SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

FLUIDE DA (TOTAL)

SDS no. : 36283

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

1.1 Product identifier

Product name : FLUIDE DA (TOTAL)

Product code : 36283

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
Transmission fluids

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

TotalEnergies Lubrifiants
562 Avenue du Parc de L'ile
92029 Nanterre Cedex FRANCE
Tél: +33 (0)1 41 35 40 00
Fax: +33 (0)1 41 35 84 71

rm.msds-lubs@totalenergies.com

TotalEnergies Marketing UK Limited
10 Upper Bank Street (19th floor)
Canary Wharf,
London E14 5BF
UNITED KINGDOM
Tel: +44 (0)20 7339 8000
Fax: +44 (0)20 7339 8033

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

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 Tox. 4, H332
Asp. Tox. 1, H304

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

Ingredients of unknown toxicity : 5.4 percent of the mixture consists of component(s) of unknown acute toxicity

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

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

2.2 Label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H304 - May be fatal if swallowed and enters airways.
H332 - Harmful if inhaled.

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 : P271 - Use only outdoors or in a well-ventilated area.
P261 - Avoid breathing gas, vapour or spray.

Response : P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331 - Do NOT induce vomiting.

Storage : P405 - Store locked up.

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

Contains : Hydrogenated dimerization products of 1-decene and reaction products of 1-decene, hydrogenated
Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene
Distillates (petroleum), hydrotreated middle

Supplemental label elements : Not applicable.

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

SECTION 2: Hazards identification

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 >= 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

Product/ingredient name	Identifiers	%	Classification	Type
Hydrogenated dimerization products of 1-decene and reaction products of 1-decene, hydrogenated	REACH #: 01-2119537268-33 EC: 931-652-2	≥25 - ≤50	Acute Tox. 4, H332 Asp. Tox. 1, H304	[1]
Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene	REACH #: 01-2119411393-49 EC: 700-308-1	≥25 - ≤48	Acute Tox. 4, H332 Asp. Tox. 1, H304	[1]
reaction mass of: branched icosane;branched docosane; branched tetracosane	CAS: 151006-58-5 Index: 601-070-00-0	≥10 - ≤25	Acute Tox. 4, H332	[1]
Distillates (petroleum), hydrotreated middle	EC: 265-148-2 CAS: 64742-46-7	≤10	Asp. Tox. 1, H304	[1]
Dec-1-ene, trimers, hydrogenated	REACH #: 01-2119493949-12 EC: 500-393-3 CAS: 157707-86-3	≤10	Asp. Tox. 1, H304	[1]
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	REACH #: 01-2119510877-33 EC: 620-540-6 CAS: 1218787-32-6	<0.25	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 The product is made from synthetic base oils

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. If it is suspected that vapors are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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 : 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. 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. The exposed person may need to be kept under medical surveillance for 48 hours.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, 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.

Hazardous combustion products : carbon monoxide
carbon dioxide
Silicon 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to British standard BS 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 spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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).

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

SECTION 6: Accidental release measures

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

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

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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. Store locked up. 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 : See exposure scenarios

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological Limit Values (BLV)

No exposure indices known.

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS 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.

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

Product/substance	Type	Exposure	Value	Population	Effects
Hydrogenated dimerization products of 1-decene and reaction products of 1-decene,hydrogenated	DNEL	Short term Inhalation	60 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	50 mg/m³	General population	Systemic
Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene	DNEL	Short term Inhalation	22.9 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	3.9 mg/m³	Workers	Local
	DNEL	Long term Inhalation	3.9 mg/m³	General population	Local
	DNEL	Short term Inhalation	16.8 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	3.9 mg/m³	General population	Local
Distillates (petroleum), hydrotreated middle	DNEL	Long term Oral	1.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2.91 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	4.85 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	16.4 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	3001.6 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	5002.67 mg/m³	Workers	Systemic
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	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/m³	General population	Systemic
	DNEL	Long term Inhalation	2.112 mg/m³	Workers	Systemic

PNECs

SECTION 8: Exposure controls/personal protection

Product/substance	Compartment Detail	Value	Method Detail
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	-
	Soil	5 mg/kg dwt	-
	Sewage Treatment Plant	1.5 mg/l	-

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. 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 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 : Wear work clothing with long sleeves.
Protective shoes or boots.

