

FLC-270 Precision Plastic Grinding & Machining Fluid

FLC-270 can be used for grinding, machining, and fabrication of most types of plastic, PVC, polycarbonate, and fiberglass parts. It is formulated to offer the highest levels of surface finishing possible. Very low surface tension allows complete and controlled removal of fines from the system.

High Line Speeds – FLC-270 is formulated with high levels of lubricity additives, allowing increased line speeds.

Highly Dilutable – FLC-270 can be diluted to extended levels (20:1 to 25:1) with water, and still produce a perfect pass in an ASTM Cast Iron Chip Test.

Outstanding Corrosion Protection – FLC-270 provides significantly higher levels of in-process and machine corrosion control than most competitive materials.

Non- Sticky – FLC-270 will not build up on machine surfaces and floors.

Extremely Low Foaming – FLC-270 is low foaming even under high agitation.

Operator Safety – FLC-270 will not attack skin or irritate lungs when diluted and used as directed.

Biologically Stable – FLC-270 is formulated to provide extended tank life and low sludge levels due to biological build up.

Safe on Most Metals – FLC-270 will not attack most ferrous or non-ferrous metals. Unlike many other competitive materials, it

will not attack electrical components and contacts.

Waste Treatable – FLC-270 rejects tramp and way oils; therefore, it is easily waste treated by simple and inexpensive methods. Always contact local and state agencies before disposing of this material or any others.

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 = $2 \times 6 \times 2 = 24$ cu ft

Liquid Volume = $24 \times 7.5 = 180$ gal

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

Adding FLC-270 to the Coolant Tank – When diluting FLC-270, 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-270. 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-

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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 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

Grinding 20:1 to 25:1
Machining 15:1 to 20:1

Typical Properties

Appearance Clear Blue Liquid
Volatile Component Water
Freeze Point 32°F
Boiling Point 212°F
pH 10 - 10.3
Evaporation Rate NA
Odor Mild
Vapor Pressure NA
Vapor Density NA
Specific Gravity 1.04 - 1.05
VOC None
Weight per Gallon 8.65 - 8.75
Solubility in Water Infinite

Packaging and Handling – FLC-270 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 |

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