

VoltCool® Dielectric Coolant

Fully Synthetic Dielectric Heat Transfer Fluids

Engineered Fluids' VoltCool Dielectric Coolants are the synthetic high-performance dielectric fluids made for use in power and distribution transformers, switchgear and other power delivery applications. VoltCool Dielectric Coolants feature the broadest material compatibility index, high dielectric strength, long-term stability, and best health and safety ratings.

INDUSTRIES SERVED:

Power Generation, Transmission, and Distribution

APPLICATIONS:

Power Transformers • Distribution Transformers • Switchgear • Transformer-rectifier sets
Voltage Regulators • Fuses • Tap-changers • Load-break Switches

KEY PROPERTIES:

Low Viscosity • High Dielectric Strength • Highly Biodegradable • Highly Processed, Tested and Standardized • 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 applications. Unlike dielectric fluids made with mineral oils or GTL petroleum 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 >90% 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.

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CHARACTERISTICS OF VOLTCOOL DIELECTRIC COOLANTS

Product	VC-110	VC-140
Description and Common Applications	Synthetic Dielectric Coolant for Power and Distribution Transformers	Synthetic Fire-Resistant (K-Class) Dielectric Coolant
Key Characteristics	Exceeds all ASTM and IEC Standards with exceptional purity and service life	High Fire Point Low Viscosity, Low Pour Point
Pour Point (oC)	-55	-58
Flash Point (oC)	180	285
Fire Point (oC)	195	304
Density, g/cc @ 16C	0.81	0.82
Viscosity (cSt) @ 40C	8.1	68.0
Viscosity (cSt) @ 100C	2.2	9.1
Moisture Content, ppm	<10	<10
Interfacial Tension (dy/cm)	27	45
Neut. No., mg KOH/g	0.01	0.01
28-Day Biodegradation ²	>95%	>60%
Power Factor @ 25C, %	0.01	0.01
Dielectric Strength, kV)	>60	>60
Coefficient of Thermal Expansion, (Volume/C)	0.0007	0.0007
Global Warming Potential	0	0
Shelf Life (Yrs) ³	5	5

1. Dielectric Strength is measured using ASTM D1816 method with 2mm electrode gap
2. Biodegradation is stated for a 28-Day Test Period. Biodegradation continues to occur after the initial test period.
3. See product specific warranty statement for terms and conditions. Shelf-Life duration is stated for an original sealed steel container, Shelf-life period is included in the warranty period.

Need more information? Please contact us at sales@engineeredfluids.com or +1.725-218-1981

Proudly Manufactured in the United States

