



PRECISION
LUBRICATION

TRANSFORMER OIL

Description

A high quality insulating oil with high dielectric strength, high chemical stability and very good water separation properties. Transformer Oil is manufacture to the British Standard Specification BS 148:1972. It's typical pour point of less than -30°C satisfies the BS requirement. It meets all the requirements of SABS555. Transformer oils are subject to operating temperatures from 35°C to 90°C, whilst "hot - spots" of 100°C and higher temperatures can greatly accelerate oxidation. Because of these conditions, good chemical stability is essential to prevent the formation of acidic materials which impair the insulating properties of the oil. The expected minimum service life of transformer oil is 15 years. To carry out its cooling and insulating functions with a minimum power requirement when pumped, and to ensure most effective heat removal when circulated by thermal action, minimum viscosity at operating temperature and good fluidity at low temperatures are essential.

Features/Benefits

- High chemical stability to resist formation of acidic materials and deposits
- Correct viscosity for ready flow and effective heat removal
- Very good water separation to ensure that insulating properties are not impaired

TECHNICAL DATA

| TEST | TYPICAL RESULTS |
|-----------------------------|-----------------|
| Viscosity @ -15°C, cSt | 375 |
| Viscosity @ 20°C, cSt | 33 |
| Flash Point. Deg C, min | 140 |
| Water content , ppm max | 35 |
| Dielectric Strength, kV min | 30 |
| ISLS Grade | OTE-15 |

Applications

Transformer Oil is suitable for filling most types of transformers and switchgear. While the BS specification requires a minimum dielectric strength (breakdown voltage) of 30kV, it recognizes that oil in drums cannot be expected to retain the dielectric strength obtained at the time of filling. To ensure that the oil in service complies with the minimum requirements, it has a breakdown voltage exceeding 50kV when filled into drums. Special care is needed in storage, handling, sampling and in service to keep the oil clean and dry. It must be stored under cover and storage time must be reduced to a minimum. It should not be transferred from one package to another. All pumps, pipes and sampling equipment must be kept clean and dry and flushed with clean oil before use. Before the apparatus is filled, it should first be ascertained that it is absolutely dry. During filling, the oil should be slightly warmer than the surrounding atmosphere. Transformer Oil should preferably be filtered before being transferred into high voltage apparatus. Aeration during filling must be prevented. The oil should be checked regularly during service.

DISCLAIMER: The information given in this document is offered in good faith, but no warranty is implied or expressed. The onus is on the end user to ensure the suitability of this product to meet the end user requirements. It is also the end user's responsibility to follow health & safety procedures when using this product.