

KUNLUN TRANSFORMER OIL

Product introduction

Kunlun transformer oil ultra high voltage transformer oil is a special naphthenic crude oil as raw material, base oil production by special technology, adding high-quality antioxidant compound additives, with rapid heat transfer and oxidation stability, excellent electrical properties and anti gassing property, etc. The product under strict quality control production, stable and reliable performance, resource fixed Kunlun transformer oil.

The transformer oil in china is subject to Standard GB2536-2011. The modification of this Standar adopts IEC60296-2003. Compared with IEC60296, the test item of corrosive sulfur (ASTMD1275B), Aniline point and water-soluble acid or alkali and product technical requiment of the lowest cold start energizing temperature (LCSET) is -10 độ °C are added in this Standard. Primarily, the standards of transformer oil in the foreign countries are IEC 60296-2012, ASTMD3487-09 and BS148:2009

Performance characteristics

- Excellent electrical insulation performance, high breakdown voltage, low dielectric loss factor, can effectively prevent the discharge phenomenon and power loss under high voltage electric field
- Good thermal stability and oxidation stability, acid sludge formation and prevent the use of the process, prolong the service life of electrical equipment
 - Lower viscosity, providing effective cooling and heat transfer properties
 - Excellent low temperature performance, does not contain the pour point depressant
- Good performance of anti gas analysis, to prevent the phenomenon of air gap discharge under the condition of high voltage electric field
- Naphthenic hydrocarbon and aromatic hydrocarbon content is appropriate, to ensure the formation of running process of electrical equipment in the sludge and dissolved to avoid the destruction of insulation material and the effect of heattransfer
 - Environmentally friendly, do not contain any PCBs.

Application

KI25X and KI45X ultra-high voltage transformer oil suitable for 500KV transformers and similar requirements of electrical equipment.

PROPERTY	TYPICAL DATA		TEST METHOD			
Model Type	KI25X (25#)	KI45X (45#)	Internaitional	Domestic		
LCSET °C	Max -20		IEC60296	GB 2536		
1-Function						
Pour point °C	Max -40	Max -45	ISO 3016	GB/T 3535		
Viscosity at 40°C; mm ² /S	Max 12	Max 12	ISO 3104	GB/T 265		
Viscosity at -20°C; mm ² /S	Max 1800	Max 1800	ISO 3104	GB/T 265		
Viscosity at -30°C; mm ² /S	Max 1800	Max 1800	ISO 3104	GB/T 265		
Water content; mg/kg	Max 30	Max 30	IEC 60814	GB/T 7600		

Breakdown voltage							
-Before treatment; KV	≥ 30	≥ 30	IEC 60156	GB/T 507			
-After treatment; KV	≥ 70	≥ 70	IEC 60156	GB/T 507			
Density at 20°C; kg/m³	Max 895	Max 895	ISO 12185	GB/T 1884			
Aniline point; °C	~78	~78	ASTM D611	GB/T 262			
DDF at 90°C	Max 0.005	Max 0.005	IEC 60247	GB/T 5654			
2-Refining/stability							
Appearance	Clear, free from sediment and suspended matter						
Acidity; mgKOH/g	Max 0.01	Max 0.01	IEC 62021-1	NB/SH/T 0836			
Water soluble acid or alkali	None	None		GB/T 259			
Interfacial tension; mN/m	~ 49 Min 40	~ 49 Min 40	ISO 6295	GB/T 6541			
Total sulfur content; %	0.02	0.02	ASTM D5453	SH/T 0689			
Corrosive sulfur	Non-corrosive	Non-corrosive	DIN 51353	SH/T 0804			
Potentially corrosive sulfur	Non-corrosive	Non-corrosive	IEC 62535				
Anti-oxidation additives(mass fraction)/%	0.08-0.4	0.08-0.4	IEC 60666	SH/T 0802			
2-furfural content; mg/kg	Max 0.1	Max 0.1	IEC 61198	NB/SH/T 0812			
3-Performance							
Oxidation stability at 120°C Test 500hrs whit antioxidant	Qualify	Qualify	IEC 61125C	SH/T 0803			
Total Acidity (mgKOH/g)	Max 0.3	Max 0.3	IEC 62021-1	NB/SH/T 0836			
Oil Sludge (mass fraction)/; %	Max 0.05	Max 0.05		NB/SH/T 0811			
DDF at 90°C	Max 0.05	Max 0.05	IEC 60247	GB/T 5654			
Gassing tendency; mm3/min	+26	+22	IEC 60628A	NB/SH/T 0810			
ECT; μC/m ³	As reported	As reported	IEC 60296	DL/T 385			
4-Health, safety and enviroment(HSE)							
Flash point (PM); °C	Min 135	Min 135	ISO 2719	GB/T 261			
PCA Content; %	Max 3	Max 3	IP 346	NB/SH/T 0838			
PCB Content; mg/kg	Not detectable	Not detectable	IEC 61619	SH/T 0803			

Package: Steel drum •Gross weight: 185Kg/Drum •Net weight: 170kg~200L/Drum

Our products with the inventory change, due to stock a wide range of products so baby pictures and sometimes there are manufacturers are not consistent, but the quality of ingredients like, thank you does not affect your use please understanding.