TRANSFORMER OIL

Non-Inhibited High Performance Electrical Insulating Oil

Technical Data Sheet

Specification and Approvals

Meets the following specifications: -
BS 148 Class I (1972)
IEC 60296 (11.2003)

Note: MOGAS Transformer oil does NOT contain Polychlorinated Biphenyls (PCBs)

Description

MOGAS Transformer Oil a is highly refined non-inhibited high performance mineral paraffinic oil with good oxidation stability and high dielectric strength, designed to meet the BS, ASTM, and IEC specifications for electrical insulating oil.

Features and Benefits

- High insulating capacity.
- Prolonged equipment life through good heat transfer properties
- Effective cooling and heat dissipation due to low viscosity.
- Minimum risk of fire due to very high flash point.
- High demulsibility to ensure good separation of water in case of accidental pollution.
- No impurities e.g. water, dissolved gases, suspended solids, etc.
- Minimum consumption of product due to low volatility at normal operating temperatures.
- Reduction in energy losses due to excellent electrical insulation and dielectric properties.
- Increased life of switch contacts by rapidly quenching arcs
- Long life time due to good natural oxidation stability

Applications

For insulation and cooling transformer coils, quench electric arcs that form between contacts of switchgears, circuit breakers and rheostats using mineral insulating oil.

CORPORATE OFFICE – MOGAS GROUP
PLOT 40, NILE AVENUE, P.O.BOX 19, KAMPALA, UGANDA
www.mogasoil.com

MOGAS

Technical Data Sheet

Typical Properties

Test Parameters	Test Method	Specification		
		IEC60296	ASTMD 3487	BS148
Appearance	IEC 601296	Clear, free from sediment & Suspension matter		
Color	ASTM D 1500-12		L0.5	
Viscosity at 100°C (212° F), max, cSt	ASTM D 445		2.360	
Viscosity at 40°C (104° F), max, cSt	ASTM D 445/ISO 3104	12	12	11
Viscosity at 0° C (32° F), max, cSt	ASTM D 445		76	
Viscosity at -30° C (-22° F), max, cSt	ISO 3104	1800		1800
Pour Point, max, °C (°F)	ASTM D97/ ISO 3016	-40 (-40)	-40 (-40)	-45 (-49)
Water Content, max, ppm	ASTMD 6304-07/ ISO 60814	30	30	20
Breakdown Voltage, kV ,Untreated	ASTM D 877/ IEC 60156	40 min	40 min	30min
Breakdown Voltage, kV, Treated	ASTM D 877/ IEC 60156	70 min	70 min	70min
Density @ 29.5°C, max, g/cm3	ASTM D 4052-11/ ISO 3675		0.8702	
Dielectric Dissipation Factor at 90 °C	IEC 60247-2004-02	0.005		0.005
Power Factor, % @ 25°C (77°F)	ASTM D 924		0.05	
Power Factor, % 100°C (212° F)	ASTM D 924		0.30	
Acidity, max, mg KOH/g	ASTM D 974/ IEC 62021-1	0.01	0.03	0.03
Interfacial Tension, min, mN/m	ASTM D 971/ ISO 6295	40	40	
Total Sulfur	BS 2000/ISO 14596			
Corrosive Sulfur	ASTM D1275 B/ DIN 51353	Non-Corrosive	Non-Corrosive	Non-Corrosive
Antioxidant, max, wt. %	ASTM D 2668/ IEC 60666	ND	ND	ND
-Furfural, max, mg/kg	IEC 61198	0.1		1.0
Oxidation Stability, 72 Hour:	ASTM D 2440			
Acid, max, mg KOH/g			0.15	
Sludge, wt. %			0.50	
Oxidation Stability, 164 Hour:	ASTM D 2440/ IEC 61125			
Acid, max, mg KOH/g		1.2	0.30	1.2
Sludge, wt. %		0.30	0.30	0.30
Flash Point	ASTM D 93-13/ ISO 2719	135,PMCC	145 COC	130 PMCC
PCA Content, max, wt.	% BS 2000 Part 346	3.0		3.0
PCB Content, ppm	ASTM D 4059/ IEC 61619	ND	ND	ND

The typical characteristics mentioned represent mean values

Health and Safety

This product used as per our recommendation for the intended application is not expected to produce any particular risk. A safety data sheet of it is available upon request from our sales contact office or on our website. In case of used oil disposal, please respect the Regulations to protect the environment.