



Shell ROTELLA[®] ELC Nitrite Free Pre-Diluted 40/60

Premium, Nitrite Free, Extended Life Antifreeze/Coolant for Stationary Natural Gas Engines

Shell ROTELLA[®] ELC Nitrite Free (NF) Pre-Diluted 40/60 antifreeze/coolant is formulated for use in stationary natural gas engines. It provides improved heat transfer performance as well as extended life cooling system protection over a wide range of operating conditions. Shell ROTELLA[®] ELC NF Pre-Diluted 40/60 is pre-diluted and ready to use. It requires no further dilution.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Outstanding heat transfer**

Provides excellent heat transfer due to the OAT technology that is superior to conventional coolants. This helps keep heavily used engines cool during summer.

- **Phosphate and Silicate Free**

Shell ROTELLA[®] ELC NF Pre-Diluted 40/60 does not contain phosphates or silicates. The absence of phosphates helps reduce the occurrence of hard water and phosphate scale on heat transfer surfaces. Elimination of silicates provides improved heat transfer compared to traditional stationary gas engine coolants that contain silicates.

- **Extended Life Capability**

Shell ROTELLA[®] ELC NF Pre-Diluted 40/60 provides up to 32,000 hours of coolant life in stationary engine service when properly maintained. For 32,000 hour service life, always top up with Shell ROTELLA[®] ELC NF Pre-Diluted 40/60. Sample the coolant every six months to check for coolant dilution and top up as needed.

- **Compatibility With Other Coolants**

Shell ROTELLA[®] ELC NF Pre-Diluted 40/60 is miscible and compatible with other engine coolant (antifreeze), including Shell ROTELLA[®] ELC and ShellZone[®] DEX-COOL[®].

Dilution/mixing with non-equivalent coolants will reduce or eliminate the extended life properties.

Therefore, do not dilute the product by more than 20% with conventional coolants.

- **No SCA Use Required**

No supplemental coolant additive (SCA) use is needed during the life of the coolant.

- **Excellent Cavitation (Pitting) Protection**

Formulation delivers a high level of protection against cylinder liner pitting due to cavitation.

- **Excellent Corrosion Protection**

Shell ROTELLA[®] ELC NF Pre-Diluted 40/60 provides excellent corrosion protection of all cooling system metals including aluminium, brass, copper, iron, solder, and steel. DEX-COOL is a registered trademark of General Motors Corporation.

Main Applications

- **Heavy duty, mixed application antifreeze / coolant**

Shell ROTELLA[®] ELC NF ELC NF Pre-Diluted 40/60 is designed for use in stationary gas engines. It is suitable for use in stationary gas engines from Caterpillar, Cooper-Bessemer, MWM, Waukesha, and other OEMs.

Specifications, Approvals & Recommendations

Shell ROTELLA® ELC NF Pre-Diluted 40/60 is suitable for use against the following specifications:

- ASTM D3306, D4985, D6210 (Meets)
- Cummins CES 14439¹ (Approval)
- Detroit Diesel 93K217 (Approval)
- Ford WSS-M97B44-D (Meets performance)
- General Motors GM 6277M (Meets performance)
- Deutz DQC CB-14 (Approval)
- MTU MTL 5048 (Approval)
- International MPAPS B-1 (Type IIIA) and MPAPS B-6826, Type II (Approval)
- Paccar (Meets)

- TMC RP 329, RP 364 (Meets)
- Volvo/Mack STD 418-0005 (Approval)
- CAT EC-1 (Meets performance)
- Jenbacher TA 1000-0200 (Approval)

¹ Approved for use in all Cummins medium & heavy duty on-road and off-road engines where CES 14439 coolants are specified.

The product is free of amine, nitrite, nitrate, phosphate, heavy metals, and silicate..

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

Typical Physical Characteristics

Properties	Method	Shell ROTELLA® ELC Nitrite Free Pre-Diluted 40/60
Appearance, visual colour		Red
Freeze point (as produced)	°C(°F)	-26 (-15)
pH as sold	ASTM D1287	8.5
Specific Gravity	@15.6°C	1.065
Shelf Life (unused)		5 years
Silicon as silicate	ppm	ICP
		None

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 ROTELLA® Nitrite Free Pre-Diluted 40/60 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 new and used fluid. After skin contact, wash immediately with soap and water. Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from <https://www.epc.shell.com>

The usual precautions for handling chemicals must be observed. In particular the place of work must be well ventilated, the skin protected and safety glasses worn at all times. Avoid contact with the skin. This product contains a bitterant reducing the chance of accidental ingestion. The product is based on monoethylene glycol and should be kept from children and animals to prevent exposure.

• Protect the Environment

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

Additional Information

• Storage Requirements

Store at ambient temperatures and limit periods of exposure to temperatures above 35°C.

- **Advice**

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