

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

1.1 Product identifier

Product name : FLUIDMATIC XLD FE
Product code : 089937
Product description : Not available.
Product type : Liquid.
Other means of identification : Not available.

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

Identified uses

Not applicable.

Uses advised against

Not applicable.

Not applicable.

1.3 Details of the supplier of the safety data sheet

TotalEnergies Lubrifiants
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rm.gb-msds@totalenergies.com

H.S.E

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : National Poisons Information Service (NPIS): 111

Supplier

Telephone number : Emergency telephone: +44 1235 239670

Hours of operation : Edit the content of sentence <GB Telephone Number - Supplier - Hours of operation> to define this output

Information limitations : Edit the content of sentence <GB Telephone Number - Supplier - Information limitations> to define this output

**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]**

Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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**Signal word** : No signal word.**Hazard statements** : H412 - Harmful to aquatic life with long lasting effects.**Precautionary statements****General** : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read carefully and follow all instructions.**Prevention** : P273 - Avoid release to the environment.**Response** : Not applicable.**Storage** : Not applicable.**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.**Supplemental label elements** : Contains 1,2-Propanediol,3-amino-,N,N-dicoco alkyl derivs and 2-tetradecyloxirane, reaction products with boric acid. May produce an allergic reaction.**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : 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 in a concentration $\geq 0,1$ %. This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.**Other hazards which do not result in classification** : Hazard of slipping on spilt product.**SECTION 3: Composition/information on ingredients****3.2 Mixtures** : Mixture

**SECTION 3: Composition/information on ingredients**

Product/ingredient name	Identifiers	%	Classification	Type
Distillates (petroleum), hydrotreated light paraffinic	REACH #: 01-2119487077-29 EC: 265-158-7 CAS: 64742-55-8	≥25 - ≤50	Asp. Tox. 1, H304	[1]
Distillates (petroleum), hydrotreated light paraffinic	REACH #: 01-2119487077-29 EC: 265-158-7 CAS: 64742-55-8	≤5	Asp. Tox. 1, H304	[1]
mineral oil	-	≤5	Asp. Tox. 1, H304	[1]
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	REACH #: 01-2119969520-35 EC: 800-172-4 CAS: 398141-87-2	≤3	Aquatic Chronic 2, H411	[1]
Z-76	REACH #: 01-0000020142-86 EC: 482-000-4	<1	Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
1-(tert-dodecylthio)propan-2-ol	REACH #: 01-2119953277-30 EC: 266-582-5 CAS: 67124-09-8	≤1	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
2-tetradecyloxirane, reaction products with boric acid	REACH #: 01-2119976364-28 EC: 701-392-2	≤0.3	Skin Sens. 1B, H317	[1]
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	REACH #: 01-2119777867-13 EC: 202-414-9 CAS: 95-38-5	<0.1	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	[1]
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	REACH #: 01-2119510877-33 EC: 620-540-6 CAS: 1218787-32-6	<0.1	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) See Section 16 for the full text of the H statements declared above.	[1]

Additional information : Mineral oil of petroleum origin Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

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

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 if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Skin contact** : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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.

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** : 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, water spray (fog) or foam.
- 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. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**SECTION 5: Firefighting measures**

Hazardous combustion products : carbon monoxide
carbon dioxide
nitrogen oxides
phosphorus oxides
sulfur oxides
Hydrogen sulfide
Mercaptans

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.

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 spilt material. Put on appropriate personal protective equipment.

For emergency responders : If specialised 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 spilt 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). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material 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 the 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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 ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. 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 unlabelled 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 solutions** : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Reportable hazardous constituent(s) contained in UVCB- and/or multi-constituent substance(s) complying with the classification criteria and/or with an exposure limit (OEL)

No exposure limit value known.

- 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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

- Advisory OEL** : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined)

