Shell Melina *S 30*

Multifunctional Lubricant for low speed marine diesel engines

Shell Melina S is a high performance multifunctional low speed diesel engine lubricant based on a blend of highly refined high viscosity index mineral oils and a balanced selection of additives. It is designed to provide the highest levels of machinery protection in highly rated low speed marine engines, but being multifunctional, can also be used in many different items of marine equipment and used to rationalise the number of grades of lubricant carried on board ship. Please note that Shell Melina S is NOT recommended for trunk-piston engines and in these cases Shell Melina should be used.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Improved engine operation and reliability**

  Shell Melina S effectively neutralises the highly corrosive combustion acids which can contaminate the main system when cylinder oil drains leak past piston rod glands.

  Good resistance to corrosion results in protection of metal surfaces from corrosion

  Good detergency keeps crankcases and under piston spaces clean and optimise efficiency

  Good air release & antifoam properties mean that air is released from the oil without foaming

- **Lower Maintenance Costs**

  Good Oxidation stability combats thermal degradation of the oil and extends its useful life

  Good water shedding properties mean that water can be easily removed by centrifuge

  Extreme pressure properties make the oil suitable many gear oil applications

- **Re-assurance**

  Shell Melina S Oil is approved by all major low speed diesel engine manufacturers

Main Applications

- Low speed marine diesel engine crankcase and piston cooling systems
- Turbochargers, geared transmissions, oil lubricated stern tubes & deck machinery
- All ancillary equipment requiring an SAE 30 oil

Specifications, Approvals & Recommendations

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties			Method	Shell Melina S 30
SAE Viscosity Grade				30
Kinematic Viscosity	@40°C	mm^2/s	ASTM D445	104
Kinematic Viscosity	@100°C	mm^2/s	ASTM D445	11.6
Viscosity Index			ASTM D2270	102
Density	@15°C	kg/l	ASTM D4052	0.888
Flash Point (CC)		°C	ASTM D93	227
Load Carrying Capacity	FZG	Fail Stage	FZG A/8.3/90	11
Pour Point		°C	ASTM D97	-18
TBN-E		mg/KOH/g	ASTM D2896	5
Sulphated Ash		% wt	ASTM D874	0.62

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

Health, Safety & Environment

- **Health and Safety**

  Shell Melina S 30 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 Material Safety Data Sheet, which can be obtained from http://www.epc.shell.com/

- **Protect the Environment**

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

Additional Information

- **Advice**

  Advice on applications not covered here may be obtained from your Shell representative.

- **Condition Monitoring**

  Shell RLA and Shell RLA OPICA engine condition monitoring services are ideal for users of Shell Melina S. Use of these services enable the ship operator to monitor the condition of the oil and equipment, and enable remedial action to be taken when necessary. This helps to avoid breakdowns, costly downtime and all the associated inconvenience. To fully benefit from this service, samples should be taken at regular intervals of approximately 750 hours.