

# SAFETY DATA SHEET

## Shell Coolant Longlife HD Concentrate

Version 1.1

Revision Date 19.01.2021

Print Date 20.04.2024

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Shell Coolant Longlife HD Concentrate

Product code : 001J1464

#### Manufacturer or supplier's details

Manufacturer/Supplier : **Shell India Markets Private Limited**  
(U23201TN2004PTC053147)  
Commerzone, Block-2, No.2  
200 Feet Radial Road  
Pallikaranai  
CHENNAI  
600100  
India

Telephone : (+91) 04446945100

Telefax : (+91) 04443451516

Emergency telephone : +91 22 6516 1058  
number

#### Recommended use of the chemical and restrictions on use

Recommended use : Antifreeze and coolant.

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Mixture of ethylene glycol, water and additives.

#### Hazardous components

| Chemical name | CAS-No.<br>EC-No.<br>Registration<br>number | Classification<br>(67/548/EEC) | Classification<br>(REGULATION<br>(EC) No<br>1272/2008) | Concentration<br>(% w/w) |
|---------------|---|--------------------------------|--|--------------------------|
| Ethanediol    | 107-21-1                                    | Xn; R22                        | Acute Tox. 4;<br>H302<br>STOT RE 2; H373               | 90 - 99.9                |

For explanation of abbreviations see section 16.

### 3. HAZARDS IDENTIFICATION

#### Classification (REGULATION (EC) No 1272/2008)

Acute toxicity (Oral) : Category 4

Specific target organ toxicity - : Category 2 (Kidney)  
repeated exposure

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### Label elements

Hazard pictograms

:



Signal word

: Warning

Hazard statements

: **PHYSICAL HAZARDS:**  
Not classified as a physical hazard according to CLP criteria.  
**HEALTH HAZARDS:**  
H302 Harmful if swallowed.  
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.  
**ENVIRONMENTAL HAZARDS:**  
Not classified as environmental hazard according to CLP criteria.

Precautionary statements

: **Prevention:**  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
**Response:**  
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P330 Rinse mouth.  
**Storage:**  
No precautionary phrases.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:  
Contains Ethylene Glycol

### Other hazards

Intentional abuse, misuse or other massive exposure may cause multiple organ damage and or death.

## 4. FIRST-AID MEASURES

General advice

: Not expected to be a health hazard when used under normal conditions.

If inhaled

: Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

In case of skin contact

: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.  
If persistent irritation occurs, obtain medical attention.

In case of eye contact

: Flush eye with copious quantities of water.

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Remove contact lenses, if present and easy to do. Continue rinsing.

If persistent irritation occurs, obtain medical attention.

If swallowed

: If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Rinse mouth.

Most important symptoms and effects, both acute and delayed

: Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow. Other signs and symptoms can include nausea, vomiting, abdominal cramps, diarrhoea, lumbar pain shortly after ingestion, and possibly narcosis and death.

Not considered to be an inhalation hazard under normal conditions of use.

Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing.

No specific hazards under normal use conditions.

Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision.

Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters.

Ingestion may result in nausea, vomiting and/or diarrhoea.

High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

Protection of first-aiders

: When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

Notes to physician

: IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT!

Call a doctor or poison control center for guidance.

Treat symptomatically.

May cause significant renal, respiratory, and CNS toxicity.

May cause significant acidosis.

The preferred treatment is immediate transportation to a medical facility and use of appropriate treatment including possible administration of activated charcoal, gastric lavage and or gastric aspiration. If none of the above are immediately available and a delay of more than one hour is anticipated before such medical attention can be obtained, induction of vomiting may be appropriate using IPECAC syrup (Contraindicated if there are any signs of CNS depression). This should be considered on a case by case basis following specialist advice. Specific other treatments may include ethanol therapy, fomepizole, treatment of acidosis and haemodialysis. Seek specialist advice without delay.

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### 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
- Unsuitable extinguishing media : Do not use water in a jet.
- Specific hazards during firefighting : Hazardous combustion products may include:  
A complex mixture of airborne solid and liquid particulates and gases (smoke).  
Carbon monoxide may be evolved if incomplete combustion occurs.  
Unidentified organic and inorganic compounds.
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid contact with skin and eyes.
- Environmental precautions : Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
- For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
- Additional advice : For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet.  
For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

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Local authorities should be advised if significant spillages cannot be contained.

### 7. HANDLING AND STORAGE

General Precautions : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.  
Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Advice on safe handling : Avoid prolonged or repeated contact with skin.  
Avoid inhaling vapour and/or mists.  
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.  
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Avoidance of contact : Strong oxidising agents.

#### Storage

Other data : Keep container tightly closed and in a cool, well-ventilated place.  
Use properly labeled and closable containers.  
Store at ambient temperature.

