

# SAFETY DATA SHEET

## Q8 Antifreeze Lobrid



### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

**Product name** : Q8 Antifreeze Lobrid  
**Material uses** : Antifreeze and coolant for engines and industrial equipment

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

#### 1.3 Details of the supplier of the safety data sheet

**Manufacturer / Distributor** : Kuwait Petroleum Companies in the Benelux  
Company Office: Brusselstraat 59, B-2018, Antwerp  
Contactaddress: Petroleumkaai 7, B-2020, Antwerp  
Tel. +32 3 247 38 11, Fax +32 3 216 03 42

**e-mail address of person responsible for this SDS** : SDSinfo@Q8.com, communication preferably in English only.

#### 1.4 Emergency telephone number

**Europe** : +44 (0) 1235 239 670  
**Global (English only)** : +44 (0) 1865 407 333



### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Acute Tox. 4, H302  
STOT RE 2, H373

**Ingredients of unknown toxicity** : None.

**Ingredients of unknown ecotoxicity** : None.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : H302 - Harmful if swallowed.  
H373 - May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements

## SECTION 2: Hazards identification

- General** : P103 - Read label before use.  
P102 - Keep out of reach of children.  
P101 - If medical advice is needed, have product container or label at hand.
- Prevention** : P260 - Do not breathe vapor.  
P270 - Do not eat, drink or smoke when using this product.  
P264 - Wash hands thoroughly after handling.
- Response** : P314 - Get medical attention if you feel unwell.  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.
- Storage** : Not applicable.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazardous ingredients** : Ethane-1,2-diol
- Supplemental label elements** : Not applicable.
- Special packaging requirements**
- Containers to be fitted with child-resistant fastenings** : Not applicable.
- Tactile warning of danger** : Yes, applicable.

### 2.3 Other hazards

- Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers   | %   | Regulation (EC) No. 1272/2008 [CLP]  | Type    |
|-------------------------|---|-----|--|---------|
| Ethane-1,2-diol         | REACH #:<br>01-2119456816-28<br>EC: 203-473-3<br>CAS: 107-21-1<br>Index: 603-027-00-1 | ≥90 | Acute Tox. 4, H302<br>STOT RE 2, H373<br><br><b>See Section 16 for the full text of the H statements declared above.</b> | [1] [2] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

- [1] Substance classified with a health or environmental hazard  
[2] Substance with a workplace exposure limit  
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII  
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII  
[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Have conscious person drink several glasses of water or milk. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Induce vomiting by sticking finger in throat. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. The product contains bitrex. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray (fog).
- Unsuitable extinguishing media** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

## SECTION 5: Firefighting measures

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## SECTION 7: Handling and storage

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

| Product/ingredient name | Exposure limit values  |
|-------------------------|--|
| ethane-1,2-diol         | <b>Lijst Grenswaarden / Valeurs Limites (Belgium, 4/2014).<br/>Absorbed through skin.</b><br>TWA: 20 ppm 8 hours. Form: aerosol<br>TWA: 52 mg/m <sup>3</sup> 8 hours. Form: aerosol<br>M: 40 ppm Form: aerosol<br>M: 104 mg/m <sup>3</sup> Form: aerosol |

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### DNELs/DMELs

No DNELs/DMELs available.

#### PNECs

No PNECs available.

### 8.2 Exposure controls

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## SECTION 8: Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** :  Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Wear suitable gloves tested to EN374. Recommended: < 1 hour (breakthrough time): nitrile rubber 0.17 mm.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** :  Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Boiling point > 65 °C: A1; Boiling point < 65 °C: AX1; Hot material: A1P2.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid.
- Appearance** : Clear.
- Color** :  Violet.
- Odor** : Sweet. [Slight]
- Odor threshold** : Not available.
- pH** : 8
- Melting point/freezing point** : <-18°C
- Initial boiling point and boiling range** : >160°C
- Flash point** : Closed cup: >124°C [ASTM D93.]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Upper/lower flammability or explosive limits** : Lower: 3.4%  
Upper: 15.1%
- Vapor pressure** :  0.02 kPa [room temperature]
- Vapor density** : Not available.
- Relative density** : 1.1
- Solubility(ies)** : Easily soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/ water** : Not available.



## SECTION 9: Physical and chemical properties

|                           |                   |
|---------------------------|-------------------|
| Auto-ignition temperature | : Not applicable. |
| Decomposition temperature | : Not available.  |
| Viscosity (20°C)          | : 20 to 30 cSt    |
| Viscosity (40°C)          | : Not available.  |
| Explosive properties      | : Not applicable. |
| Oxidizing properties      | : Not applicable. |

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

|   |  |
|---|--|
| 10.1 Reactivity                         | : No specific test data related to reactivity available for this product or its ingredients.           |
| 10.2 Chemical stability                 | : The product is stable.   |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| 10.4 Conditions to avoid                | : Avoid all possible sources of ignition (spark or flame). and moisture                                |
| 10.5 Incompatible materials             | : Reactive or incompatible with the following materials:<br>Strong oxidizing materials                 |
| 10.6 Hazardous decomposition products   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result    | Species | Dose       | Exposure |
|-------------------------|-----------|---------|------------|----------|
| ethane-1,2-diol         | LD50 Oral | Rat     | 4700 mg/kg | -        |

Conclusion/Summary : Not available.

