRIM[®] C320 is a high lubricity, low foam, synthetic coolant that approaches the “down-the-hole” machining performance of premium soluble oils. This product is exceptionally good on aluminum. Even with its very high performance, C320 meets or exceeds most stringent environmental standards.

ADVANTAGES

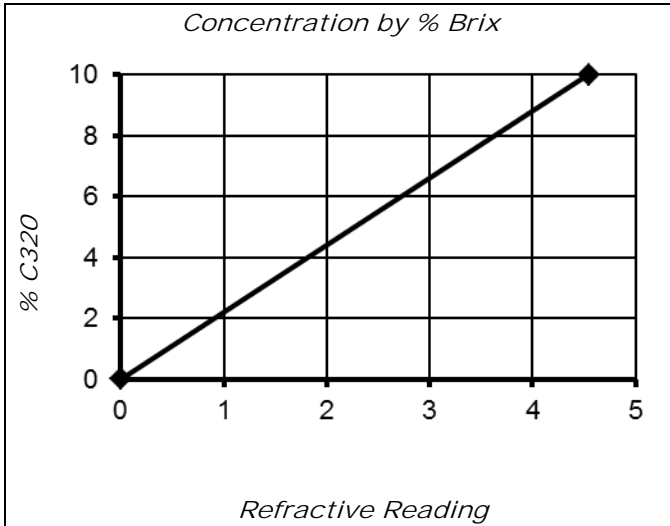
- Excellent extreme pressure (EP) lubricity to do many drilling, tapping, reaming, and form-grinding operations without any chlorine or sulfur-based EP additives
- A very versatile product which works well in mixed metal situations including aluminum, steel alloy, cast iron, and copper alloy
- Provides good corrosion inhibition on all common ferrous and nonferrous alloys
- Keeps grinding wheels clean and sharp for higher “G ratios”, better surface integrity, and faster stock removal
- Contains no DEA, nitrides, phenolic compounds, “formaldehyde releasers”, or chlorine
- Operators like C320’s very low odor, low foam, low mist, and light yellow working solution
- Keeps your machines clean while leaving a soft fluid film that protects the bare metal parts
- Machines are easily washed off with coolant working solution to minimize the buildup of residues and chips
- Exceptional sump life, great resistance to fungus and bacteria, and good tramp oil rejection
- C320 is a super product for aluminum wheel machining

APPLICATION GUIDELINES

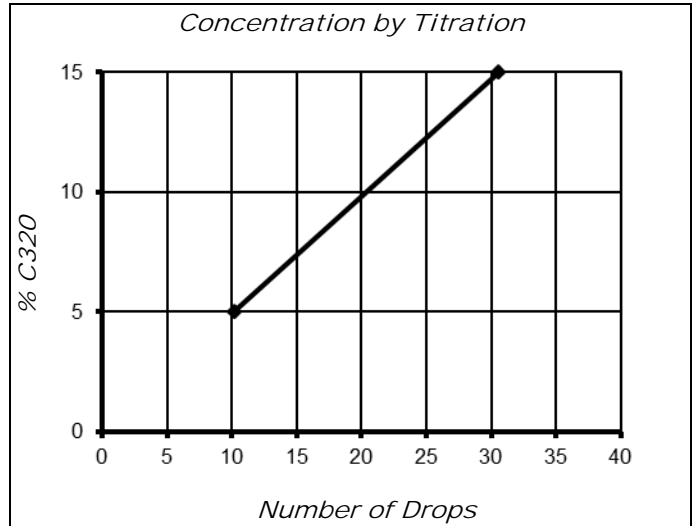
- C320 has increased tendency to foam as the fluid temperature falls below 80°F (27°C).
- Concentration should be kept at 7.5% or higher for operations at lower SFPM, soft or “gummy” material, or operations where finish is a factor.
- C320 is not recommended in machine tools that rely on splash lubrication from the coolant; e.g., older screw machines or transfer machines.
- C320 is not recommended on magnesium or zirconium without special precautions.
- This product may “wash out” dirt and residues when a machine is first charged. Machines should be thoroughly precleaned with Whamex™ before charging.
- Concentration should be at least 5% on cast iron and 4% on steel to help prevent in-process corrosion.
- Concentrations of 7.5%-10% usually give the best tool life, finish, and sump life; however, the best concentration for your operation should be determined by on-site testing.
- 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)	Yellow	Flash Point	>214°F (101°C) (ASTM D92)
Color (working solution)	Light yellow	pH (Typical Operating as a range).....	8.8-9.2
Odor	Mild, sweet	Coolant Refractometer Factor % Brix	2.2
Form.....	Liquid	Titration Factor (CGF-1 Titration Kit)	0.490



% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 2.2



% Concentration = No. of Drops x Titration Factor
Titration Factor = 0.490

RECOMMENDED METALWORKING CONCENTRATIONS

- Moderate-duty machining and grinding 5%-7.5%
- Heavy-duty machining and grinding 7.5%-10%
- Design range..... 4%-10%

MIXING INSTRUCTIONS

- Using premixed coolant as makeup will improve performance and reduce coolant purchases. The makeup concentration you use should balance the water evaporation rate with the coolant carryout rate. Adding makeup coolant at 5%-15% of the desired working concentration will generally maintain proper concentration in the sump.
- The use of DI or mineral-free water will improve sump life, reduce carryoff, and improve corrosion inhibition.

HEALTH & SAFETY

See the most recent SDS at 2trim.us/s/?i=1065-en-US-US.



NOTES

- Before using this product on any metals or applications not specifically recommended, consult Master Chemical Corporation.
- C320 should not be mixed with other metalworking fluids or metalworking fluid additives, except as specifically recommended by Master Chemical Corporation, as this may reduce overall performance or result in adverse health effects or damage to the machine tool and parts. If inadvertent contamination should occur, please contact Master Chemical Corporation for recommended action.
- C320 is a light yellow working solution.
- 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=13

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