

Technical Data Sheet

Vacuum Pump Oil ISO 100

TMS Vacuum Pump Oil ISO 100 is formulated from selected premium performance, highly refined mineral oils. This provides the low vapor pressure and high performance, desired for the effective lubrication of rotary vacuum pumps.

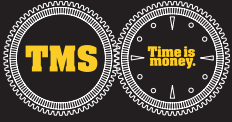
FEATURES

- **Maintenance savings** - TMS Vacuum Pump Oil ISO 100 is formulated to provide excellent resistance to oil degradation. This ensures the oil will provide a long service life as well as reduced tendency for sludge build up and deposit formation.
- **Increased wear and corrosion protection** - TMS Vacuum Pump Oil ISO 100 helps provide effective protection of internal metal surfaces from corrosion and wear.
- **System efficiency** - The selection of low vapor pressure base oils with a narrow boiling range enables the pump to efficiently work at the vacuum for which it is designed over the extended maintenance period.
- **Rotary vacuum pumps** - TMS Vacuum Pump Oil ISO 100 is designed for use in rotary and sliding vane vacuum pumps. It can be used to provide low vacuum pressures. It is suitable for most industrial rotary vacuum pump applications.
- **Standard operating environments** - TMS Vacuum Pump Oil ISO 100 is suitable for applications where ambient temperatures are above 0°C and where maximum operating temperatures do not exceed 100°C. Maximum vacuum pressure capability generally tends to decrease as the pump operating temperatures increase. TMS Vacuum Pump Oil ISO 100 is suitable for vacuum pumps working in a vacuum range of 100 mbar - 10⁻² mbar. TMS Vacuum Pump Oil ISO 100 is not recommended for use when corrosive gasses or chemical vapors are involved in the extraction process.

APPLICATIONS

- ISO 6743-3A-DVC
- Typical Physical Characteristics

| Properties | Method | TMS Vacuum Pump Oil ISO 100 |
|---------------------------------|------------|-----------------------------|
| ISO Viscosity grade | ISO 3448 | 100 |
| Kinematic Viscosity @40°C cSt | ASTM D445 | 108 |
| Kinematic Viscosity @100°C cSt | ASTM D445 | 11.8 |
| Density @15°C kg/m ³ | ASTM D1298 | 882 |
| Flash Point COC °C | ASTM D92 | 265 |
| Pour Point C | ASTM D97 | -9 |
| Neutralisation value mg KOH/g | ASTM D947 | <0.04 |
| Ash, sulphated % | DIN 5175 | <0.01 |



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APPLICATIONS

| Properties | | Method | TMS Vacuum Pump Oil ISO 100 |
|---|-------------|------------|-----------------------------|
| Conradson Carbon Residue | %m | DIN 51551 | 0.05 |
| Vapor pressure versus temperature, Isoteniscope | @0°C mbar | ASTM D2879 | 8.40E-06 |
| Vapor pressure versus temperature, Isoteniscope | @25°C mbar | ASTM D2879 | 5.33E-05 |
| Vapor pressure versus temperature, Isoteniscope | @50°C mbar | ASTM D2879 | 4.67E-04 |
| Vapor pressure versus temperature, Isoteniscope | @100°C mbar | ASTM D2879 | 8.40E-03 |
| Vapor pressure versus temperature, Isoteniscope | @150°C mbar | ASTM D2879 | 0.11 |
| Vapor pressure versus temperature, Isoteniscope | @200°C mbar | ASTM D2879 | 0.53 |

These characteristics are typical of current production. Whilst future production will conform to TMS's specifications, variations in these characteristics may occur.

Health, Safety & Environment

- **Health and Safety** - TMS Vacuum Pump Oil ISO 100 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained. Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water. Guidance on Health and Safety is available on the appropriate Safety Data Sheet.
- **Protect the Environment** - Take used oil to an authorized collection point. Do not discharge into drains, soil or water.