SAFETY DATA SHEET

Q8 T 45 LS 90



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

1.1 Product identifier

Product name : Q8 T 45 LS 90

: SAE 90 **Viscosity or Type**

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

Material uses : Lubricating oil for automotive transmissions

1.3 Details of the supplier of the safety data sheet

Supplier : Kuwait Petroleum Companies in the Benelux

> Company Office: Brusselstraat 59, 2018 Antwerp, Belgium Contactaddress: Petroleumkaai 7, 2020 Antwerp, Belgium

> > Q80ils Italia S.r.I.

Italy

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

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

Petroleumkaai 7

Via Volpedo 2 B-2020 Antwerp 15050 Castellar Guidobono (AL)

Belgium

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 CARECHEM24 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]

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown : None.

toxicity

Ingredients of unknown : None.

ecotoxicity

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

2.2 Label elements

Signal word : No signal word.

: No known significant effects or critical hazards. **Hazard statements**

Precautionary statements

Prevention : Not applicable. Response : Not applicable.

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SECTION 2: Hazards identification

Storage

: Not applicable.

Disposal

: Not applicable.

Supplemental label

elements

Contains Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) and Reaction product of 1.3.4-thiadiazolidine-2.5-dithione, formaldehyde and phenol.

heptyl derivs.. May produce an allergic reaction.

Safety data sheet available on request.

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

: Not applicable.

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant

fastenings

Tactile warning of danger : Not 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 : Prolonged or repeated contact may dry skin and cause irritation. Contains Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.

. May cause endocrine disruption.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Severely refined mineral oil (C15 - C50) * - Not classified.	-	≥75 - ≤90	Not classified.	-	[2]
Distillates (petroleum), hydrotreated heavy naphthenic	REACH #: 01-2119467170-45 EC: 265-155-0 CAS: 64742-52-5 Index: 649-465-00-7	≤3	Not classified.	-	[2]
Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	REACH #: 01-2119493620-38 EC: 931-384-6	≤2.3	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	ATE [Oral] = 2000 mg/kg Eye Irrit. 2, H319: C ≥ 50% Skin Sens. 1, H317: C ≥ 9.39%	[1]
Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14, -tert-alkyl	REACH #: 01-2119978530-33 EC: 939-591-3 CAS: 1471315-74-8	≤1.7	Aquatic Chronic 3, H412	-	[1]

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SECTION 3: Composition/information on ingredients

Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	REACH #: 01-2119971727-23 EC: 939-460-0 CAS: 1471311-26-8	≤0.3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	-	[1] [3] [4]
			See Section 16 for the full text of the H statements declared above.		

Contains one or more of the following:

CAS: 64742-54-7, EC: 265-157-1, EU REACH: 01-2119484627-25 CAS: 64742-55-8, EC: 265-158-7, EU REACH: 01-2119487077-29 CAS: 64742-56-9, EC: 265-159-2, EU REACH: 01-2119480132-48 CAS: 64742-57-0, EC: 265-160-8, EU REACH: 01-2119489287-22 CAS: 64742-62-7, EC: 265-166-0, EU REACH: 01-2119480472-38 CAS: 64742-65-0, EC: 265-169-7, EU REACH: 01-2119471299-27

The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extract according to IP 346 method, and are therefore not classified as carcinogen according to Regulation (EC) No 1272/2008, note L.

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.

Ingestion

- Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance of equivalent concern
- [4] Substance with endocrine disrupting properties

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 evelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

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 if adverse health effects persist or are severe. 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.

: Wash skin thoroughly with soap and water or use recognized skin cleanser. Skin contact Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Wash clothing before reuse. Clean shoes thoroughly before reuse.

: Wash out mouth with water. Remove dentures if any. 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. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. 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

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SECTION 4: First aid measures

Eye contact : No specific data. Inhalation : No specific data.

Skin contact Adverse symptoms may include the following:

> irritation dryness cracking

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, 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 sulfur 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

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SECTION 6: Accidental release measures

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. 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. 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.

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

Advice on general occupational hygiene

: Put on appropriate personal protective equipment (see Section 8).

