



# GlycoShell Concentrate

# Automotive fluid

GlycoShell Concentrate is a concentrated phosphate and nitrite-free, low silicate, anti-freeze, to be mixed with water, for engine cooling systems.

# DESIGNED TO MEET CHALLENGES

# Performance, Features & Benefits

## High quality product

GlycoShell Concentrate does not contain any Nitrites, Amines or Phosphates (N.A.P. free) and is thus more environmentally friendly. In addition, it is hard water stable and is fully compatible with elastomers and rubbers present in most automotive cooling systems.

#### • Multiple vehicle performance

GlycoShell Concentrate is suitable for use as a antifreeze/coolants in most automobiles and light-duty trucks. It is based on hybrid, low-silicate technology suitable for protection of aluminium and cast iron engines.

## **Main Applications**

- It is an advanced formulation designed for use in modern water cooled gasoline and diesel engines.
- The advanced corrosion inhibitor technology used imparts particularly good corrosion protection in modern engines.
- In conjunction with Supplementary Cooling Additives (SCAs), GlycoShell Concentrate will provide protection suitable for most heavy duty truck applications.

## Specifications, Approvals & Recommendations

- ASTM D3306, D4985
- SAE J 1034

## **Typical Physical Characteristics**

- Renault 41-01-001 Type D
- SAAB 6901599
- Volvo 1286083
- MTU MTL5048
- KHD, BWB TK-BA2-3-6850-008
- MAN 324, Type NF
- Mercedes Benz DBL 7700.00, 325.0
- Mercedes Benz DBL 7700.02 /Page 325.0
- Bundeswehr TL-6580-0038/1
- BMW N600 69.0
- KHD H-LV 0161 0188
- Opel/General Motors B 040 0240 GM QL 130 100
- Porsche TL-774 C
- Audi TL-774 C
- Seat TL-774 C
- VW TL-774 C
- Skoda TL-774 C
- Scania TB 1451

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

Properties			Method	GlycoShell Concentrate
Density	20ºC	kg/l	DIN 51757 / ISO 12185	1.122
Flash Point, Pensky-Martens Closed Cup		٥C	DIN ISO 2592	118
Boiling Point, CC		٥C	ASTM D1120	173
Colour			Visual	Blue
Reserve Alkalinity	20°C	mL HCL 0.1 mol/L	ASTM D1121	13-15
pH			ASTM D1287	7.1 - 7.3
Water Content		% m	DIN 51777	3.5 max

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

GlycoShell Concentrate 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.

#### • Recommended dilution with water

It is recommended to use a minimum of 33% aqueous solution by mixing one part of GlycoShell Concentrate and two parts of water. As an engine coolant it will provide:

Reduced freezing point to guard against frost.

Elevating boiling point to prevent over-boiling

All round corrosion protection of the cooling system.

#### Toxicity

GlycoShell Concentrate is based on monoethylene glycol which is toxic to humans and animals. This product is provided with a bittering agent to make it less palatable to consume. As with any product of this type, adequate precautions should be taken to prevent accidental injection.

## Additional Information

#### Advice

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