



# ELECTRICAL OIL SERVICES

## EOS® HIB

### Inhibitor Concentrate

#### Description

EOS® HIB is a concentration of 10% BHT (DBPC) in transformer oil. BHT inhibitor itself is a solid flake, which requires specialist blending to produce a homogeneous, stable solution concentrate, which is ready for controlled dosing into Mineral Transformer / Insulating Oils.

#### Application

EOS® HIB is a pre-blend of 10% inhibitor with transformer oil. EOS® HIB is a ready to use anti-oxidant solution for use in inhibited transformer oils. The temperature-stable inhibitor concentrate should be blended into IEC60296:2020 Ed.5 Table B compliant Mineral Oils at a controlled dosage rate to achieve the necessary level of inhibitor for the Transformer as determined by IEC60422:2013.

The optimised method of oil treatment should be via the use of a Mobile Processing Unit, which would ensure the correct dosage of concentrate is introduced into the main tank of the transformer under controlled conditions. This ensures the oil and inhibitor are temperature-match heated, de-gassed and filtered prior to introduction into the Transformer.

Care must be taken to ensure the maximum dosage rate (0.4%) is not exceeded and that there is sufficient ullage within the main tank, cooler bank etc to accept the volume of inhibitor concentrate. It is also recommended to circulate the cooler bank oil with the main oil to ensure the total volume of oil has been thoroughly mixed and remains fully inhibited. EOS further recommend that the full body of oil be circulated via a Mobile Processing Unit to ensure thorough mixing and dispersal throughout the Transformer.

| Property           | Unit               | Test Method | Specification Limits |       | Typical Data |
|--------------------|--------------------|-------------|----------------------|-------|--------------|
|                    |                    |             | Min                  | Max   |              |
| <b>Function</b>    |                    |             |                      |       |              |
| Density @20°C      | kg/dm <sup>3</sup> | ISO 12185   |                      | 0.895 | 0.880        |
| Viscosity @40°C    | cSt                | ISO 3104    | 10                   | 12    | 10           |
| Flash Point        | °C                 | ISO 2719    | 130                  |       | 140          |
| <b>Chemical</b>    |                    |             |                      |       |              |
| Antioxidants       | %wt                | IEC 60666   | 9.5                  | 10.5  | 10           |
| <b>Performance</b> |                    |             |                      |       |              |
| DDF @90°C          | -                  | IEC 60247   |                      | 0.05  | 0.01         |
| Breakdown Voltage  | kV                 | IEC 60156   | 30                   |       | >30          |

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