Technical Data Sheet

Shell **Mysella** *XL*

Long Life, Low Ash Gas Engine Oil

- *EXTENDED OIL LIFE*
- *EXTRA PROTECTION AGAINST DEPOSITS & CORROSION*

Shell Mysella XL is a premium gas engine oil, formulated for use in the latest generation of highly-rated gas- or dual fuel engines which require a 'low ash' oil.

Shell Mysella XL has been specially developed to provide extended oil drain intervals in those natural gas engines where oil life is a limiting operational factor. It offers excellent engine protection and extended overhaul intervals for critical components such as valves, seats, pistons and liners. In addition, Shell Mysella XL is designed to reduce heat exchanger fouling to enhance engine efficiency.

Applications

- *Gas Engines*
  All types of 4-stroke gas engines burning natural gas, biogas or landfill gas (spark or pilot ignition; lean burn or rich burn).
  Also suitable for 4-stroke dual fuel engines with gas as main fuel.
  2-stroke gas engines where a low ash oil can be used.
- *Gas compressors*
  Engine driven gas compressors where engine and compressor have a common lubrication system.

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

Performance Features and Benefits

- *Extended oil life:*
  By resisting oxidation and nitration, viscosity increase and the formation of harmful acids, especially in demanding cogeneration applications, Shell Mysella XL offers a step change in oil drain intervals relative to previous generation gas engine oils.
  Note that when used with landfill or biogases, oil life will be dependent on the level of contaminants in the gas.
- *Engine protection*
  Shell Mysella XL offers superior control of deposits and excellent piston cleanliness in advanced engine designs.
  It has been formulated with the optimum level of "ash" components which also helps to prolong the life of valves and spark plugs

  With a low phosphorus level Shell Mysella XL is compatible with engines equipped with exhaust emission catalysts for CO, NOx and formaldehyde.
- *System efficiency*
  Shell Mysella XL maintains excellent cleanliness and exhaust deposit control within the boiler and intercooler thus maximizing heat recovery. In engines utilising crank case gas recirculation Shell Mysella XL also reduces fouling and prevents clogging of charge air coolers.

Specifications and Approvals

Shell Mysella XL is suitable in engine types where a "low ash" oil is required.
Shell Mysella XL 40 meets the requirements of

- API CF
- Caterpillar

Shell Mysella XL 40 has been approved by

- Cummins, as "premium grade - long change interval" oil for highest rated QSV 81/91G and QSK60G
- MWM-Deutz
- GE-Jenbacher 2, 3, and 6-series
- GE-Jenbacher installations with catalytic converter for formaldehyde
- MAN high speed engines

- MDE
- Perkins
- Rolls Royce Bergen K-G1, K-G2, K-G3, K-G4 and B series
- Wartsila
- Waukesha cogeneration applications
- Waukesha APG

Storage precautions

The closed container can be kept in a dry and covered location at temperatures between 20 and 40 °C for maximum of 2 years. After longer storage the oil should be homogenised.

Oil Analysis

For optimum results regular oil analysis is strongly recommended

Health & Safety

Shell Mysella XL 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.

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.

Typical Physical Characteristics

Property	Units	Shell Mysella XL 40	Shell Mysella XL 30	Shell Mysella XL 15W 40
SAE Viscosity Grade	-	SAE 40	SAE 30	SAE 15W 40
Kinematic viscosity at 40°C	mm2/s	128	95	107
Kinematic viscosity at 100°C	mm2/s	14	11	14
BN	mg KOH/g	4.5	4.5	4.5
Sulphated ash	%wt	0.48	0.48	0.48
Density at 15°C	kg/m3	890	870	877
Flash Point, open cup	°C	>240	>180	>240
Pour point	°C	-18	-18	-33
Phosphorus	ppm	300	300	300

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