DNELs/DMELs



SECTION 8: Exposure controls/personal protection

Product/substance	Type	Exposure	Value	Population	Effects	
Distillates (petroleum), hydrotreated light paraffinic	DNEL	Long term Inhalation	5.4 mg/m ³	Workers	Local	
	DNEL	Long term Inhalation	1.2 mg/m ³	General population	Local	
	DNEL	Long term Oral	0.74 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	0.97 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	1.19 mg/m ³	General population	Local	
	DNEL	Long term Inhalation	2.73 mg/m ³	Workers	Systemic	
	DNEL	Long term Inhalation	5.58 mg/m ³	Workers	Local	
Distillates (petroleum), hydrotreated light paraffinic	DNEL	Long term Inhalation	5.4 mg/m ³	Workers	Local	
	DNEL	Long term Inhalation	1.2 mg/m ³	General population	Local	
	DNEL	Long term Oral	0.74 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	0.97 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	1.19 mg/m ³	General population	Local	
	DNEL	Long term Inhalation	2.73 mg/m ³	Workers	Systemic	
	DNEL	Long term Inhalation	5.58 mg/m ³	Workers	Local	
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	DNEL	Long term Oral	0.4 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Inhalation	0.8 mg/m ³	General population	Systemic	
	DNEL	Long term Inhalation	3.1 mg/m ³	Workers	Systemic	
	DNEL	Long term Dermal	22 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	44 mg/kg bw/day	Workers	Systemic	
	1-(tert-dodecylthio)propan-2-ol	DNEL	Long term Oral	0.84 mg/kg bw/day	General population	Systemic
		DNEL	Long term Dermal	1.67 mg/kg bw/day	General population	Systemic
DNEL		Long term Inhalation	2.9 mg/m ³	General population	Systemic	
DNEL		Long term Dermal	3.34 mg/kg bw/day	Workers	Systemic	
DNEL		Long term Inhalation	11.8 mg/m ³	Workers	Systemic	
DNEL		Short term Dermal	0.1077 mg/cm ²	General population	Local	
DNEL		Short term Dermal	0.2154 mg/cm ²	Workers	Local	
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	DNEL	Long term Dermal	0.06 mg/kg bw/day	Workers	Systemic	



SECTION 8: Exposure controls/personal protection

2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	DNEL	Long term Inhalation	0.46 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	14 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	0.214 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.214 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.745 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	2.112 mg/m ³	Workers	Systemic

PNECs

Product/substance	Compartment Detail	Value	Method Detail
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	Fresh water	0.0024 mg/l	-
	Marine water	0.00024 mg/l	-
	Fresh water sediment	0.435 mg/kg dwt	-
	Marine water sediment	0.0435 mg/kg dwt	-
	Soil	0.086 mg/kg dwt	-
	Sewage Treatment Plant	100 mg/l	-
	1-(tert-dodecylthio)propan-2-ol	Fresh water	0.0064 mg/l
Marine water		0.00064 mg/l	-
Fresh water sediment		1.8 mg/kg dwt	-
Marine water sediment		0.18 mg/kg dwt	-
Soil		0.21895 mg/kg dwt	-
Sewage Treatment Plant		100 mg/l	-
2-tetradecyloxirane, reaction products with boric acid	Fresh water	1 mg/l	-
	Marine water	100 µg/l	-
	Fresh water sediment	42700 mg/kg dwt	-
	Marine water sediment	4270 mg/kg dwt	-
	Sewage Treatment Plant	100 mg/l	-
	Soil	8540 mg/kg dwt	-
2-(2-heptadec-8-enyl-2-imidazolin-1-yl) ethanol	Fresh water	0.00003 mg/l	-
	Marine water	0.000003 mg/l	-
	Fresh water sediment	0.376 mg/kg dwt	-
	Marine water sediment	0.0376 mg/kg dwt	-
	Soil	0.075 mg/kg dwt	-
	Sewage Treatment Plant	0.27 mg/l	-
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	Fresh water	0.000214 mg/l	-
	Marine water	0.0000214 mg/l	-
	Fresh water sediment	1.692 mg/kg dwt	-
	Marine water sediment	0.1692 mg/kg dwt	-



SECTION 8: Exposure controls/personal protection

	Soil	5 mg/kg dwt	-
	Sewage Treatment Plant	1.5 mg/l	-

8.2 Exposure controls

Appropriate engineering controls : 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 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. EN 166

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.

Hydrocarbon-proof gloves

nitrile rubber

Fluorinated rubber

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

In case of prolonged contact with the product, it is recommended to wear gloves complying with ISO 21420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency

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 : Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces. In case of inadequate ventilation wear respiratory protection: Type A/P1 Warning ! filters have a limited use duration. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses

**SECTION 8: Exposure controls/personal protection**

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 (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

9.1 Information on basic physical and chemical properties**Appearance**

Physical state	: Liquid. [Clear]
Colour	: Red.
Odour	: Characteristic.
Odour threshold	: Not available.
Melting point/freezing point	: Not applicable.
Initial boiling point and boiling range	: >316°C (>600.8°F) [ISO 3405]
Flammability (solid, gas)	: Not applicable.
Upper/lower flammability or explosive limits	: Lower: 0.9% Upper: 7%
Flash point	: Open cup: 212°C (413.6°F) [Cleveland Open Cup (COC)]
Auto-ignition temperature	: >212°C (>413.6°F) [ASTM E 659]
Decomposition temperature	: Not applicable.
pH	: Not applicable. Product is non-soluble (in water).
Viscosity	: Kinematic (40°C): 0.3393 cm ² /s [ASTM D 445]
Solubility(ies)	:

