



ENVIROTEMP FR3 FLUID

Product Description

ENVIROTEMP FR3 FLUID is a bio-based, sustainable, natural ester dielectric coolant for use in distribution and power class transformers where its unique fire safety, environmental, electrical, and chemical properties are advantageous. ENVIROTEMP FR3 FLUID is formulated from seed oils and performance enhancing additives.

Specifications

On COA		Minimum	Maximum	UOM	Method
<input checked="" type="checkbox"/>	Acid Value		0.06	mg KOH/g	ASTM D974
<input checked="" type="checkbox"/>	Color		1.0		ASTM D1500
<input checked="" type="checkbox"/>	Dielectric Breakdown 2mm gap	35		kV	ASTM D1816
<input checked="" type="checkbox"/>	Dissipation Factor 100 °C		4.0	%	ASTM D924
<input checked="" type="checkbox"/>	Dissipation Factor 25 °C		0.20	%	ASTM D924
<input checked="" type="checkbox"/>	Moisture-Coulometric		200	ppm	ASTM D1533
<input checked="" type="checkbox"/>	Open Cup Fire Point °C	300		°C	ASTM D92
<input checked="" type="checkbox"/>	Open Cup Flash Point °C	275		°C	ASTM D92
<input checked="" type="checkbox"/>	Pour Point °C		-10	°C	ASTM D97
<input checked="" type="checkbox"/>	Viscosity at 40 °C		50	cSt	ASTM D445
<input checked="" type="checkbox"/>	Viscosity at 100 °C		15	cSt	ASTM D445
<input checked="" type="checkbox"/>	Appearance	Bright and Clear			ASTM D1524
<input checked="" type="checkbox"/>	Corrosive Sulfur	Not Corrosive			ASTM D1275
<input checked="" type="checkbox"/>	PCB Content	Not Detectable			ASTM D4059

Storage and Handling

Avoid extremes of temperature in storage. Store ENVIROTEMP FR3 FLUID in labeled, tightly closed containers in cool, dry, isolated, and well-ventilated areas, away from sources of ignition or heat. To maintain fluid for intended use as an electrical insulating fluid, eliminate exposure to oxygen and moisture. Prolonged exposure to ultraviolet radiation (sunlight) may affect color in intermediate bulk storage containers, such as totes.

Additional Information

ENVIROTEMP FR3 FLUID conforms to requirements listed in ASTM D6871.

Revision Date: 06/29/2011

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Cargill Industrial Oils & Lubricants / Box 5700/ Minneapolis, MN 55440 / 800-842-3631 / IOLCustomerService@cargill.com

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Customer Specification Acceptance

Revision Date: 06/29/2011

The previous page(s) define the specifications for the product listed above that you purchase from Cargill Incorporated. This product will be produced and shipped according to these specifications unless changes are requested in writing from your company. **Your response is required and must be returned via email to IOLCustomerService@cargill.com or faxed to (952) 367-0755 within (2) weeks from the date of this letter. No response received by the required date will serve as ACCEPTANCE of this specification.** If your specifications are different from those listed, or you would like to make changes, please attach applicable documentation to this form and return within the same timeframe. Questions and comments may be directed to:

IOL Customer Service
Cargill Incorporated
Industrial Oils and Lubricants

Fax #: (952) 367-0755
Email: IOLCustomerService@cargill.com

Comments: _____

Name and Title (please print):

Company Name and Address:

Date: _____

Signature: _____

Email Address: _____

Phone Number: _____

Revision Date: 06/29/2011

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