: 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 name	Exposure limit values
Severely refined mineral oil (C15 - C50) * - Not	EU OEL (Europe)
classified.	TWA 8 hours: 5 mg/m³. Form: Mist.
	STEL 15 minutes: 10 mg/m³. Form: Mist.
Distillates (petroleum), hydrotreated heavy	Limit values (Belgium, 5/2021) [Olie]
naphthenic	TWA 8 hours: 5 mg/m³. Form: mist.
	STEL 15 minutes: 10 mg/m³. Form: mist.
	EU OEL (Europe)
	TWA: 5 mg/m³ (oil Mist).

Biological exposure indices

No exposure indices known.

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SECTION 8: Exposure controls/personal protection

procedures

Recommended monitoring: 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

Product/ingredient name	Type	Exposure	Value	Population	Effects
Distillates (petroleum), hydrotreated	DNEL	Long term Oral	0.74 mg/	General	Systemic
heavy naphthenic	DNEL	Long term Dermal	kg bw/day 0.97 mg/ kg bw/day	population Workers	Systemic
	DNEL	Long term Inhalation	1.19 mg/m ³	General population	Local
	DNEL	Long term Inhalation	2.73 mg/m ³		Systemic
	DNEL	Long term Inhalation	5.58 mg/m ³	Workers	Local
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	DNEL	Long term Oral	0.33 mg/ kg bw/day	General population	Systemic
don'to.	DNEL	Long term Inhalation	0.58 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	2.35 mg/m ³		Systemic
	DNEL	Long term Dermal	33.33 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	66.7 mg/ kg bw/day	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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 evewear 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. Wear suitable gloves tested to EN374. Recommended: < 1 hour (breakthrough time): nitrile rubber 0.17 mm. Provide employee with skin care programmes.

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SECTION 8: Exposure controls/personal protection

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

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. [Oily liquid.]

Appearance Clear. Color Yellow

Odor Characteristic. Not available. **Odor threshold** Melting point/freezing point : Not applicable.

: <-24°C (<-11.2°F) [ASTM D 97] **Pour point**

Boiling point or initial boiling

point and boiling range

: >300°C (>572°F)

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

limit

Open cup: >200°C (>392°F) [ASTM D 92] Flash point

: >300°C (>572°F) **Auto-ignition temperature**

Decomposition temperature : >300°C

pН : Not applicable.

Kinematic (40°C (104°F)): 170 mm²/s (170 cSt) [ASTM D 445] **Viscosity**

Kinematic (100°C (212°F)): 16.7 mm²/s (16.7 cSt) [ASTM D 445]

Solubility

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water : Not available. Partition coefficient n-octanol/ : Not applicable.

water (log Pow)

Vapor pressure : <0.01 kPa (<0.075006 mm Hg)

: 0.9 g/cm³ [15°C (59°F)] [ASTM D 4052] **Density**

Relative vapor density : Not available. **Explosive properties** : Not applicable. **Oxidizing properties** Not applicable.

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SECTION 9: Physical and chemical properties

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

Not applicable.

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 : Reactive or incompatible with the following materials:

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

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	LC50 Inhalation Dusts and mists	Rat - Male, Female	5.53 mg/l	4 hours
	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg >5000 mg/kg	-
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-
Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	LD50 Oral	Rat - Male, Female	2000 mg/kg	-

Conclusion/Summary: Not available.

Acute toxicity estimates

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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 T 45 LS 90 Severely refined mineral oil (C15 - C50) * - Not classified.	123571.2 N/A	N/A N/A	N/A N/A	N/A N/A	N/A 5.53
Reaction products of bis(4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched)	2000	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Severely refined mineral oil (C15 - C50) * - Not classified.	Eyes - Iris lesion	Rabbit	0	48 hours	72 hours
	Eyes - Redness of the conjunctivae	Rabbit	0.33	48 hours	72 hours
	Skin - Edema Skin - Erythema/Eschar	Rabbit Rabbit	0 0.17	72 hours 72 hours	7 days 7 days

Conclusion/Summary: Not available.

