



# Shell Rotella *ELC Pre-diluted 50/50*

## *Premium Extended Life Coolant / Antifreeze*

Shell ROTELLA® ELC Extended Life Coolant/Antifreeze is an ethylene glycol based coolant for heavy-duty diesel, gasoline and natural gas power engines. Shell Rotella ELC contains a unique extended life carboxylate inhibitor system and nitrite / molybdate as secondary inhibitors. This product requires no traditional ELC Extender and supplemental coolant additive (SCA) additions and contains no silicate, borate, nitrate or phosphate. Shell Rotella ELC meets all the requirements of ASTM D3306, D6210, CAT EC-1, TMC RP329 and RP 338.

### DESIGNED TO MEET CHALLENGES

#### Performance, Features & Benefits

- Minimum coolant life of 600,000 miles without the need of ELC Extender
  - No regular Supplemental Coolant Additives (SCA's) required
  - Improved water pump seal life due to low dissolved solid levels
  - Excellent pitting protection for wet sleeve cylinder liners
  - Excellent, long-term corrosion protection of all cooling system metals including aluminum, brass, cast iron, steel, solder, and copper
  - Excellent heat transfer
  - Reduced hard water scale
  - Reduced overall coolant and cooling component maintenance
  - No silicate dropout or gel formation during use or storage
  - Compatible with conventional coolants. Dilution/mixing with non-equivalent coolants will reduce or eliminate extended life properties. **DO NOT DILUTE THIS PRODUCT BY MORE THAN 15% WITH CONVENTIONAL COOLANTS or water.**
  - Can be used for top-up of cooling systems containing conventional coolants. When Shell Rotella ELC is used as top-up for conventional coolants SCA's must still be added.
- The inhibitors in ROTELLA ELC, due to their special chemistry, are designed to go 600,000 miles on-road or 12,000 hours off-road without the need of ELC Extender. After 600,000 miles or 12,000 hours it is recommended that the coolant be tested for continued use.
  - Shell Rotella ELC's patented inhibitors, while providing complete cooling system component protection, also help reduce water pump failures, hard water scale deposits, silicate "green goo" and improve heat transfer. Tests with ROTELLA ELC show that heat transfer is about 8% better with RELC than with conventional heavy duty, silicate-containing coolants.
  - Maintenance is simple with ROTELLA ELC. To use this product just follow your OEM's instructions on how to drain, flush and refill your cooling system. Top up only with Shell Rotella ELC Pre-diluted 50/50 or an equivalent brand of ELC like Fleetrite® ELC. At every PM, or at least twice per year, check the color and freeze point of your coolant. If coolant is red, has no deposits and has a freeze point of between -15°F and -60°F then the coolant is considered in suitable condition for further use. See index for freeze point adjustment chart. Please note that dilution of Shell Rotella ELC by more than 15% with non-equivalent coolants or water is not recommended. Over-dilution will require initiating SCA use or draining and refilling the cooling system with Shell Rotella ELC. If contamination with non-equivalent /non-extended life coolants is suspected, it is recommended the ELC Contamination Test Strip Kit be used to confirm satisfactory carboxylate inhibitor content.

#### Main Applications

- Shell Rotella ELC Extended Life Coolant/Anti-Freeze has been proven, with over 100 million miles of fleet testing, to provide complete protection of all cooling system components.

## Specifications, Approvals & Recommendations

Shell Rotella ELC Extended Life Coolant Anti-freeze meets or exceeds:

- ASTM D3306, D4985, D6210 (Meets)
- TMC RP 329, RP 338 (Meets)
- Cummins CES 14439 (Approval)
- Navistar MPAPS B-1 (formerly Int CEMS B-1) (Approval)
- CAT EC-1 (Meets)

- Detroit Diesel DFS 93K217 (Meets performance)
- Volvo/Mack (Meets)
- Paccar (Meets)
- Deutz DQC CB-14 (Approval)
- Phosphate free requirement of European OEMs
- Silicate free requirement of Japanese OEMs

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

## Typical Physical Characteristics

Properties	Method	Shell Rotella ELC Pre-diluted 50/50
Code No.		94042
Appearance		Red
Specific Gravity	60 / 60°F	1.06
Freezing Point	°F As sold	ASTM D1177 -34
pH, 1:2 dilution with water		ASTM D1287 As sold 8.3
Reserve Alkalinity, as received		ASTM D1121 As sold 3.0
Silicate (as Anhydrous Alkali Metasilicate)	%	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 ELC 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 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

### • Advice

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