



Previous Name: Shell Mysella LA

# Shell Mysella S3 N 40

- *Reliable Protection*
- *Low Ash Content for Four Stroke Engines*

## Low Ash Stationary Gas Engine Oil

Shell Mysella S3 N is a high performance quality oil blended for use in 4-stroke, spark-ignition engines which require a 'low ash' oil and use natural gas as fuel.

Shell Mysella S3 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.

### 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.

- **Engine protection**

Shell Mysella S3 N is formulated with low ash and low phosphorus offering extended life to valves and spark plugs and full compatibility with emission catalysts.

- MTU: Series 4000 L61/L62/L63
- MWM gas engines – TR 2105
- Caterpillar CG132, CG170, CG260 – TR 2105
- MAK: GCM 34 Category 1
- Perkins: 4000 series
- Rolls Royce: KG-1, KG-2, KG-3
- Wartsila: W 34SG, W 50SG, W 20DF, W 32DF, W 34DF, W 50DF, W25SG, W28SG, W 175SG, W 220SG
- Waukesha: 220 GL (Pipeline Quality Natural Gas)
- MAN D&T : Medium Speed Engines for gas operation
- S.E.M.T Pielstick PC - Dual Fuel engines

#### Main Applications



- Spark-ignited gas engines fuelled by natural gas
- May also be used for landfill and biogases

#### Specifications, Approvals & Recommendations

Shell Mysella S3 N is suitable in engine types where a "low ash" oil is required.

#### Shell Mysella S3 N is approved by:

- GE Jenbacher: Series 2, 3 Fuel Class A and CAT. Series 4 (Version B) Fuel Class A, B, C and CAT. Series 6 (Version E) Fuel Class A, B, C and CAT.
- Hyundai H35/40G(V) series

#### Shell Mysella S3 N meets Requirement of:

- Caterpillar Stationary Gas Engines
  - MAN: Gas engines (Natural Gas, Landfill Gas/Digester gas/Biogas). Dual Fuel (Pilot Diesel)
  - Waukesha: other gas engine types.
  - Nuovo Pignone: Reciprocating Compressor Service Class A
- For engines under warranty, Shell advises to contact the engine manufacturer and Shell representative to choose the appropriate oil given the equipment operating conditions and customer maintenance practises.
- 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 N 40 |
|-------------------------|--------|--------------------|------------|-----------------------|
| SAE Viscosity Grade     |        |                    |            | 40                    |
| Kinematic Viscosity     | @40°C  | mm <sup>2</sup> /s | ASTM D445  | 135                   |
| Kinematic Viscosity     | @100°C | mm <sup>2</sup> /s | ASTM D445  | 13.5                  |
| Density                 | @15°C  | kg/m <sup>3</sup>  | ASTM D4052 | 890                   |
| Flash Point, closed cup |        | °C                 | ASTM D93A  | 230                   |
| Pour Point              |        | °C                 | ISO 3016   | -18                   |
| BN                      | mg     | KOH/g              | ASTM D2896 | 5                     |
| Sulphated Ash           |        | %wt                | ISO 3987   | 0.45                  |
| 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 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 <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

