# Mobilect™ 39

Mobil Industrial , Guam

Electrical insulating oils

## Product Description

Mobilect™ 39 is a high quality uninhibited naphthenic mineral insulating oil with very good dielectric properties and oxidation stability intended for transformers, switchgears and other electrical equipment.

Mobilect 39 meets the IEC 60296 (04) specifications and ASTM D1275 / IEC 62535 / DIN 51353 corrosion tests requirements.

## Features and Benefits

▪ Mobilect 39 has reliable oxidation stability and a high resistance to thermal and chemical degradation in the presence of iron and copper, which reduces tendencies to produce sludge and oil-soluble oxidation products. When lower quality oils are used these may form deposits in the transformer and impede heat transfer by interfering with convection currents. In addition deposits may accelerate insulation defects and are often very difficult to remove without complete dismantling.

▪ Mobilect 39 is specifically treated during manufacture to remove moisture. Water will reduce the electrical insulating properties of the oil and promote oxidation. It is important to remember that a dry oil is hygroscopic and absorbs moisture from the air. It must therefore always be stored in dry conditions and well-closed containers. It is strongly recommended to dry the product before use or use it within short notice after purchasing to avoid long term storage.

▪ The high dielectric strength of Mobilect 39 is a measure of the resistance of the oil to electric stress and is expressed in kV across a specified gap under test conditions. This is not a measure of the quality of the oil but of the absence of contaminants - especially moisture, fibres and polar chemicals.

▪ Mobilect 39 has excellent low temperature properties. It is free from wax even at low temperatures and thus circulates freely in outdoor applications. Its low viscosity is excellent for heat transfer.

▪ The low pour point of Mobilect 39 ensures a free flow in most conditions between the transformer and the conservator and maintains the reliability of tap changers at the lowest temperatures.

▪ Mobilect 39 is DBDS and PCB free.

▪ Mobilect 39 is metal passivator and deactivator free.

## Applications

Mobilect 39 is a high quality uninhibited naphthenic mineral insulating oil with very good dielectric properties and oxidation stability intended for transformers, switchgears and other electrical equipment.

Mobilect 39 meets the IEC 60296 (04) specifications and ASTM D1275 / IEC 62535 / DIN 51353 corrosion tests requirements.

## Specifications and Approvals

| This product meets or exceeds the requirements of: |
|---|
| IEC 60296 :2012 General Specifications |

## Properties and Specifications

| Property | |
|---|---|

| Property | |
|---|---|
| Density @ 20C, kg/L, ISO 12185 | >0.85 |
| Kinematic Viscosity @ 40C, cSt, ISO 3104 | 8-11 |
| Flash Point (PMCC), deg C, ISO 2719 | 142 |
| Dielectric Dissipation Factor @ 90 C, IEC 60247 | <0.001 |
| Breakdown Voltage, kV, IEC 60156 | 40-60 |
| Corrosive Sulfur, Procedure B, Rating, ASTM D1275 | Non Corrosive |
| Breakdown Voltage, after Treatment, kV, IEC 60156 | >70 |
| Oxidation Stability, Sludge, 164 h, 120 C, mass%, IEC 61125-METC | 0.1 |
| Oxidation Stability, Total Acidity, 164 h, 120 C, mgKOH/g, IEC 61125-METC | 0.4 |
| Interfacial Tension, mN/m, ISO 6295 | 46 |
| Pour Point, deg C, ISO 3016 | -42 |

### Health and safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

12-2020
Mobil Oil Guam Inc, Mobil Oil Micronesia Inc, Mobil Oil Mariana Islands Inc,
642 East Marine Drive
PO Box EU
Hagatna
Guam 96932

+671 647 9600
http://www.exxonmobil.com

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com
ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is intended to override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entities.

ExxonMobil

Exxon Mobil Esso XTO

© Copyright 2003-2024 Exxon Mobil Corporation. All Rights Reserved