Media	Result
water	Not soluble

Miscible with water	: No.
Partition coefficient: n-octanol/ water	: Not applicable.
Vapour pressure	: <0.013 kPa (<0.1 mm Hg) [room temperature] Not applicable. [50°C (122°F)]
Relative density	: 0.85 [ISO 3675]
Density	: 0.85 g/cm ³ [15°C (59°F)] [ISO 3675]
Vapour density	: >2 [Air = 1]
Particle characteristics	
Median particle size	: Not applicable.

9.2 Other 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** : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- 10.5 Incompatible materials** : No specific data.
- 10.6 Hazardous decomposition products** : carbon monoxide
carbon dioxide
nitrogen oxides
phosphorus oxides
sulfur oxides
Hydrogen sulfide
Mercaptans

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Product/substance	Result	Species	Dose	Exposure	Test
Distillates (petroleum), hydrotreated light paraffinic	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
Distillates (petroleum), hydrotreated light paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
	LC50 Inhalation Vapour	Rat	80.4 mg/l	1 hours	-
	LC50 Inhalation Vapour	Rat	20.1 mg/l	4 hours	-
	LD50 Dermal	Rabbit	4000 to 8000 mg/kg	-	STDMETH, ASTM and USEPA
	LD50 Oral	Rat	>10 mg/kg	-	-
1-(tert-dodecylthio)propan-2-ol	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
	LD50 Dermal	Rabbit	2201 mg/kg	-	OECD 434
	LD50 Oral	Rat	5500 mg/kg	-	-
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
	LD50 Oral	Rat	1265 mg/kg	-	OECD 401
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino)	LD50 Oral	Rat - Male, Female	1200 mg/kg	-	OECD 425

**SECTION 11: Toxicological information**

diethanol					
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Conclusion/Summary : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Distillates (petroleum), hydrotreated light paraffinic	N/A	N/A	N/A	N/A	5.1
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	N/A	N/A	N/A	20.1	5.1
1-(tert-dodecylthio)propan-2-ol	5500	2201	N/A	N/A	5.1
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	1265	N/A	N/A	N/A	5.1
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	1200	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	Skin - Erythema/Eschar	Rabbit	2.67	-	OECD 404

Conclusion/Summary

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

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

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

Sensitisation

Product/substance	Route of exposure	Species	Result
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met. Contains sensitizer. May produce an allergic reaction.

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

Mutagenicity

Product/substance	Test	Experiment	Result
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476 Read across	Experiment: In vitro Subject: Mammalian-Animal	Negative

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

**SECTION 11: Toxicological information**

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Product/substance	Category	Route of exposure	Target organs
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	Category 2	-	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Aspiration hazard

Product/substance	Result
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
mineral oil	ASPIRATION HAZARD - Category 1

Conclusion/Summary : Based on available data, the classification criteria are not met.

Information on 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** : 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 as well as 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.

**SECTION 11: Toxicological information**

Conclusion/Summary	: Not available.
General	: No known significant effects or critical hazards.
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**

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

Harmful to aquatic life with long lasting effects.

12.1 Toxicity

Product/substance	Result	Species	Exposure	Test
Distillates (petroleum), hydrotreated light paraffinic	Acute EC50 >100 mg/l	Algae - Pseudokirchnerella subcapitata	72 hours	OECD 201
	Acute EC50 >10000 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Chronic NOELR 10 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
	Chronic NOELR >1000 mg/l	Fish - Oncorhynchus mykiss	21 days	-
Distillates (petroleum), hydrotreated light paraffinic	Acute EC50 >100 mg/l	Algae - Pseudokirchnerella subcapitata	48 hours	OECD 201
	Acute EC50 >10000 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Chronic NOEL 10 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
	Chronic NOEL >1000 mg/l	Fish - Oncorhynchus mykiss	21 days	-
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	Acute EC50 3.5 mg/l	Algae - Desmodesmus subspicatus	72 hours	OECD 201
	Acute EC50 63 mg/l	Algae - Desmodesmus subspicatus	72 hours	OECD 201
	Acute EC50 4.6 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Acute LC50 2.4 mg/l	Fish	96 hours	-
	Acute NOEC 0.63 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Acute NOEL 0.313 mg/l	Algae - Desmodesmus subspicatus	72 hours	OECD 201
1-(tert-dodecylthio)propan-2-ol	Acute NOEL 1 mg/l	Fish - Oncorhynchus mykiss	96 hours	OECD 203
	Acute EC50 0.58 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Acute LC50 0.75 mg/l	Fish	96 hours	-
2-tetradecyloxirane, reaction products with boric acid	Acute EC50 >100 mg/l	Algae - Selenastrum Capricornutum	3 days	-

