



TECHNICAL INFORMATION

Transformer Oil Transformer Oil lubricant

DESCRIPTION

ORIGEN Transformer Oil is an uninhibited naphthenic transformer oil that conforms to IEC 60296 edition 4.0. Developed and formulated to resist oil degradation and provide good oxidation stability through its natural inhibitors. This low viscosity index product offers excellent heat transfer characteristics and is developed to reduce oil degradation resulting in increased transformer life and reduced maintenance.

APPLICATION

ORIGEN Transformer Oil is suitable for filling most types of transformers, switchgear, inductors, condensers and similar equipment. Special care is needed in storage to prevent the product from breathing. Must be kept clean and dry at all times. Moisture is a critical factor and must be free of water at all times. Prevent aeration and make sure product is filtered before filling transformer.

BENEFITS

- High Di-electric strength.
- Excellent oxidation stability.
- Low temperature fluidity.
- High KV rating.

TECHNICAL CHARACTERISTICS

Indicator Name	Test Method	Standard according to TR CU 30/2012	Standard according to TU 38.401-58- 107-94	Actual Value
1. Appearance	Item 4.2 of TU 38.401-58-107-94	-	transparent liquid without traces of suspended solids and moisture	transparent liquid without traces of suspended solids and moisture
2. Kinematic viscosity, mm ² /s: at 40 °C at minus 30 °C	GOST 33-2016	-	no more than 11.0 no more than 1300	10.58 836.0
3. Acid number, mg KOH per 1 g of oil	GOST 11362-96	-	not more than 0,01	0.01
3. Flash point determined in an open crucible, °C	GOST 6356-75	-	not lower than 135	160



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5. Solidification temperature, °C	GOST 20287-91	-	not higher than minus 45	minus 45
6. Corrosion test on copper plates of M-1 or M-2 grades according to GOST 859	GOST 2917-76	-	resistant	resistant
7. Stability against oxidation: low-molecular-weight volatile acids, mg KOH per 1 g of oil acid number of oxidized oil, mg KOH per 1 g of oil mass fraction of sediment, %	GOST 981-75 and Item 4.3 of TU 38.401-58-107-94	-	not more than 0.07 not more than 0.15 not more than 0.015	0.070 0.13 0.01
8. Stability against oxidation according to the IEC method. The induction period of oxidation, h	IEC Publication No. 1125 B	-	not less than 150	181
9. Mass fraction of sulfur, %	GOST 19121-73	-	not more than 0.45	0.39
10. The tangent of the dielectric loss angle at 90°C, %	GOST 6581-75 and Item 4.4 of TU 38.401-58-107-94	-	not more than 0.5	0.46
11. The color on the CST colorimeter, CST units	GOST 20284-74	-	not more than 1.5	1.0
12. Density at 15 °C, kg/m³	GOST R 51069-97	-	not more than 888	848.7
13. Flash point determined in an open crucible, °C	GOST 4333-2021	not less than 135	-	164
14. The content of mechanical impurities, % wt.	GOST 6370-2018	not more than 0.03	-	-
15. The content of poly-chlorinated diphenyls, mg/kg	GOST R IEC 61619-2013	not more than 50	-	not less than 2
16. Self-ignition point, °C	GOST 12.1.044-89	not less than 165	-	272

Conclusion:

meets the following requirements:

- Technical Regulation of the Customs Union TR CU 030/2012 On requirements for lubricants, oils and special fluids (Decision of the Council of the Eurasian Economic Commission No. 59 dated July 20, 2012) (Appendix 1);
- TU 38.401-58-107-94. Transformer oil T-1500U. Technical requirements.

Additional information:

- Indicator 16 Self-ignition point – when disclosing;
- sampling for the indicator "Content of polychlorodiphenyls" was carried out according to GOST R IEC 60475-2013;

*MSDS available on request.

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