Naphthenic Transformer Oil (CT5)

Product Description

Podlee naphthenic transformer oil is made from naphthenic compounds and features advantages such as low density, low viscosity, minimal resistance, excellent stability, low dielectric loss, and strong oxidative stability. It maintains stable insulating performance even in harsh and complex environments involving high temperatures, high pressure, and strong electric fields, thereby extending equipment service life and reducing operational costs. As a high-performance insulating oil, it is primarily used in transformers and other electrical equipment to fulfill critical functions including insulation, cooling, and lubrication.

Application

CT5 range naphthenic transform oil is widely used in high-voltage electrical equipment such as power transformers, power capacitors, frequency converters, and high-voltage switchgear, as well as specialized machinery in fields like electronics, chemical, pharmaceutical, and light industries. Its critical role lies in maintaining stable insulating performance and other physicochemical properties under harsh and complex environments involving high temperatures, high pressure, and strong electric fields, ensuring reliable operation of electrical equipment.

Advantages

High Insulation Strength:

With electrical performance comparable to or superior to mineral oils, it forms stable insulation under high-voltage conditions.

Excellent Oxidative Stability:

Maintains stable performance in high-temperature and high-pressure environments, extending equipment service life.

Low Dielectric Loss:

Its small molecular structure and low viscosity minimize dielectric loss, reducing operational costs of electrical equipment.

Superior Water Resistance:

Exceptional moisture-proof properties prevent water ingress, safeguarding equipment from dampness-induced corrosion.

Environmentally Friendly, Safe, and Non-Toxic:

Contains negligible polycyclic aromatic hydrocarbons (PAHs), semi-volatile organic compounds (SVOCs), and toxic substances, posing minimal risks to the environment and human health.

Typical Characteristics

Item	Test Data			Standard
Style	10	30	45	-
Viscosity (mm^2/s@104 ℉ /40 ℃)	9	9.8	10	ASTM D445
Flash Point – Open Cup Method, (°F/°C)	284/140	284/140	284/140	ASTM D92
Pour Point (°F/°C)	-22/-30	-54/-48	-67/-55	ASTM D97
TAN (mgKOH/g)	0.006	0.006	0.006	ASTM D664
Water-soluble Acids and Alkalis	None	None	None	ASTM D974
Dielectric Strength (KV)	59.9	61.2	63	ASTM D877
Dielectric Dissipation Factor	0.00012	0.00012	0.00012	ASTM D924
Interfacial Tension (mN/m)	45	48	50	ASTM D971

Package

18 L/Barrel

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