Insulating Oil

MAKER ELECTRA 3

Description

Light oil specially recommended for use as an insulating fluid in electrical equipment. It is formulated from highly refined and treated bases that ensure the absence of solid matter, polar compounds and precipitate products at low temperatures. Likewise, the absence of humidity is ensured by means of a rigorous manufacturing and packaging procedure.
It is specially suited for transformers, circuit breakers, rheostats, etc. In general, it can be used in all kinds of electrical devices that need oil bath which acts as a dielectric or cooling agent.

Properties

- High dielectric power
- Great heat evacuating capacity
- High oxidation stability
- Insignificant dielectric losses (Tg d)
- Absence of dampness and solids in suspension
- Minimal formation of sludge during use
- Low aromatic content
- Totally free of PCBs and PCTs

Quality levels, approvals and recommendations

- ABB Approval for power transformers
- ASTM D3487 type I
- BS 148 type II
- EDF Electricité du France*
- EDP Electricity of Portugal*
- ENDESA Distribution transformers*
- IBERDROLA Power and distribution transformers
- IEC 60296 type B <<STANDARD GRADE>>
- SIEMENS TUN 901293*

*Formal approval

Technical specifications

	UNIT	METHOD	VALUE
Oxidation stability - Dielectric dissipation factor at 90 °C	-	IEC 61125	0.120
Oxidation stability - Total acidity	mg KOH/g	IEC 61125	0.42
Oxidation stability - Total sludge	% in weight	IEC 61125	0.05
Dielectric loss factor at 90 °C	-	IEC 60247	0.00198
Density at 20 °C	g/cm3	DIN 51757-4	0.839
Kinematic viscosity at 40 ºC	cSt	ASTM D445	9.98
Kinematic Viscosity at -30 ºC	cSt	ASTM D445	925.85
Flash point, closed cup	ºC	ASTM D93	176
Pour point	ºC	ASTM D97	-48
Breakdown voltage, untreated	kV	UNE EN 60156	46
Interfacial tension	mN/m	ASTM D971	43

The above mentioned characteristics are typical values and should not be considered product specifications.