

FLC-260 Aluminum Nitride Ceramic Grinding Fluid

FLC-260 Grinding Fluid is specifically designed for use on the ceramic substrate Aluminum Nitride (AlN). During production, AlN swarf can react with high pH grinding coolants to produce ammonia gas. This can create an uncomfortable, irritating, and unhealthy work environment. FLC-260 maintains a lower pH of 7.5 to 8, helping eliminate ammonia odors and extending coolant life.

Superior Corrosion Protection – FLC-260 passes a standard ASTM Cast Iron Chip Test at a 35:1 dilution.

Added Lubricity – FLC-260 has moderately high levels of added lubricity and load carrying additives for superior finishing capabilities and extended wheel life.

Low Misting – FLC-260 resists misting in the harshest applications, including Blanchard grinding.

Versatile – FLC-260 is ideal for most grinding operations, including Blanchard, Kleep, heavy surface and machining.

Rejects Tramp Oil – FLC-260 is formulated to reject tramp oils to help maintain a cleaner machine and a healthier work environment.

Biological Stability – FLC-260 is formulated with the latest technology to resist biological attack.

Will Not Attack Copper or Aluminum – FLC-260 is compatible with most steel and

cast iron metals and will not dissolve copper.

Calculating Starting Amount of Coolant – To calculate the correct amount of coolant to be added to the sump, multiply coolant sump volume by 7.5 (the number of gallons of liquid in a cubic foot).

Example:

Tank width = 2 ft

Tank length = 6 ft

Tank depth = 2 ft

Volume = 2 x 6 x 2 = 24 cu ft

Liquid Volume = 24 x 7.5 = 180 gal

For a 50:1 concentration, add 180/50 = 3.6 gal to the coolant tank.

Adding FLC-260 to the Coolant Tank – When diluting FLC-260, ensure that the machine sump is clean and free of built up glass fines and other foreign materials. Always add water to the sump first after cleaning, and then add FLC-260. Circulate the sump for several minutes before starting production to give the tank time to completely mix.

Checking Concentration – Coolant concentration should be checked daily whenever possible. The simplest method is with a hand held refractometer. For the best results, always filter the coolant through a 1-micron filter before reading the solution concentration. Once the coolant has been filtered, place a drop or two on the face of the refractometer. Hold the instrument up to the light and read the number just at the light colored line on the screen face. Write

www.ferro.com

DISCLAIMER: Reasonable care has been taken in the preparation of this information, but FERRO EXTENDS NO WARRANTIES, MAKES NO REPRESENTATIONS AND ASSUMES NO RESPONSIBILITY AS TO ACCURACY OR SUITABILITY OF THIS INFORMATION OF THIS PRODUCT FOR ANY PURCHASER'S OR USER'S USE OR FOR ANY CONSEQUENCE OF ITS USE. FERRO DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR ANY PARTICULAR USE. All statements, technical information and recommendations contained herein are based on Seller's or Manufacturer's test and the test of others, and are believed to be accurate, but no guarantee of accuracy is made. Judgment as to the suitability of information herein or the user's purposes are necessarily the user's responsibility. Users shall determine the suitability of the products for their own intended application.

Users assume all risk of use or handling whether or not in accordance with any statements or recommendation of the seller or manufacturer. Liability, if any, is and shall be limited to the replacement of such quantity of material proved not to conform to specifications as set out in product specification. Statements concerning the possible use of these products are not intended as recommendation to use these products in infringement of any patent. No guarantee is made that any use of the products does not infringe third-party intellectual property or patent rights anywhere in the world.

FLC-260 Aluminum Nitride Ceramic Grinding Fluid

down and use it to refer to the refractive index chart enclosed with the product. Find the reading on the refractometer and locate it on the left-hand side of the chart. Now read to the right and down to determine the current dilution.

Recommended Starting Dilutions

Surface Grinding	20:1 to 30:1
Blanchard Grinding	20:1 to 30:1
Double-Disc Grinding	15:1 to 25:1
Machining	15:1 to 20:1

Typical Properties

Appearance	Transparent Blue
	Liquid
Volatile Component	Water
Freeze Point	32°F
Boiling Point	212°F
pH	8 – 8.3
Evaporation Rate	NA
Odor	Mild
Vapor Pressure	NA
Vapor Density	NA
Specific Gravity	1.062
VOC	None
Weight per Gallon	8.85
Solubility in Water	Infinite

Contains Alkanolamines – Do not add solutions containing sodium nitrite to FLC-260.

Packaging and Handling – FLC-260 is a liquid packed in non-returnable drums, Tote Bins, Pails, and Bulk. Refer to the Material Safety Data Sheet for suitable materials of construction, for handling, and storing of this product. Observe all safety precautions shown on the label and in the Material Safety Data Sheet.

Health	1
Flammability	1
Reactivity	0
Personal Protection	B

Ferro Electronic Material Systems Penn Yan, New York, U.S.A. 315-227-5276

www.ferro.com

DISCLAIMER: Reasonable care has been taken in the preparation of this information, but **FERRO EXTENDS NO WARRANTIES, MAKES NO REPRESENTATIONS AND ASSUMES NO RESPONSIBILITY AS TO ACCURACY OR SUITABILITY OF THIS INFORMATION OF THIS PRODUCT FOR ANY PURCHASER'S OR USER'S USE OR FOR ANY CONSEQUENCE OF ITS USE. FERRO DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR ANY PARTICULAR USE.** All statements, technical information and recommendations contained herein are based on Seller's or Manufacturer's test and the test of others, and are believed to be accurate, but no guarantee of accuracy is made. Judgment as to the suitability of information herein or the user's purposes are necessarily the user's responsibility. Users shall determine the suitability of the products for their own intended application.

Users assume all risk of use or handling whether or not in accordance with any statements or recommendation of the seller or manufacturer. Liability, if any, is and shall be limited to the replacement of such quantity of material proved not to conform to specifications as set out in product specification. Statements concerning the possible use of these products are not intended as recommendation to use these products in infringement of any patent. No guarantee is made that any use of the products does not infringe third-party intellectual property or patent rights anywhere in the world.