Packaging material : Suitable material: For containers or container linings, use mild steel or high density polyethylene.  
Unsuitable material: Zinc., Avoid contact with galvanized materials.

Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### Components with workplace control parameters

| Components | CAS-No.  | Value type<br>(Form of exposure)           | Control parameters / Permissible concentration | Basis |
|------------|----------|--|--|-------|
| Ethanediol | 107-21-1 | TWA<br>(Vapour)                            | 25 ppm   | ACGIH |
| Ethanediol |          | STEL<br>(Vapour)                           | 50 ppm   | ACGIH |
| Ethanediol |          | STEL<br>(Inhalable fraction, Aerosol only) | 10 mg/m3                                       | ACGIH |

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### Biological occupational exposure limits

No biological limit allocated.

### Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods  
<http://www.cdc.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods  
<http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances  
<http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA) , Germany  
<http://www.dguv.de/inhalt/index.jsp>

L'Institut National de Recherche et de Sécurité, (INRS), France <http://www.inrs.fr/accueil>

### Engineering measures

: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:  
Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

#### General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

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**Personal protective equipment****Protective measures**

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory protection : No respiratory protection is ordinarily required under normal conditions of use.  
In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for the combination of organic gases and vapours and particles [Type A/Type P boiling point >65°C (149°F)].

Hand protection  
Remarks

: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Eye protection : If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and body protection : Skin protection is not ordinarily required beyond standard work clothes.  
It is good practice to wear chemical resistant gloves.

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Thermal hazards : Not applicable

### Environmental exposure controls

General advice : Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.  
Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.  
Information on accidental release measures are to be found in section 6.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid at room temperature.

Colour : red

Odour : characteristic

Odour Threshold : Data not available

pH : Not applicable

Melting point/freezing point :  $\leq -38\text{ }^{\circ}\text{C}$  /  $\leq -36\text{ }^{\circ}\text{F}$  (50.0 hPa)  
Method: ASTM D1177

Initial boiling point and boiling range :  $> 100\text{ }^{\circ}\text{C}$  /  $212\text{ }^{\circ}\text{F}$  Estimated value(s)

Flash point : Method: Unspecified  
Not applicable

Evaporation rate : Data not available

Flammability (solid, gas) : Data not available

Upper explosion limit : Typical 15 %(V)

Lower explosion limit : Typical 3 %(V)

Vapour pressure : Data not available

Relative vapour density : Data not available

Relative density : 1.124 (20  $^{\circ}\text{C}$  / 68  $^{\circ}\text{F}$ )

Density : 1,124 kg/m<sup>3</sup> (20  $^{\circ}\text{C}$  / 68  $^{\circ}\text{F}$ )  
Method: ASTM D4052

Solubility(ies)

Water solubility : completely soluble

Solubility in other solvents : Data not available

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|  |   |
|--|---|
| Partition coefficient: n-octanol/water | : Data not available  |
| Auto-ignition temperature              | : > 200 °C / 392 °F   |
| Decomposition temperature              | : Data not available  |
| Viscosity                              |   |
| Viscosity, dynamic                     | : Data not available  |
| Viscosity, kinematic                   | : Method: Unspecified<br>Not applicable                     |
| Explosive properties                   | : Not classified  |
| Oxidizing properties                   | : Data not available  |
| Conductivity                           | : This material is not expected to be a static accumulator. |
| Molecular weight                       | : Not applicable  |

### 10. STABILITY AND REACTIVITY

|                                    |   |
|------------------------------------|---|
| Chemical stability                 | : Stable.   |
| Possibility of hazardous reactions | : Reacts with strong oxidising agents.                |
| Conditions to avoid                | : Extremes of temperature and direct sunlight.        |
| Incompatible materials             | : Strong oxidising agents.                            |
| Hazardous decomposition products   | : No decomposition if stored and applied as directed. |

### 11. TOXICOLOGICAL INFORMATION

|  |   |
|--|---|
| Basis for assessment                     | : Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s). |
| Information on likely routes of exposure | : Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.   |

#### Acute toxicity

##### **Product:**

|                     |                                 |
|---------------------|---------------------------------|
| Acute oral toxicity | : LD50 rat: > 500 - 2,000 mg/kg |
|---------------------|---------------------------------|

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Remarks: Harmful if swallowed.

Acute inhalation toxicity : LC 50 Rat: > 5 mg/l  
Exposure time: 4 h  
Remarks: Low toxicity:

Acute dermal toxicity : LD50 Rabbit: > 5,000 mg/kg  
Remarks: Low toxicity:

### Skin corrosion/irritation

#### Product:

Remarks: Slightly irritating to skin., Based on available data, the classification criteria are not met.

