



Shell Turbo Oil J

Premium Industrial Turbine Oil

Shell Turbo Oil J has been specially formulated to satisfy the demanding requirements of the MHI (Mitsubishi Heavy Industry) non-geared steam & gas turbines.

This is based on a blend of specially chosen high quality hydrotreated base oils with selected additives to enhance their rust and oxidation properties.

Applications

- Power generation MHI turbines.

Shell Turbo Oil J may also be used for other industrial applications requiring high quality rust and oxidation (R & O) inhibited oils, which separate easily from water.

Performance Features

- ***Good thermal and oxidation stability***
Resist the formation of sludge and other harmful products of oxidation. Long oil life, performance proven over many years in service.
- ***Excellent corrosion protection***
High level of corrosion protection of all metal surfaces.
- ***Excellent oil/water separation properties***
Easy drainage of excess water from lubrication systems.
- ***Good air release characteristics***
Effective air release without excessive foaming.
- ***Reliable performance in MHI turbines***
Shell Turbo J meets the requirements of MHI turbines and has been successfully tested in the MHI in-house dry TOST test.

Turbo J is approved by MHI against their specifications Turbine Oil Type 2 (additive) MS04-MA-CLO01 (R-1) and MS04-MA-CLO02 (R-1).

Health & Safety

Shell Turbo Oil J is unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

For further guidance on Product Health & Safety refer to the appropriate Shell Product Safety Data Sheet.

Advice

Advice on applications not covered in this leaflet may be obtained from your Shell Representative.

Typical Properties

Shell Turbo J	32
Viscosity (ASTM D 445)	
cSt @ 40°C	32
cSt @ 100°C	5.3
Viscosity Index (ASTM D 2270)	104
Colour (ASTM D 1500)	L0.5
Pour Point °F (ASTM D 5949)	0
Flash Point - COC (ASTM D 92, °F)	430
Total Acid Number (ASTM D 974, mg KOH/g)	0.05
Foaming (ASTM D 892, ml at 0/10 minutes)	
Sequence I	30/Nil
Sequence II	20/Nil
Sequence III	30/Nil
Water Separability (ASTM D 1401, @130°F, ml (min))	40-40-0(10)
Air Release (ASTM D 3427, min)	<4
Copper Corrosion (ASTM D 130, 212°F/3hr)	1b
Rust Control (ASTM D665B)	Pass
Oxidation Control Tests-	
A) TOST Life (ASTM D 943, hr)	>8000
B) Dry TOST (MHI method)	Pass
C) RPVOT (ASTM D 2272, min)	>950