

# Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45

Premium extended life, fully formulated, OAT-Hybrid heavy duty ethylene glycol engine coolant pre-diluted and ready to use.

Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 is a fully formulated extended life heavy duty ethylene glycol antifreeze coolant. The product is a hybrid coolant, containing the combination of organic additive technology inhibitors with inorganic corrosion inhibitors. It is a phosphate-free, and amine-free coolant. It is suitable for heavy duty applications without supplemental coolant additives (SCAs) during the initial fill. Shell HD Premium Coolant-N Pre-Diluted 55/45 is Ready-to-Use. It requires no further dilution.

# **DESIGNED TO MEET CHALLENGES**

# Performance, Features & Benefits

#### • All-climate year round performance

As sold Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 provides freeze protection to -45°C and boilover protection to 131°C (with the use of a 103.4 kPa pressure cap).

## • Extended Life Capability

Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 typically provides 5 years, or 240,000 km service (whichever comes first) in automotive service and can provide up to 12,000 hours or 1 million km in heavy duty applications under normal operating conditions, provided the coolant is frequently checked and kept in good condition.

 Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 is part of the Shell family of heavy duty lubricants and coolants for the heavy duty market.

#### **Main Applications**

· Heavy duty gasoline or diesel engine antifreeze

Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 is an amine and phosphate free fully formulated extended life engine coolant suitable for automotive and heavy duty gasoline and diesel engines found in on-road, off-road, marine, farm, mining and construction equipment.

- Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 contains organic additive technology corrosion inhibitors as well as inorganic corrosion inhibitors. This product does not require a charge of supplemental coolant additives (SCAs) during the initial fill or if the system is drained and fully charged with new Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45.
- It is specifically formulated to protect cylinder liners from pitting in heavy duty applications.

# Specifications, Approvals & Recommendations

Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 has been formulated to meet the following coolant specifications:

- ASTM D3306, D4985, D6210
- GB 29743-2013
- Caterpillar EC-1 (Sections 2.3 4.5 incl.)
- Cummins 14603
- Chrysler MS-9769
- Detroit Diesel 7SE298 / 93K217
- Freightliner 48-22880
- General Motors 1825M, 1899M, Heavy Truck
- JIS K 2234
- Kenworth R026-170-97
- John Deere JDM H24

- Landrover
- Mack Truck 014GS17004
- MAN MAN 324
- Mercedes-Benz DBL 7700
- MTU MTL 5048
- PACCAR CS0185
- Peterbilt 8502.002
- SAE J1034
- Scania TB1451
- TMC RP 329
- Volvo

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

# Typical Physical Characteristics

## **Compatibility & Miscibility**

#### · Field Compatibility

Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 is miscible and compatible with other engine coolant (antifreeze); although to get the best performance from the extended life capabilities and the time between SCA additions, it is always recommended to not dilute Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 with other coolants or water. It is also compatible with standard heavy duty SCAs and coolant filters. As sold it is ready for use – do not add water.

Properties		Method	Shell HD Premium N Antifreeze/Coolant Pre- Diluted 55/45
Appearance		Visual colour	Yellow
Ash Content	% w/w maximum	ASTM D1119	2.8
Freeze point as sold	°C	ASTM D1177	-45
pH as sold		ASTM D1287	7.6-8.6
Reserve Alkalinity	ml 0.1N HCL minimum	ASTM D1121	3.3
Shelf life (unused)			2 years
Silicon	ppm maximum	ICP	120
Specific Gravity	20ºC	ASTM D1122	1.080 - 1.095

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 HD Premium N Antifreeze/Coolant Pre-Diluted 55/45 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 https://www.epc.shell.com/

#### • Protect the Environment

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

# **Additional Information**

## Advice

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

## • Storage Requirements

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

# Typical Freeze and Boilover Protection Mixing Chart

Shell HD Premium N Antifreeze/Coolant Pre-Diluted 55/45	Freeze Point Protection*	Boilover Protection (°C)
Coolant Pre-Diluted As Sold	-45	131

\*Using a 103.4 kPa pressure cap