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Technical Data Sheet

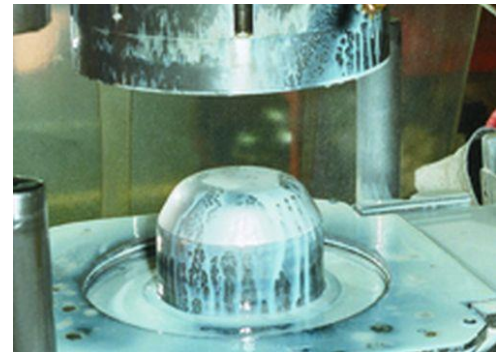
TechDraw FT 403

Heavy - Duty Drawing Compound

TechKool FT 403 is a heavy-duty drawing soluble oil formulated based on sulfur and chlorine to perform a wide range of operations on ferrous metals. **TechKool FT 403** can be used neat in severe operations such as drawing, rolling, stamping, or diluted as low as 20:1 with water to form a stable emulsion for most machining operations. **TechKool FT 403's** unique formulation is ideal for multi-operation machining systems such as CNC machining operations that perform multiple tasks.

Key Features:

- Versatile
- Low Foaming
- Hard Water Stable
- Imparts In-Process Corrosion Protection
- Can Be Used Neat or in Emulsion Form



Typical Properties (Not Specifications):

Appearance.....Amber Oil
Viscosity S.U.S. @ 100°F, ASTM D-445.....300
Specific Gravity @ 60°F, ASTM D-12981.046
Pounds Per Gallon, ASTM D-12988.722
pH @ 10.0% (IN Detroit H₂O), FWI 3.028.5

Mixing Instructions

When mixing metalworking fluids, we recommend that a proportioner be used to ensure a stable mix is formed at the correct concentration. A hydroblend proportioner mounts vertically to a fluid wall to automatically mix fluid concentrate with water to a pre-determined level.

Mixing manually is an option but is prone to errors. Two common errors that often occur – resulting in improper mix concentration – are:

- Inaccurate estimate of machine tank volume (gallons) causing the wrong volume of fluid concentrate to be added to the water, and
- Incorrect order of addition; adding water to concentrate may form an inverted emulsion (mix), affecting many metalworking fluid performance properties.

If mixing manually is the only option, it is imperative that the fluid concentrate is added to the water and not the reverse.

OIL = Oil In Last

When mixing fluids manually in a premix tank or a machine reservoir:

1. Fill the tank half-full with water.
2. Add the concentrate directly to the water.
3. Add the remainder of the water to create agitation and allow the fluid to mix thoroughly.

Turning on the machine tool coolant pump and circulating the fluid will help create a uniformly mixed product. Once the product is uniformly mixed, the concentration should be tested using a refractometer, test strip or chemical titration method. The fluid sample used to check concentration is typically taken at the fluid delivery nozzle or a representative fluid sample from the reservoir.

It is also important to remember that each product will have its own Refractometer Index, displayed above. The index will be needed to calculate the metalworking fluid mix concentration when using a refractometer. If you have any questions, contact a Fortech Representative by phone or at sales@fortechproducts.com.

FT 403 RIS Chart		
Ratio	%	Refractometer
1 to 1	50.0	31.8
2 to 1	33.3	21.2
3 to 1	25.0	15.9
4 to 1	20.0	12.7
5 to 1	16.7	10.6
6 to 1	14.3	9.1
7 to 1	12.5	8.0
8 to 1	11.1	7.1
9 to 1	10.0	6.4
10 to 1	9.1	5.8
11 to 1	8.3	5.3
12 to 1	7.7	4.9
13 to 1	7.1	4.5
14 to 1	6.7	4.2
15 to 1	6.3	4.0
16 to 1	5.9	3.7
17 to 1	5.6	3.5
18 to 1	5.3	3.3
19 to 1	5.0	3.2
20 to 1	4.8	3.0

TechDraw FT 403 is available at our Brighton, Michigan facility in 55-gallon drums, 330 gallon totes and pails.

Storage And Handling: See Safety Data Sheet Before Use. Use at room temperature. If frozen, allow to thaw completely prior to use. Do not expose to extreme high temperature due to container rupture. Do not pressurize drum or reuse empty container. Follow all safety regulations on label.

Non-Warranty: While the information and recommendations sent forth herein are believed to be accurate as of the date thereof, Fortech Products, Inc. makes no warranty with respect thereto and disclaims all liability for reliance therein.

Last Updated: 7/17/17