

Previous Name: Shell Mysella XL

# Shell Mysella S5 N 40

Long Life, Low Ash Stationary Gas Engine Oil

### Technical Data Sheet

- Extended Oil Life
- Extra Protection from Deposits and Corrosion

Shell Mysella S5 N is a high performance quality oil blended for use in highly-rated, 4-stroke, spark-ignition engines which require a 'low ash' oil.

Shell Mysella S5 N satisfies the new generation of stationary gas engines designed to meet the emerging legislation limiting emissions of NOx, and those which employ the latest 'lean' or 'clean' burn technology.

Shell Mysella S5 N is specially developed to provide extended drain intervals in those natural gas engines where oil life is a limiting operational factor.

# **DESIGNED TO MEET** CHALLENGES

### Performance, Features & Benefits

### Extended oil life

Significantly prolongs oil life relative to previous generation gas engine oils by resisting oxidation and nitration, viscosity increase and the formation of harmful acids, especially in demanding cogeneration (CHP) applications. (When used with landfill or biogases, oil life will be dependent on the level of contaminants in the gas.)

## Engine protection

Shell Mysella S5 N offers excellent control of deposits and piston cleanliness in advanced engine designs. Shell Mysella S5 N is formulated with low ash and low phosphorus offering extended life to valves and spark plugs and full compatibility with emission catalysts.

## System efficiency

Shell Mysella S5 N is designed to help prevent knocking and thereby enable engines to be run at full load and optimum efficiency and its viscosity control helps to minimise engine friction losses. Shell Mysella S5 N helps to provide excellent cleanliness for the heat recovery boilers, turbochargers and intercoolers thus allow total system to operate with consistent performance and efficiency over time.

## **Main Applications**



- Spark-ignited gas engines fuelled by natural gas, especially those creating high oil stress
- May also be used for landfill and biogases

## Specifications, Approvals & Recommendations

Shell Mysella S5 N is suitable in engine types where a "low ash" oil is required.

Approved by:

- Cummins: QSV 81G/91G, OSK 60G
- GE Jenbacher: Series 2, 3, 4 Fuel Class A and CAT. Series 6 (Version E&F) Fuel Class A and CAT
- Guascor: FGLD, SFGLD
- MAN: 3271-2
- MTU: MLT 5074, A001061/29E (Category 1), Onsite Energy Series 400 and 4000
- MWM: TR 0199-99-2105
- MDE: Naturally Aspirated 28xx, 30 xx (D/M), Turbocharged 28xx 30xx (T/L/Z)
- MAK: GCM 34
- Rolls Royce: KG-1, KG-2, KG-3, KG-4, BV-G
- Tedom: Natural Gas Engines
- Wartsila: 34SG, 32DF, 50DF, 25SG, 28SG, 175SG, 220SG
- Waukesha: Cogen and 220 GL (Pipeline Quality Natural Gas) Meets requirements of:
- Caterpillar Stationary Gas Engines
  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, or the OEM Approvals website.

## **Typical Physical Characteristics**

Properties			Method	Shell Mysella S5 N
SAE Viscosity Grade				40
Kinematic Viscosity	@40°C	mm²/s	ASTM D445	135
Kinematic Viscosity	@100°C	mm²/s	ASTM D445	13.5
Density	@15°C	kg/m³	ASTM D4052	890
Flash Point, closed cup		°C	ASTM D93A	230
Pour Point		°C	ISO 3016	-18
BN		mg KOH/g	ASTM D2896	4.5
Sulphated Ash		%wt	ISO 3987	0.48
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 S5 N 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 your Shell representative.

## 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