Respiratory or skin sensitization

Product/ingredient name	Route of exposure	Species	Result
Severely refined mineral oil (C15 - C50) * - Not classified.	skin	Guinea pig	Not sensitizing
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	skin	Guinea pig	Sensitizing

Conclusion/Summary: Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Severely refined mineral oil (C15 - C50) * - Not classified.	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative

Conclusion/Summary: Not available.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	Negative - Dermal - TC	Mouse - Female	-	78 weeks

Conclusion/Summary: Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	Negative	Negative	Negative		Oral: 1000 mg/ kg	-

Conclusion/Summary: Not available.

Teratogenicity

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SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	Negative - Dermal	Rat	2000 mg/kg	7 days per week

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

Skin contact: Defatting to the skin. May cause skin dryness and irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation dryness cracking

Ingestion: No specific data.

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) * - Not classified.	Sub-acute LOAEL Oral	Rat - Male	125 mg/kg	13 weeks; 5 hours per day
	Sub-chronic NOAEL Oral	Rat - Male, Female	≥2000 mg/kg	13 weeks; 5 days per week
	Sub-acute NOAEL Inhalation Vapor	Rat - Male	>980 mg/m³	4 weeks; 5 days per week

Conclusion/Summary: Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/

or dermatitis.

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SECTION 11: Toxicological information

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
Severely refined mineral oil (C15 - C50) * - Not classified.	Acute NEL >100 mg/l Fresh water	Algae	72 hours
	Acute NEL >10000 mg/l Fresh water Acute NEL ≥100 mg/l Fresh water Chronic NEL 10 mg/l Fresh water	Daphnia - <i>Daphnia Magma</i> Fish - <i>Pimephales promelas</i> Daphnia - <i>Daphnia magna</i>	48 hours 96 hours 21 days

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Reaction Products of alcohols, C14-18, C18 unsat. , esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl	-	17.4 % - 28 days	-	-
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	-	17.4 % - 28 days	-	-

Conclusion/Summary: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Severely refined mineral oil (C15 - C50) * - Not classified.	-	-	Inherent
Distillates (petroleum), hydrotreated heavy naphthenic	-	-	Inherent
Reaction Products of alcohols, C14-18, C18 unsata , esterified with phosphorus pentoxide and salted with		-	Not readily
amines, C12-14,-tert-alkyl Reaction product of 1,3,4-thiadiazolidine- 2,5-dithione, formaldehyde and phenol, heptyl derivs.	-	-	Not readily

12.3 Bioaccumulative potential

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SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
Reaction Products of alcohols, C14-18, C18 unsat. , esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl Reaction product of	9.4	-	High
1,3,4-thiadiazolidine- 2,5-dithione, formaldehyde and phenol, heptyl derivs.	3.4	-	T ngii

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

May cause endocrine disruption.

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
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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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

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Substance of equivalent concern for environment	Reaction product of 1,3,4-thiadiazolidine- 2,5-dithione, formaldehyde and phenol, heptyl derivs.	Listed	-	-
Endocrine disrupting properties for environment	reaction products of 1,3,4-thiadiazolidine- 2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP- HP) (with ≥ 0,1 % w/w 4-heptylphenol, branched and linear)	Listed	57	5/1/2022

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Substance of equivalent concern for environment	Reaction product of 1,3,4-thiadiazolidine- 2,5-dithione, formaldehyde and phenol, heptyl derivs.	Candidate	-	-
Endocrine disrupting properties for environment	reaction products of 1,3,4-thiadiazolidine- 2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP- HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl)	Recommended	ED/01/2018	10/1/2019

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

No listed substance

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Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 - Belgium

Q8 T 45 LS 90

SECTION 15: Regulatory information

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)

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 : 2

(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): Not determined.

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.

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SECTION 15: Regulatory information

Turkey: Not determined.

United States of America : Al

: 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.

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 [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]

Not classified.

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SECTION 16: Other information

The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extract according to IP 346 method, and are therefore not classified as carcinogen according to Regulation (EC) No 1272/2008, note L.

Note L: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Full text of abbreviated H statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1B	SKIN SENSITIZATION - Category 1B

Training advice : Ensure operatives are trained to minimise exposures.

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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.

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