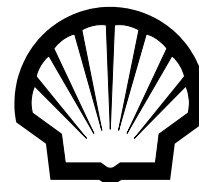


Shell Gadinia Oils

Medium-speed trunk piston diesel engine oil



Shell Gadinia Oils are premium quality diesel engine lubricants, based on highly-refined mineral oils and carefully selected additives. They are specially designed for main propulsion and auxiliary marine trunk piston engines burning distillate fuel.

Applications

- Highly-rated, medium speed, trunk-piston marine engines
- Auxiliary marine engines
- Geared transmissions
- Turbochargers
- Variable pitch propellers
- Oil lubricated stern tubes
- Deck machinery
- Other applications requiring an SAE 30 or 40 viscosity oil

Performance Features

A marine engine lubricant has to perform satisfactorily under conditions that are more arduous than those encountered in transportation applications. Of particular importance is the higher sulphur content of marine distillate fuels and the possibility of water contamination, especially sea water. In addition, the oil may be expected to remain in service for long periods before it is changed.

Consequently, Shell Gadinia Oils are designed to effectively neutralise the corrosive acids contained in the products of combustion of marine distillate fuels, to give adequate protection against corrosion and rusting and to readily shed water and soot in a lubricating oil purifier. At the same time, the use of Shell Gadinia Oils will ensure a clean engine, free from sludge and deposit formation.

Performance Specifications

- | | | |
|--------------------|---|-------------------|
| API Classification | - | CD |
| US Military | - | MIL-L-2104C (obs) |

Shell Gadinia Oils are approved by most leading trunk piston diesel engine manufacturers.

Seal Compatibility

Shell Gadinia Oils are compatible with all normal oil seal materials.

Purification

Normal purification equipment and practices for heavy duty crankcase lubricants should be used to ensure that Shell Gadinia Oil does not become over burdened with solid contaminants and water. With centrifugal purification, "water-washing" to remove strong acids is unnecessary.

Availability

Shell Gadinia Oils are available in SAE 30 & 40 Viscosity grades.

Health & Safety

Shell Gadinia Oils are 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.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

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

Protect the environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Advice

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

Typical Physical Characteristics

Shell Gadinia Oil	30	40
SAE Viscosity Grade	30	40
Kinematic Viscosity @ 40°C cSt 100°C cSt (IP 71)	104.0 11.8	139.0 14.4
Density @ 15°C kg/l (IP 365)	0.897	0.900
Flash Point °C (Pensky-Martens Closed Cup) (IP 34)	227	229
Flash Point °C (Cleveland Open Cup) (IP 36)	241	246
Pour Point °C (IP 15)	-18	-18
Load Carrying Capacity FZG Gear Machine A/8.3/90 Failure load stage (IP 334)	12	12
TBN-E mg KOH/g (IP 276)	11.5	11.5
Sulphated Ash % wt (IP 163)	1.35	1.35

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