



Shell Rotella *Ultra ELC* Antifreeze/Coolant Pre-Diluted 50/50

Next generation OAT extended life, Nitrite Free heavy duty ethylene glycol engine coolant premixed and ready to use

Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 is an extended life ethylene glycol coolant for heavy duty diesel, gasoline, and natural gas powered engines. Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 contains OAT corrosion inhibitor technology that provides effective corrosion protection of engine and cooling system metals. The product is free of nitrites, amines, borates and silicates. Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 is suitable for both heavy and light duty applications without supplemental coolant additives (SCAs), making it ideal for use in mixed fleet applications. Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 is premixed and ready to use. It requires no further dilution.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **All-climate year round performance**

As sold Rotella Ultra ELC Coolant Pre-diluted 50/50 provides freeze protection down to -34.6°F and boilover protection up to +264.2°F (with the use of a 103.4 kPa pressure cap).

- **Extended life capability**

Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 typically provides up to 12,000 hours or 1 million km in heavy duty applications under normal operating conditions, provided the coolant is checked and kept in good condition.

- **Field compatibility**

Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 is miscible and compatible with other engine antifreeze of similar type; although to get the best performance from the long life capabilities, it is always recommended to not dilute Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 with other coolants. It is also compatible with standard heavy duty SCAs, coolant filters and hard water should circumstances dictate its use in that environment.

Main Applications

- **Heavy duty diesel or gasoline engine antifreeze**

Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 is formulated to be an extended life coolant in heavy duty applications, found in on-road, off-road, marine, farm, mining and construction equipment.

Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 contains

Specifications, Approvals & Recommendations

- Astm D3306, D4985, D6210
- AS/NZS 2108.1:1997 "Type A"
- Caterpillar EC-1 (Sections 2.3 – 4.5 incl.)
- Cummins Bulletin 3666132 and 14603
- DAF MAT 74002
- Detroit Diesel 7SE298 and 93K217
- Freightliner 48-22880
- General Motors 1825M, 1899M, Heavy Truck
- International Truck & Engine CEMS B-1
- JIS K 2234
- Kenworth R026-170-97
- John Deere JDM H24
- Landrover
- Mack Truck 014GS17004
- MAN 324
- Mercedes-Benz DBL 7700
- MTU MTL 5048
- PACCAR CS0185
- Peterbilt 8502.002
- SAE J1034
- Scania TB1451
- TMC RP 329
- Volvo

organic additive technology corrosion inhibitors along with molybdate to provide extra protection to cylinder liners found in heavy-duty applications. It will not require an initial charge or additional supplemental coolant additives (SCAs).

Shell Rotella Ultra ELC Coolant Pre-diluted 50/50 also provides protection in light duty engines making it highly suitable for mixed fleets (light duty as well as heavy duty gasoline and diesel engines).

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

Typical Physical Characteristics

Properties	Method	Shell Rotella Ultra ELC Antifreeze/Coolant Pre-Diluted 50/50
Appearance, visual Color	Visual	Yellow
Ash Content % w/w	ASTM D1119	2.5 max
Freeze Point as sold	ASTM D1177	-34.6°F
pH as sold	ASTM D1287	8.0 - 9.0
Reserve Alkalinity ml 0.1N HCL	ASTM D1121	2.0 min
Shell Life (unused)		5 years
Silicon as silicate ppm	ASTM D6130	<10
Specific Gravity @60.08°F	ASTM D1122	1.070 - 1.080

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 Ultra ELC Coolant Pre-diluted 50/50 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 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 authorized collection point. Do not discharge into drains, soil or water.

• Handling and Protective Measures

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 thus reducing the chance of accidental ingestion. The product is based on monoethylene glycol and should be kept from children and animals to prevent exposure.

• Storage Requirements

Store at ambient temperatures and limit periods of exposure to temperatures above 95°F.

Additional Information

Typical Freeze and Boilover Protection Mixing Chart

Rotella Ultra ELC Pre-diluted 50/50	Freeze Point Protection* (°C)	Boilover Protection* (°C)
50% Antifreeze / 50% Water as sold	-37	129

*Using a 103.4 kPa pressure cap

- **Advice**

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