



Previous Name: Shell Mysella MA

Shell Mysella S3 S 40

Medium Ash Gas Engine Oil

- Extra Protection
- Medium Ash Content for Four Stroke Engines

Shell Mysella S3 S is a high performance quality oil blended for use in 4-stroke, spark-ignition engines which require a 'medium ash' oil or use sour gases such as landfill, bio or sewage gas as fuel.

Shell Mysella S3 S is also suitable for engines that traditionally require a medium ash oil to protect the valve seating area of the cylinder head.

Shell Mysella S3 S satisfies the new generation of stationary gas engines designed to meet the emerging legislation limiting emissions of NO_x, and those which employ the latest 'lean' or 'clean' burn technology.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Extended oil life**

Significantly prolongs oil life by resisting oxidation and nitration, the high level of TBN (total base number) neutralises acids and provides corrosion protection, even when "sour" gases are in use.

- **Engine protection**

Shell Mysella S3 S is formulated with an optimised level of 'ash' components which helps prolong the life of valves in engines which prefer a medium ash oil. With a maximum phosphorus content of 300 ppm Shell Mysella S3 S is compatible with engines equipped with emission catalysts.

Main Applications



- Spark-ignited gas engines fuelled by natural gas requiring a medium ash oil
- Ideal for engines fuelled by sour gases
- "Dual-fuel" gas engines ignited by diesel pilot fuel

Specifications, Approvals & Recommendations

Shell Mysella S3 S is suitable in engine types where a "medium ash" oil is required.

Shell Mysella S3 S is Approved by:

- GE Jenbacher: Series 2, 3 Fuel Class B and C
- MAN B&W Diesel: Gas engines (Natural Gas, Landfill Gas/Digester gas/Biogas). Dual Fuel (Pilot Diesel)
- MAN: 3271-4
- MDE: Naturally Aspirated 28xx, 30 xx (D/M), Turbocharged 28xx 30xx (T/L/Z)
- MHI: Mitsubishi Gas Engines
- Rolls Royce: KG-1, KG-2, KG-3 (Bio Gas Operation)
- Waukesha: Cogen Application (Pipeline Quality Natural Gas)
- Wartsila: CR26

For engines under warranty, Shell advises to contact the engine manufacturer and Shell representative before using the oil.

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

Typical Physical Characteristics

Properties			Method	Shell Mysella S3 S 40
SAE Viscosity Grade				40
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	135
Kinematic Viscosity	@100°C	mm ² /s	ASTM D445	13.5
Density	@15°C	kg/m ³	ASTM D4052	894
Flash Point, closed cup		°C	ASTM D93A	230
Pour Point		°C	ISO 3016	-18
BN		mg KOH/g	ASTM D2896	8.5
Sulphated Ash		%wt	ISO 3987	0.9
Phosphorus		ppm	ASTM D4047	300

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 Mysella S3 S 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.

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

• Oil Analysis

For optimum results regular oil analysis is strongly recommended

• Advice

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

Note: this product is not designed for automotive gas engines