

Oxidation

Oxidation Stability: RBOT and TFOUT Bath

LINETRONIC
TECHNOLOGIES



LT/OS-197000/M



LAB-101-971, -974/A /B /C

Oxidation Stability: RBOT and TFOUT Bath

ASTM D2112 - ASTM D2272 - ASTM D4742
IP 229

ASTM D2112

Oxidation Stability of Inhibited Mineral
Insulating Oil by Pressure Vessel

This test method is intended as a rapid method for the evaluation of the oxidation stability of new mineral insulating oils containing a synthetic oxidation inhibitor. This test is considered of value in checking the oxidation stability of new mineral insulating oils containing 2,6-ditertiary-butyl para-cresol or 2,6-ditertiary-butyl phenol, or both, in order to control the continuity of this property from shipment to shipment. The applicability of this procedure for use with inhibited insulating oils of more than 12 cSt at 40°C (approximately 65 SUS at 100°F) has not been established.

ASTM D2272

Oxidation Stability of Steam Turbine Oils
by Rotating Pressure Vessel (RBOT)

This test method utilizes an oxygen-pressured vessel to evaluate the oxidation stability of new and in-service turbine oils having the same composition (base stock and additives) in the presence of water and a copper catalyst coil at 150°C.

ASTM D4742

Oxidation Stability of Gasoline Automotive
Engine Oils by Thin-film Oxygen Uptake
(TFOUT)

This test method evaluates the oxidation stability of engine oils for gasoline automotive engines. This test, run at 160°C, utilizes a high pressure reactor pressurized with oxygen along with a metal catalyst package, a fuel catalyst, and water in a partial simulation of the conditions to which an oil may be subjected in a gasoline combustion engine. This test method can be used for engine oils with viscosity in the range from 4 mm²/s (cSt) to 21 mm²/s (cSt) at 100°C, including re-refined oils.

IP 229

Relative Oxidation Stability by Rotating Bomb
of Mineral Turbine Oil

This method covers a rapid means for estimating the oxidation stability of new turbine oils having the same composition (RBOT).

Art. LT/OS-197000/M
RBOT and TFOUT Bath

ASTM D2112 - D2272 - D4742

- Bath made in stainless steel for two vessels with capacity about 60 litres where the oxidation cylinders are turned at 100rpm with a 30° angle according to ASTM specifications
- Bath temperature rate from ambient to 199°C ±0.1°
- Controlled by a digital thermoregulator PID with over-temperature alarm and PT100A

Accessories for ASTM D2112 - D2272

- LT/WM-227200: electric winding mandrel for copper wire catalyst coiling
- LT/B-2470/ BC150: balance
- LAB-101-971: RBOT vessel made in stainless steel
- LAB-101-972: pressure gauge 0-200 psi, div. 5
- LAB-101-973/A: minirecorder pressure gauge 0-200 psi
- LAB-101-974/A: container 175 ml
- LAB-101-974/B: Teflon® cover
- LAB-101-974/C: glass cover
- LAB-101-922: wire catalyst copper/steel Ø 1.63 / 1.59 mm, 3 m, pack of 5
- LAB-101-441/P: silicon carbide paper 100 grit, pack of 100
- LAB-100-371/50: silicone oil, can of 25 litres
- T-AS96C: thermometer ASTM 96C
- T-IP37C: thermometer IP 37C

Accessories for ASTM D4742

- LT/B-2470/ BC150: balance
- LAB-101-976: TFOUT vessel made in stainless steel
- LAB-101-972: pressure gauge 0-200 psi, div. 5
- LAB-101-973/A: minirecorder pressure gauge 0-200 psi
- LAB-101-978/A: container
- LAB-101-978/B: Teflon® cover
- LAB-101-978/C: glass cover
- LAB-101-979/A: soluble metal catalyst mixture
- LAB-100-371/50: silicone oil, can of 25 litres
- T-AS100C: thermometer ASTM 100C

Spare Parts for ASTM D2112 - D2272

- LAB-101-973/B: paper recording chart, pack of 100
- LAB-101-973/C: nibs, pack 10
- LAB-101-922: wire catalyst copper/steel Ø 1.63 / 1.59 mm, 3 m, pack of 5
- LAB-101-441/P: silicon carbide paper 100 grit, pack of 100
- LAB-100-371/50: silicone oil, can of 25 litres
- LAB-101-979/B: gasket

Spare Parts for ASTM D4742

- LAB-101-973/B: paper recording chart, pack of 100
- LAB-101-973/C: nibs pack 10
- LAB-101-979/A: soluble metal catalyst mixture
- LAB-100-371/50: silicone oil, can of 25 litres
- LAB-101-979/C: gasket
- LAB-110-012: heater
- LAB-160-014: digital thermoregulator
- LAB-140-001: probe PT100
- LAB-150-015: static relay

CE



LT/WM-227200