

Product Data Sheet

Servo Electra LP

Uninhibited Insulating Oil For Electric Transformers & Switchgears



Description

Servo Electra LP is high quality uninhibited insulating oil developed for the use in electrical transformers & switchgears. The oil is specifically formulated to meet low pour point requirement of IEC: 60296 Type B (Uninhibited) and IS: 335 Type I (Uninhibited) specifications. Low viscosity of oil helps in better heat transfer and therefore, provides efficient cooling of internal parts.

Performance, Features and Benefits

- Resist oxidation & deposit formation
- Extreme Low pour point
- High di-electric strength
- Superior Interfacial Tension (IFT)
- Superior TAN delta & Resistivity (Sp. Resistance)
- High Flash point
- Compatible with materials used in transformers
- Superior electrical properties ensuring safety around high voltage equipment.

Application

Servo Electra LP is recommended for use in all types of oil-filled transformers - power generation, transmission & distribution. It can also be used in both large substations and small pole mounted transformers. It is suitable for use in switchgears and oil immersed electrical equipment in which oil is required as an insulant. In order to maintain a high di-electric strength, the oil must be kept in clean & dry condition.

Approvals / Performance Standards / Recommendations

Servo Electra LP meets the following requirements:

- IS: 335 (2018) - Type 1 (Uninhibited)
- IEC: 60296 (2020) - Type B (Uninhibited)
- PGCIL - Uninhibited

Typical Physical Characteristics

Parameters	Method	Value
Kinematic Viscosity, @ 40°C, cSt	ASTM D-445	7.23
Interfacial tension, nN/m at 27 Deg C	ASTM D-971	44
Flash point PMCC, °C	ASTM D-93	165
Pour point, °C	ASTM D-97	-42
Corrosive Sulphur	ASTM D-1165	Not corrosive
Break down voltage, kV after filtration, Min	IS 6792	79
Di-electric dissipation factor, (TAN delta), @ 90°C, Max	IS 16086	0.0005
PCB Content	IS 16082	NIL

The oil is developed from paraffinic/iso-paraffinic base and pour point of (-) 42 deg C is achieved by addition of pour point depressant (PPD). It may be noted that IS:335 and IEC:60296 specifications allow the usage of PPD to achieve pour point requirement as per clause 6.11.4 page no. 6 and clause 6.12.4 page 18 respectively.

Health, Safety & Environment

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or at <https://cx.indianoil.in/>. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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