SAFETY DATA SHEET

Q8 Antifreeze OAT-2



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

1.1 Product identifier

Product name : Q8 Antifreeze OAT-2
UFI : MQ30-30KE-100J-27XR

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

Material uses : Antifreeze and coolant for engines and industrial equipment

1.3 Details of the supplier of the safety data sheet

Supplier: Kuwait Petroleum Companies in the Benelux

Company Office: Desguinlei 100 - 8, 2018 Antwerp, Belgium Contactaddress: Petroleumkaai 7, 2020 Antwerp, Belgium

Tel. +32 3 247 38 11, Fax +32 3 216 03 42

Manufacturer / Distributor : Kuwait Petroleum Belgium N.V./S.A.

Petroleumkaai 7

B-2020 Antwerp

Belgium

Q8Oils Italia S.r.l. Via Volpedo 2

15050 Castellar Guidobono (AL)

Italy

CARECHEM24

e-mail address of person

responsible for this SDS : SDSinfo@Q8.com, communication preferably in English only.

PCN Information contact : PCNinfo@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

National advisory body/Poison Center

Belgium : Poison Centre : +32 (0)70 245 245

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]

ACUTE TOXICITY (oral)

SPECIFIC TARGET ORGAN TOXICITY (REPEATED

Category 2

H302

Category 2

H373

EXPOSURE)

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

Ingredients of unknown

toxicity

: None.

Ingredients of unknown

: None.

ecotoxicity

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 :





Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 1/15

Q8 Antifreeze OAT-2

SECTION 2: Hazards identification

Signal word : Warning

Hazard statements : H302 - Harmful if swallowed.

H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

General : P103 - Read carefully and follow all instructions.

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 thoroughly after handling.

Response : P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or physician.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

Hazardous ingredients

Supplemental label

: Not applicable.

: ethanediol

elements

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and : Not applicable.

articles

Special packaging requirements

Containers to be fitted with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Yes, applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No.

1907/2006, Annex XIII

: This mixture does not contain any substances that are assessed to be a PBT or a

vPvB.

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
ethanediol	REACH #: 01-2119456816-28 EC: 203-473-3 CAS: 107-21-1 Index: 603-027-00-1	≥90	Acute Tox. 4, H302 STOT RE 2, H373 (kidneys)	ATE [Oral] = 500 mg/kg	[1] [2]
sodium benzoate	REACH #: 01-2119460683-35 EC: 208-534-8 CAS: 532-32-1	≤5	Eye Irrit. 2, H319	-	[1]
methyl-1H-benzotriazole	REACH #: 01-2119979081-35	<1	Acute Tox. 4, H302 Repr. 2, H361d (oral)	ATE [Oral] = 720 mg/kg	[1]

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 2/15

2020/070 - Deigiuili			
Q8 Antifreeze OAT-2			
SECTION 3: Composi	tion/information c	on ingredients	
	C: 249-596-6 :AS: 29385-43-1	Aquatic Chronic 2, H411	
		See Section 16 for the full text of the H statements declared	

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.

above.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

... Description of first aid ineasures

: 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

Eye contact

: 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. The product contains bitrex. Have conscious person drink several glasses of water or milk. 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. 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.

Date of issue/Date of revision: 02-10-2024Date of previous issue: No previous validationVersion: 1

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO₂, 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 metal oxide/oxides

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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

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.

Date of issue/Date of revision : 02-10-2024 Version :1 4/15 Date of previous issue : No previous validation

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.

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. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

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 nar	ne Exposure limit values
ethanediol	Limit values (Belgium, 5/2021) Absorbed through skin.
	TWA 8 hours: 20 ppm. Form: aerosol.
	TWA 8 hours: 52 mg/m³. Form: aerosol.
	Limit value - M: 40 ppm. Form: aerosol.
	Limit value - M: 104 mg/m³. Form: aerosol.
	EU OEL (Europe, 1/2022) Absorbed through skin.
	TWA 8 hours: 20 ppm.
	TWA 8 hours: 52 mg/m³.
	STEL 15 minutes: 40 ppm.
	STEL 15 minutes: 104 mg/m³.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

: 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.

