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Attention: Editor

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PRESS RELEASE



Cortec® EcoLine® Cutting Fluid Withstands Bitter Cold!

During shipping and handling processes, it is not uncommon to encounter extreme temperature conditions such as freezing. It is necessary for Cortec® products to be able to withstand temperature changes during transportation. According to the Freeze and Thaw Stability testing conducted by Cortec's accredited Laboratory, EcoLine® Cutting Fluid



retains its integrity after a number of freezing and thawing cycles without any effect on performance. Cortec's EcoLine® Cutting Fluid was tested for reduction in product effectiveness and observed for change in thickness, odor, or other abnormalities. The results verified that there were no adverse effects once returned to normal temperatures.

ASTM D-1748 Testing

EcoLine® Cutting Fluid 5% (freeze/thaw tested) Time to Failure 720 hours

Visual Observations of Freeze-Thaw Testing

Product	Product Observations		
EcoLine® Cutting Fluid	Cycle 1	Cycle 2	Cycle 3
	No Separation	No Separation	No Separation

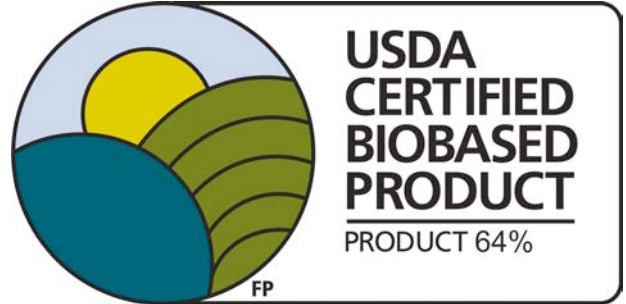
EcoLine® Cutting Fluid is a multifunctional biobased biodegradable concentrate for metal cutting operations. It cools work pieces and tools and prevents welding of metals during metalworking procedures; while providing excellent corrosion protection and lubrication during the cutting process. This product's high performance characteristics are ideally suited for heavy-duty cutting, milling, turning, drilling, broaching, and other machining operations. EcoLine® Cutting Fluid gives a stable emulsion, which provides excellent cooling and little or no smoke during use. This concentrated fluid can be used in small amounts providing cost savings. When used as directed, EcoLine® Cutting Fluid prevents corrosion during in-plant processing, storage, and export shipment for up to 12 months. EcoLine® Cutting Fluid has been certified as a USDA certified biobased product and has been awarded USDA BioPreferredSM designated for Metalworking Fluids for Federal Preferred Purchasing (www.biopreferred.gov)



Typical applications include lubricant for heavy-duty rolling, grinding, extruding, stamping, and cutting; in-plant machining or as a biodegradable preservative for hot-rolled, cold-rolled, galvanized, and aluminized steel during operation, storage, and shipment; also for use as a machining coolant or for hydrostatic testing.

FEATURES

- Contains 64% biobased content
- Environmentally friendly and biodegradable
- Replaces hazardous mineral oil; excellent for operations which require rapid cooling
- Contains no chlorinated compounds, chromates, or nitrites
- Low to no smoke or burning vapors
- Excellent anti-wear properties
- Excellent lubricity
- Excellent extreme pressure properties
- Cleans parts by removing rust and oil
- Provides excellent corrosion protection
- Displaces water and oil from metal surfaces
- Economical - can be diluted 1:40 with water



EcoLine[®] Cutting Fluid is available in 5-gallon (19 liter) pails concentrate, 55-gallon (208 liter) drums concentrate, liquid totes, and bulk.

Testing done regarding freeze-thaw stability of EcoLine[®] Cutting Fluid was with the concentrated product before being diluted to form an emulsion for metalworking. After it has been diluted, the emulsion has proven to only be partially stable during freeze thaw cycles (depending on temperatures and number of times it freezes and thaws).

EcoLine[®] Cutting Fluid also conforms to ASTM D 4627-86 and ASTM D 2670.

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