### Serious eye damage/eye irritation

#### Product:

Remarks: Slightly irritating to the eye., Based on available data, the classification criteria are not met.

### Respiratory or skin sensitisation

#### Product:

Remarks: Not a skin sensitiser.  
Based on available data, the classification criteria are not met.

### Germ cell mutagenicity

#### Product:

Remarks: Non mutagenic, Based on available data, the classification criteria are not met.

### Carcinogenicity

#### Product:

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

| Material   | GHS/CLP Carcinogenicity Classification |
|------------|--|
| Ethenediol | No carcinogenicity classification.     |

### Reproductive toxicity

#### Product:

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Remarks: Not a developmental toxicant., Does not impair fertility., Based on available data, the classification criteria are not met.

### STOT - single exposure

**Product:**

Remarks: Based on available data, the classification criteria are not met.

### STOT - repeated exposure

**Product:**

Remarks: Kidney: can cause kidney damage.

### Aspiration toxicity

**Product:**

Not an aspiration hazard.

### Further information

**Product:**

Remarks: Slightly irritating to respiratory system.

Remarks: Inhalation of vapours or mists may cause irritation to the respiratory system.

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## 12. ECOLOGICAL INFORMATION

Basis for assessment : Ecotoxicological data have not been determined specifically for this product.  
Information given is based on a knowledge of the components and the ecotoxicology of similar products.  
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

### Ecotoxicity

**Product:**

Toxicity to fish (Acute toxicity) :  
Remarks: LC/EC/IC50 > 100 mg/l  
Practically non toxic:  
Based on available data, the classification criteria are not met.

Toxicity to crustacean (Acute toxicity) :  
Remarks: LC/EC/IC50 > 100 mg/l  
Practically non toxic:  
Based on available data, the classification criteria are not met.

Toxicity to algae/aquatic :

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plants (Acute toxicity)                      Remarks: LC/EC/IC50 > 100 mg/l  
Practically non toxic:  
Based on available data, the classification criteria are not met.

Toxicity to fish (Chronic toxicity)                      : Remarks: Data not available  
Toxicity to crustacean (Chronic toxicity)                      : Remarks: Data not available  
Toxicity to microorganisms (Acute toxicity)                      : Remarks: Data not available

### Persistence and degradability

#### Product:

Biodegradability                      : Remarks: Readily biodegradable.

### Bioaccumulative potential

#### Product:

Bioaccumulation                      : Remarks: Does not bioaccumulate significantly.

Partition coefficient: n-octanol/water                      : Remarks: Data not available

### Mobility in soil

#### Product:

Mobility                      : Remarks: Liquid under most environmental conditions., If product enters soil, it will be highly mobile and may contaminate groundwater., Dissolves in water., Poses a significant risk of oxygen depletion in aquatic systems.

### Other adverse effects

no data available

#### Product:

Additional ecological information                      : Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential.

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## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues                      : Recover or recycle if possible.  
It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.  
Do not dispose into the environment, in drains or in water courses  
  
Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.  
Waste, spills or used product is dangerous waste.

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|------------------------------|---|
| Contaminated packaging       | : Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations. |
| Local legislation<br>Remarks | : Disposal should be in accordance with applicable regional, national, and local laws and regulations.  |

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### 14. TRANSPORT INFORMATION

#### International Regulations

##### ADR

Not regulated as a dangerous good

##### IATA-DGR

Not regulated as a dangerous good

##### IMDG-Code

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied. MARPOL Annex 1 rules apply for bulk shipments by sea.

#### Special precautions for user

|         |  |
|---------|--|
| Remarks | : Special Precautions: Refer to Section 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport. |
|---------|--|

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### 15. REGULATORY INFORMATION

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

The Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 (amended version issued 2000). The Factories Act, 1948, The Second Schedule: Permissible levels of certain chemical substances in work environment, as amended through 1987. India Central motor Vehicles (Amendment) Rules 1993.

#### Other international regulations

##### The components of this product are reported in the following inventories:

|       |                    |
|-------|--------------------|
| REACH | : Not established. |
| TSCA  | : Not established. |

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**16. OTHER INFORMATION****Full text of R-Phrases**

R22 Harmful if swallowed.

**Full text of H-Statements**

H302 Harmful if swallowed.  
H373 May cause damage to organs through prolonged or repeated exposure.

**Full text of other abbreviations**

Acute Tox. Acute toxicity  
STOT RE Specific target organ toxicity - repeated exposure

Abbreviations and Acronyms : The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU IUCLID data base, EC 1272 regulation, etc).  
The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

SDS Regulation : Regulation 1907/2006/EC

**Further information**

Other information : A vertical bar (|) in the left margin indicates an amendment from the previous version.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.