#### Acute toxicity estimates

| Route | ATE value |
|-------|-----------|
| Oral  | 500 mg/kg |

#### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure                | Observation |
|-------------------------|--------------------------|---------|-------|-------------------------|-------------|
| ethane-1,2-diol         | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |
|                         | Eyes - Mild irritant     | Rabbit  | -     | 1 hours 100 milligrams  | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 6 hours 1440 milligrams | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 555 milligrams          | -           |

Conclusion/Summary : Not available.

#### Sensitization

Conclusion/Summary : Not available.

#### Mutagenicity

## SECTION 11: Toxicological information

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category   | Route of exposure | Target organs  |
|-------------------------|------------|-------------------|----------------|
| Ethanediol              | Category 2 | Not determined    | Not determined |

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

**General** : May cause damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.



Antifreeze Lobrid

## SECTION 11: Toxicological information

**Fertility effects** : No known significant effects or critical hazards.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Product/ingredient name | Result                               | Species                                    | Exposure |
|-------------------------|--------------------------------------|--|----------|
| ethane-1,2-diol         | Acute LC50 6900000 µg/l Fresh water  | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
|                         | Acute LC50 41000000 µg/l Fresh water | Daphnia - Daphnia magna - Neonate          | 48 hours |
|                         | Acute LC50 8050000 µg/l Fresh water  | Fish - Pimephales promelas                 | 96 hours |

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

| Product/ingredient name | Test   | Result          | Dose | Inoculum |
|-------------------------|--|-----------------|------|----------|
| ethane-1,2-diol         | OECD 301A<br>301A Ready Biodegradability - DOC Die-Away Test | >70 % - 28 days | -    | -        |

**Conclusion/Summary** : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| ethane-1,2-diol         | -                 | -          | Readily          |

### 12.3 Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| ethane-1,2-diol         | -1.36              | -   | low       |

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

**Product**

## SECTION 13: Disposal considerations

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.

### European waste catalogue (EWC)

| Waste code | Waste designation                                 |
|------------|---|
| 16 01 14*  | antifreeze fluids containing hazardous substances |

### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.


**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.


## SECTION 14: Transport information


|  | ADR/RID        | ADN            | IMDG           | IATA           |
|--|----------------|----------------|----------------|----------------|
| <b>14.1 UN number</b>                  | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| <b>14.2 UN proper shipping name</b>    | -              | -              | -              | -              |
| <b>14.3 Transport hazard class(es)</b> | -              | -              | -              | -              |
| <b>14.4 Packing group</b>              | -              | -              | -              | -              |
| <b>14.5 Environmental hazards</b>      | No.            | No.            | No.            | No.            |
| <b>Additional information</b>          | -              | -              | -              | -              |

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**

**Proper shipping name** :  Antifreeze Lobrid

**Ship type** : 

**Pollution category** : 

## SECTION 15: Regulatory information

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

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorization

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

#### Other EU regulations

**Europe inventory** : All components are listed or exempted.

##### Ozone depleting substances (1005/2009/EU)

Not listed.

##### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

##### Seveso Directive

This product is not controlled under the Seveso Directive.

**Hazard class for water (WGK)** : 1 Appendix No. 4

**VOC content** : Exempt.

#### International regulations

##### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

##### Montreal Protocol (Annexes A, B, C, E)

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

##### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

##### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

#### International lists

##### National inventory

- |                          |   |
|--------------------------|---|
| <b>Australia</b>         | : All components are listed or exempted.  |
| <b>Canada</b>            | : All components are listed or exempted.  |
| <b>China</b>             | : All components are listed or exempted.  |
| <b>Japan</b>             | : <input checked="" type="checkbox"/> <b>Japan inventory (ENCS)</b> : All components are listed or exempted.<br><b>Japan inventory (ISHL)</b> : Not determined. |
| <b>Malaysia</b>          | : All components are listed or exempted.  |
| <b>New Zealand</b>       | : All components are listed or exempted.  |
| <b>Philippines</b>       | : All components are listed or exempted.  |
| <b>Republic of Korea</b> | : All components are listed or exempted.  |
| <b>Taiwan</b>            | : <input checked="" type="checkbox"/> All components are listed or exempted.  |
| <b>Turkey</b>            | : <input checked="" type="checkbox"/> All components are listed or exempted.  |
| <b>United States</b>     | : All components are listed or exempted.  |

**15.2 Chemical Safety Assessment** :  Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

### Abbreviations and acronyms

: ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number  
vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification                        | Justification                            |
|---------------------------------------|--|
| Acute Tox. 4, H302<br>STOT RE 2, H373 | Calculation method<br>Calculation method |

### Full text of abbreviated H statements

|              |   |
|--------------|---|
| H302<br>H373 | Harmful if swallowed.<br>May cause damage to organs through prolonged or repeated exposure. |
|--------------|---|

### Full text of classifications [CLP/GHS]

|                                       |   |
|---------------------------------------|---|
| Acute Tox. 4, H302<br>STOT RE 2, H373 | ACUTE TOXICITY (oral) - Category 4<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
|---------------------------------------|---|

**Training advice** : Ensure operatives are trained to minimise exposures.

**Date of printing** : 05-07-2017

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**Date of previous issue** : 07-01-2015

**Version** : 1.04

**Prepared by** : Kuwait Petroleum Research & Technology B.V., The Netherlands

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.