Technical Data Sheet

Shellzone **Antifreeze** / ***Coolant***

Shellzone® Antifreeze is a superior quality, single phase, ethylene glycol based antifreeze. It is a low silicate, all-purpose coolant designed for use in both automotive and heavy duty diesel engines (with the use of SCA's). Shellzone Antifreeze Prediluted 50/50 is a 50/50 volume mixture of Shellzone Antifreeze with deionized water.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- Universal formula for both automotive and heavy duty diesel engines (ASTM D 3306 and ASTM D 4985)
- Excellent heat transfer properties
- Superior anti-foam characteristics
- Superior corrosion protection for aluminum, brass, copper, solder, steel and cast iron
- Low silicate formulation
- Nitrite-free, amine-free and borax-free
- Concentrate mixes readily with clean tap water
- Pre-diluted product is ready to use and requires no mixing for top-up and initial fill
- Compatible with cooling system filters
- Compatible with heavy duty diesel supplemental coolant additives
- Compatible with conventional brands of coolant
- 100% biodegradable in its pure unused form

Main Applications

- Shellzone Antifreeze is specially formulated to meet the stringent aluminum corrosion protection requirements of today's automotive engines. Because of its low concentration of silicate, it also complies with Cummins and other heavy-duty diesel engine manufacturer's silicate requirements. This product is also suitable for use in industrial internal combustion engines where an antifreeze/coolant is required to provide protection against freezing, boil over, and corrosion.

Specifications, Approvals & Recommendations

- ASTM D3306 for automotive service
- ASTM D4985 for heavy duty diesel service
- AAMVA
- Chrysler MS-7170
- Cummins 90T8-4
- Federal Specification A-A-870
- Ford ESE-M97B44-A
- Freightliner
- General Motors GM1825M
- General Motors GM1899M (performance corresponding to GM6038M)
- J.I. Case JIC501
- John Deere H24B1
- John Deere H24C1
- Mack Truck
- PACCAR
- SAE J1034
- TMC of ATA RP-302A

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

Typical Physical Characteristics

Properties		Method	Shellzone Antifreeze / Coolant
Code No.			94010
Appearance			Fluorescent Green
Specific Gravity	60/60°F		1.130

Properties		Method	Shellzone Antifreeze / Coolant
Freezing Point 50 vol % q.s. Aqueous solution	°F	ASTM D1177	-34
pH 1:2 dilution with water		ASTM D1287	10.5
Reserve Alkalinity, as received		ASTM D1121	12
Silicate (as Anhydrous Alkali Metasilicate)	%		0.09

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**

  Shellzone® Antifreeze 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 your Shell representative.

- **Protect the Environment**

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

- **Handling and Safety Information**

  Shellzone Antifreeze has a shelf life of about 18 months. Concentrate product should be mixed before use. Always dispose of used coolant in accordance with local, state and federal guidelines. These products are not to be used to protect the inside of potable water systems against freezing.

- **Supplemental Coolant Additives**

  Shellzone is not an extended life coolant and requires the use of Supplemental Coolant Additives (SCA’s) in heavy duty and industrial applications.

Additional Information

- **Advice**

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