VoltCool® Dielectric Coolant

Fully Synthetic Dielectric Heat Transfer Fluids

Engineered Fluids' VoltCool Dielectric Coolants are the highest performance dielectric fluids made for use in sealed power and distribution transformers, switchgear and other power delivery applications. VoltCool Dielectric Coolants feature the broadest material compatibility index, highest dielectric strength, zero environmental impact, and best health and safety ratings.

INDUSTRIES SERVED:
Power Generation, Transmission, and Distribution

APPLICATIONS:
Power Transformers ● Distribution Transformers ● Switch Gear ● Transformer-rectifier sets ● Voltage Regulators ● Fuses ● Tap-changers ● Load-break Switches

KEY PROPERTIES:
Low Viscosity ● High Dielectric Strength ● Highly Processed, Tested and Standardized Biodegradable ● Excellent Electrical Insulation ● Excellent Lubricity ● Displaces Water ● High Oxidation Stability ● Broad-Spectrum Material Compatibility ● Suppresses Corrosion

PRODUCT OVERVIEW:
VoltCool Dielectric Coolants are designed specifically for use in high voltage power applications. Unlike competitive dielectric fluids made with mineral oils, Engineered Fluids' VoltCool products have no sulfur, metals or other impurities. VoltCool fluids deliver safe, reliable, dielectric protection with outstanding high-temperature oxidation stability.

VoltCool Coolants are compatible with all materials commonly used in power and distribution transformers, switchgear and circulating cooling systems. VoltCool products meet all US and International standards for dielectric fluids. They have excellent heat transfer and are effective arc-quenching media. Standard maintenance procedures are used with all VoltCool products.

VoltCool Dielectric Coolants are 98% biodegradable, nontoxic, non-halogenated, food grade and 100% ozone safe. In addition, the use and manufacture of VoltCool Dielectric Coolants release no toxic waste or vapors into the workplace or environment, making Engineered Fluids' VoltCool coolants easy to transport, use, and clean up.

Engineered Fluids, LLC.
4548 Cantina Drive, Tyler, TX 75708 USA

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CHARACTERISTICS OF VOLTCOOL DIELECTRIC COOLANTS

Product	VC-300	VC-310	VC-320
Description and Common Applications	Dielectric Fluid for Power Distribution Transformers, & Switchgear	Fire Resistant K-Class Dielectric Fluid for New or Retro-filled Power and Distribution Transformers	Synthetic Fire-Resistant K-Class Dielectric Fluid for High Temp Applications
Key Characteristics	Extreme low temperature fluidity, outstanding oxidation resistance	Excellent Stability and Compatibility with Materials	Low Viscosity, Low Pour Point, High -temperature Threshold
Appearance:	Clear		
Color, ASTM	L0.5		
Pour Point (oC)	-55	-24	-58
Flash Point (oC)	170	280	277
Fire Point (oC)	185	308	304
Density, g/cc @ 16C	0.82	0.87	0.82
Viscosity (cSt) @ 40C	9.4	103.0	68.0
100C	2.7	10.2	9.1
Moisture Content, ppm	<10	<10	<10
Interfacial Tension (dy/cm)	46	28	45
Neut. No., mg KOH/g	0.01	0.01	0.01
28-Day Biodegradation	>95%	40%	65%
Power Factor @ 25C, %	0.01	0.01	0.01
Dielectric Strength, kV (D1816)	>60	>60	>60
Coefficient of Thermal Expansion, (Volume/oC)	0.0007	0.0007	0.0007
28day Biodegradation	>95%	>40%	>65%
Global Warming Potential	0	0	0
Shelf Life (Yrs) [1]	5	5	5

1) *Shelf Life period is stated for a sealed original container.*

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Need more information? Please contact us on sales@engineeredfluids.com or +1.281.205.0065

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