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 5/15

SECTION 8: Exposure controls/personal protection

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
ethanediol	DNEL	Long term	7 mg/m³	General	Local
		Inhalation	,	population	l
	DNEL	Long term Inhalation	35 mg/m³	Workers	Local
	DNEL	Long term Dermal	53 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	106 mg/kg bw/day	Workers	Systemic
sodium benzoate	DNEL	Long term Inhalation	1.5 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	3 mg/m³	Workers	Systemic
	DNEL	Long term Oral	16.6 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	62.5 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.06 mg/m ³	General population	Local
	DNEL	Long term Inhalation	0.1 mg/m ³	Workers	Local
	DNEL	Long term Dermal	31.25 mg/ kg bw/day	General population	Systemic
methyl-1H-benzotriazole	DNEL	Long term Oral	0.01 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.01 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	350 μg/m ³	General population	Systemic
	DNEL	Long term Inhalation	21.2 mg/m³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
		10 mg/l 1 mg/l 20.9 mg/kg 199.5 mg/l	- - -

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.

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

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 6/15

SECTION 8: Exposure controls/personal 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. Gas and combination filter cartridges should comply with the European standard EN14387.

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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Appearance Clear to slightly hazy liquid.

Color : Orange : Mild. Odor

Odor threshold : Not available. : <-37°C (<-34.6°F) Melting point/freezing point **Boiling point or initial boiling** : >170°C (>338°F)

point and boiling range

Flammability : Not applicable. Lower and upper explosion : Not available.

limit

: Closed cup: 122°C (251.6°F) [Pensky-Martens] Flash point

Auto-ignition temperature : 398°C (748.4°F) : Not available. **Decomposition temperature**

pН 8.6

Viscosity Not available.

Solubility

Media	Result
cold water hot water	Easily soluble Easily soluble

Solubility in water : Not available.

Miscible with water Yes.

Date of issue/Date of revision : 02-10-2024 Version : 1 7/15 Date of previous issue : No previous validation

Q8 Antifreeze OAT-2

SECTION 9: Physical and chemical properties

Partition coefficient n-octanol/ : Not applicable.

water (log Pow)

Vapor pressure : Not available.

	Vapor Pressure at 20°C			Vapor pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
ethanediol	0.09226	0.012				

Density : 1.12 g/cm³ [20°C (68°F)]

Relative vapor density : 2.1 [Air = 1]
Explosive properties : Not applicable.
Oxidizing properties : Not applicable.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties : Not applicable.

Oxidizing properties : Not applicable.

9.2.2 Other safety characteristics

Miscible with water : Yes.

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 : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous : Under nor

decomposition products should

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanediol	LD50 Oral	Rat	4700 mg/kg	-
sodium benzoate	LD50 Oral	Rat	4070 mg/kg	-
methyl-1H-benzotriazole	LD50 Oral	Rat	675 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 8/15

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Q8 Antifreeze OAT-2	529.6	N/A	N/A	N/A	N/A
ethanediol	500	N/A	N/A	N/A	N/A
sodium benzoate	4070	N/A	N/A	N/A	N/A
methyl-1H-benzotriazole	720	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ethanediol	Eyes - Mild irritant	Rabbit	-	1 hours 100	-
	Eyes - Mild irritant	Rabbit	-	mg 24 hours 500	-
	Eyes - Moderate irritant	Rabbit	-	mg 6 hours 1440	-
methyl-1H-benzotriazole	Skin - Mild irritant Eyes - Mild irritant	Rabbit Rabbit	-	mg 555 mg 10 mg	- -

Conclusion/Summary: Not available.

Respiratory or skin sensitization

Conclusion/Summary: Not available.

