

TRANSFORMER OIL

T-1500



Description

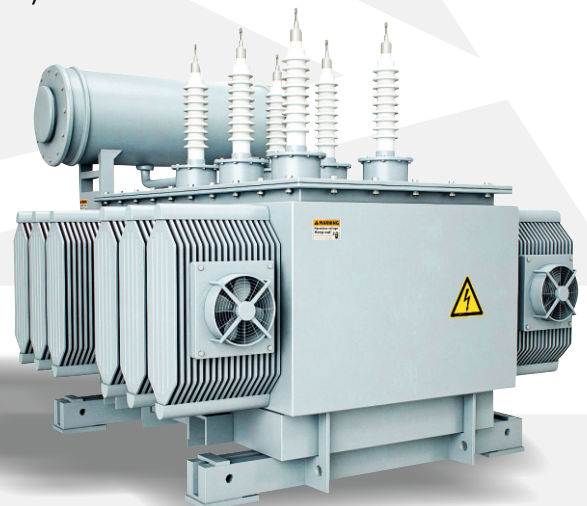
T-1500 is an inhibited transformer oil with good electrical insulating properties. Thanks to low viscosity, this grade provides good heat transfer and low temperature properties. Naphthenic characteristics allow the transformer to start at the lowest possible temperature. This insulating oil meets the toughest demands on dielectric strength – when stored and handled correctly. The highly refined mineral oil contains <3% (w/w) DMSO extract, according to IP 346. Carcinogenic substances are classified according to the European Union.

Applications

- Transformers
- Capacitors
- Generators
- Circuit breakers
- Switchgears
- X-ray devices
- Control panel
- Rectifiers
- Suitable for use in a wide range of electrical equipment

Performance and benefits

- Good heat transfer and low temperature properties
- Healthy and safe (free from polychlorinated biphenyls - PCB)
- Good oxidation stability
- Protects transformer (non corrosive)
- Good electrical insulating properties
- High dielectric strength
- Good pour point and flash point properties



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Product Data Sheet

PROPERTY	UNIT	TEST METHOD	SPECIFICATION	TYPICAL VALUE
PHYSICAL PROPERTIES				
Kinematic Viscosity, 40°C, max.	cSt	ASTM-D 445	12	10,31
Kinematic Viscosity, 100 °C	cSt	ASTM-D 445		2,52
Kinematic Viscosity, -30°C, max.	cSt		1.100	997,3
Flash Point, min.	°C	ASTM-D 93	140	150
Pour Point, max.	°C	ASTM-D 97	40 -	-40
Colour, max.		ASTM-D 1500	0,5	<0,5
Aniline Point	°C	ASTM-D 611	63~84	78
Density, 15 °C	kg/l	ASTM-D 4052	0,865~0,910	0,884
Appearance, 15 °C		ASTM-D 4176	C&B	C&B
Refractive Index	20 °C	ASTM-D 1747		1,486
CHEMICAL PROPERTIES				
TAN - Total Acid Number, max.	mg KOH/gr	ASTM-D 974	0,015	0,008
Potentially Corrosive Sulphur		IEC 62535	non corrosive	non corrosive
Antioxidant Additive (DBPC)	%	IEC 60666	0,2 - 0,4	0,34
Metal Passivator Additives (TTAA)	mg/kg	IEC 60666	n.d.	n.d.
Water Content, max.	ppm	ASTM-D 1533	20	19
2-Furfural and related compounds content, max.	mg/kg	IEC 61198	0,1	n.d.
Alkali Content, max.			0,4	0,24
Content of BTA	mg/kg	IEC 60666	n.d.	n.d.
Content of TTA	mg/kg	IEC 60666	n.d.	n.d.
ELECTRICAL PROPERTIES				
Dielectric Dissipation Factor (DDF) at 90°C, max.		IEC 60247	0,005	0,001
Breakdown Voltage, 2.5mm, min.	Kv	VDE - 0370	50	>60
Interfacial Tension, 25°C, min.	dyn/cm	ASTM- D 971	40,0	43,0
Power Factor, 25 °C, max.	%	ASTM- D 924	0,05	0,006
Power Factor, 100 °C, max.	%	ASTM- D 924	0,30	0,180
OXIDATION STABILITY				
Oxidation Stability - 500h				
* Volatile acidity	mg KOH/gr	IEC 61125 method C		1,04
* Soluble acidity	mg KOH/gr			0,60
* Total acidity	mg KOH/gr			1,64
* Sludge	%			0,76
* DDF at 90°C				1,91
HEALTH, SAFETY AND ENVIRONMENT				
DMSO Extractible Compounds - PCA Content, max.	%	IP 346	3,0	2,23
PCB Content	ppm	DEXIL L- 2000	n.d.	n.d.

* C & B: Clear and Bright

* n.d.: not detectable