

**Technical Data Sheet** 

# Shellzone AF/C 50/50

Shellzone® Antifreeze is a high quality, single phase, ethylene glycol based antifreeze. It is a low silicate, allpurpose 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 D3306 and ASTM D4985)
- Excellent heat transfer properties
- Excellent anti-foam characteristics
- Excellent corrosion protection for aluminum, brass, copper, solder, steel and cast iron
- Low silicate formulation
- Nitrite-free and amine-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 D4656 for pre-blend automotive service
- ASTM D5345 for pre-blend heavy duty diesel service
- ASTM D3306 incl. D4340
- ASTM D4985
- 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 Pre- diluted 50/50
Code No.			94067
Appearance		Visual	Fluorescent Green
Specific Gravity	60/60⁰F	ASTM D1122	1.06

Properties			Method	Shellzone Antifreeze Pre- diluted 50/50
Freezing Point, as sold		°F	ASTM D1177	-34
pH, as sold			ASTM D1287	10.3
Reserve Alkalinity, as received	0.1N HCI	mL	ASTM D1121	6
Silicate (as Anhydrous Alkali Metasilicate)		%		0.045

These characteristics are typical of current production. While 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 Antifreeze 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.