Mutagenicity

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	-	kidneys

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 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.

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 9/15

Q8 Antifreeze OAT-2

SECTION 11: Toxicological information

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

: Not available.

effects

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.
 Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
ethanediol	Acute LC50 6900000 μg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 41000 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 8050000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
sodium benzoate	Acute LC50 484000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
methyl-1H-benzotriazole	Acute LC50 102 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 38 mg/l Fresh water	Fish - Pimephales promelas	96 hours

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
ethanediol	OECD 301A 301A Ready Biodegradability - DOC Die-Away Test	>70 % - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ethanediol	-	-	Readily

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 10/15

SECTION 12: Ecological information

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethanediol	-1.36	-	Low
sodium benzoate	-2.27		Low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 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

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.

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 11/15

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

user

14.6 Special precautions for : 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 Maritime transport in bulk according to IMO

instruments

: Not available.

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.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
Q8 Antifreeze OAT-2	≥90	3

Labeling : Not applicable.

Other EU regulations

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Air

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Water

Explosive precursors : Not applicable. Ozone depleting substances (1005/2009/EU)

Not listed.

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

Date of issue/Date of revision : 02-10-2024 Date of previous issue Version:1 12/15 : No previous validation

SECTION 15: Regulatory information

Not listed.

Persistent Organic Pollutants (1021/2019/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

Germany

Hazard class for water : 1

(WGK)

Switzerland

VOC content : Exempt.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

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.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Eurasian Economic Union: Russian Federation inventory: Not determined.

Japan : Japan inventory (CSCL): All components are listed or exempted.

Japan inventory (ISHL): All components are listed or exempted.

New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.

Thailand : Not determined.

Turkey : Not determined.

United States of America : All components are active or exempted.

Viet Nam : Not determined.

15.2 Chemical Safety

Assessment

: Chemical Safety Assessments for all substances in this product are either Complete

or Not applicable.

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 13/15

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road

ASTM = American Society for Testing and Materials

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DIN = German Institute for Standardization DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level EC = European Commission

EC50 = Half maximal effective concentration

EN = European Standard (Norm)

EUH statement = CLP-specific Hazard statement

GHS - Globally Harmonized System of Classification and Labeling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IC50 = Half maximal inhibitory concentration

IMDG = International Maritime Dangerous Goods

IMO = International Maritime Organisation

ISO = International Organization for Standardization

LC50 = Median lethal concentration

LD50 = Median lethal dose

LOAEL / LOAEC = Lowest Observed Adverse Effect Level / Concentration MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available

NOAEL / NOAEC = No Observed Adverse Effect Level / Concentration

NOEL / NOEC = No Observed Effect Level / Concentration

OECD = Organisation for Economic Co-operation and Development

OEL = Occupational Exposure Limit

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals

Regulation (EC) No. 1907/2006]

RID = The Regulations concerning the International Carriage of Dangerous Goods

by Rail

SDS = Safety Data Sheet

SVHC = Substances of Very High Concern

STEL = Short Term Exposure Limit

TLV = Threshold Limit Value

TWA = Time Weighted Average

UFI = Unique Formula Identifier

UN = United Nations

VOC = Volatile Organic Compound

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	Calculation method
STOT RE 2, H373	Calculation method

Full text of abbreviated H statements

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 14/15

Q8 Antifreeze OAT-2

SECTION 16: Other information

Full text of classifications [CLP/GHS]

Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Chronic 2 AQUATIC HAZARD (LONG-TERM) - Category 2

Eye Irrit. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Repr. 2 TOXIC TO REPRODUCTION - Category 2

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Training advice : Ensure operatives are trained to minimise exposures.

Date of printing : 02-10-2024 Date of issue/ Date of : 02-10-2024

revision

Date of previous issue : No previous validation

Version : 1

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

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

Date of issue/Date of revision : 02-10-2024 Date of previous issue : No previous validation Version : 1 15/15