**SECTION 12: Ecological information**

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	Acute EC50 >100 mg/l Acute LC50 >100 mg/l Acute EC50 0.03 mg/l	Daphnia - Daphnia Magna Fish - Rainbow Trout Algae - Desmodesmus subspicatus static	2 days 4 days 72 hours	- - OECD 201
	Acute EC50 0.163 mg/l Acute LC50 0.3 mg/l Acute NOEC 0.011 mg/l Acute EC50 0.0538 mg/l	Daphnia - Daphnia magna Fish Daphnia Algae - Pseudokirchneriella subcapitata	48 hours 96 hours 72 hours 72 hours	OECD 202 - - -
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	Acute EC50 0.043 mg/l	Daphnia - Daphnia magna	48 hours	-
	Acute EC50 167 mg/l	Micro-organism	3 hours	-
	Chronic EC10 0.0107 mg/l	Daphnia - Daphnia magna	21 days	-

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/substance	Aquatic half-life	Photolysis	Biodegradability
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	-	-	Not readily
1-(tert-dodecylthio)propan-2-ol	-	-	Not readily
2-tetradecyloxirane, reaction products with boric acid	-	-	Not readily
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	-	-	Not readily

12.3 Bioaccumulative potential

Product/substance	LogP _{ow}	BCF	Potential
Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich	4.1	28	low
1-(tert-dodecylthio)propan-2-ol	4.7	-	high
2-tetradecyloxirane, reaction products with boric acid	9.4	-	high
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	7.51	371.8	low
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	3.6	110.2	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.



SECTION 12: Ecological information

Mobility in soil : Given its physical and chemical characteristics, the product generally shows low soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited.

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

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

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 minimised 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.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. The following Waste Codes are only suggestions: 13 02 05*

Packaging

Methods of disposal : The generation of waste should be avoided or minimised 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

**SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	ICAO/IATA
14.1 UN number or ID number	Not regulated.	9006	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Thiophene, tetrahydro-, 1,1-dioxide, 3-(C9-11-isoalkyloxy) derivs., C10-rich, 1-(tert-dodecylthio) propan-2-ol)	-	-
14.3 Transport hazard class(es)	-	9	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	Yes.	No.	No.

Additional information

ADN : The product is only regulated as a dangerous good when transported in tank vessels.

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 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****UK (GB) /REACH****Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

**SECTION 15: Regulatory information**

Not listed.

Persistent Organic Pollutants

Not listed.

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

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

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 inventory (AIIC) | : All components are listed or exempted. |
| Canada inventory | : All components are listed or exempted. |
| China inventory (IECSC) | : Not determined. |
| Europe inventory | : All components are listed or exempted. |
| Japan inventory | : Japan inventory (CSCL) : All components are listed or exempted.
Japan inventory (ISHL) : Not determined. |
| New Zealand Inventory of Chemicals (NZIoC) | : All components are listed or exempted. |
| Philippines inventory (PICCS) | : All components are listed or exempted. |

**SECTION 15: Regulatory information**

Korea inventory (KECI)	: All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	: All components are listed or exempted.
Thailand inventory	: Not determined.
Turkey inventory	: Not determined.
United States inventory (TSCA 8b)	: All components are listed or exempted.
Vietnam inventory	: Not determined.

The information stated in this section relates solely to the conformity of the chemical product with the countries inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

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]
- DNEL = Derived No Effect Level
- DMEL = Derived Minimal Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- vPvB = Very Persistent and Very Bioaccumulative
- PNEC = Predicted No Effect Concentration
- LC50 = Median lethal concentration
- LD50 = Median lethal dose
- OEL = Occupational Exposure Limit
- VOC = Volatile Organic Compound
- UVCB Substance of unknown or Variable composition, Complex reaction products or Biological material
- NOEC No Observed Effect Concentration
- QSAR = Quantitative Structure–Activity Relationship

Procedure used to derive the classification

Classification	Justification
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**SECTION 16: Other information****Full text of classifications**

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

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