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/P2. 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 : Orange.

Odour : Characteristic.

Melting point/freezing point : Not applicable.

Initial boiling point and boiling range : >300°C (>572°F) [EN ISO 3405]

Flammability (solid, gas) : Not applicable.

Upper/lower flammability or explosive limits : Lower: 7%
Upper: 9%

Flash point : Open cup: 150°C (302°F) [ASTM D 92]

Auto-ignition temperature : >150°C (>302°F) [ASTM E 659]

Decomposition temperature : Not applicable.

pH : Not applicable. Product is non-soluble (in water).

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): 17 mm^2/s [ISO 3104]

Solubility(ies) :

Media	Result
water	Not soluble

Solubility in water : 0.888 g/l

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 : 0.817 [ISO 3675]

Density : 0.817 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 : No specific data.

10.5 Incompatible materials : Strong oxidising agents

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/substance	Result	Species	Dose	Exposure	Test
Hydrogenated dimerization products of 1-decene and reaction products of 1-decene,hydrogenated	LC50 Inhalation Dusts and mists	Rat	1.17 mg/l	4 hours	OECD 403
	LD50 Dermal	Rat	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 423 Acute Oral toxicity - Acute Toxic Class Method
Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene	LC50 Inhalation Dusts and mists	Rat	1.4 mg/l	4 hours	OECD 403
	LD50 Dermal	Rat	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401
reaction mass of: branched icosane;branched docosane; branched tetracosane	LC50 Inhalation Dusts and mists	Rat	1.5 mg/l	4 hours	-
	LD50 Dermal	Rat	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>2000 mg/kg	-	OECD 420
Distillates (petroleum), hydrotreated middle	LC50 Inhalation Dusts and mists	Rat	4.6 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401
Dec-1-ene, trimers, hydrogenated	LC50 Inhalation Vapour	Rat	1.17 mg/l	4 hours	OECD 403
	LC50 Inhalation Vapour	Rat	0.9 mg/l	4 hours	OECD 403
	LC50 Inhalation Vapour	Rat	1.4 mg/l	4 hours	OECD 403
	LD50 Dermal	Rat	>3000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino)	LD50 Oral	Rat - Female	1200 mg/kg	-	OECD 401

SECTION 11: Toxicological information

diethanol					

Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
FLUIDE DA (TOTAL)	N/A	N/A	N/A	N/A	1.7
Hydrogenated dimerization products of 1-decene and reaction products of 1-decene,hydrogenated	N/A	N/A	N/A	N/A	1.17
Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene	N/A	N/A	N/A	N/A	1.4
reaction mass of: branched icosane; branched docosane; branched tetracosane	N/A	N/A	N/A	N/A	1.5
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	1200	N/A	N/A	N/A	N/A

Conclusion/Summary : Based on available data, the classification criteria are met.

Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	Skin - Oedema	Rabbit	3.67	4 hours	OECD 404
	Skin - Erythema/Eschar	Rabbit	2.67	4 hours	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

Conclusion/Summary :

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

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

Mutagenicity

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

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)

Not available.

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

Aspiration hazard

SECTION 11: Toxicological information

Product/substance	Result
Hydrogenated dimerization products of 1-decene and reaction products of 1-decene,hydrogenated	ASPIRATION HAZARD - Category 1
Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated middle	ASPIRATION HAZARD - Category 1
Dec-1-ene, trimers, hydrogenated	ASPIRATION HAZARD - Category 1

Conclusion/Summary : Based on available data, the classification criteria are met.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : Harmful if inhaled.

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

Ingestion : May be fatal if swallowed and enters airways.

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 : Adverse symptoms may include the following:
nausea or vomiting

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.

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

SECTION 11: Toxicological information

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

12.1 Toxicity

Product/substance	Result	Species	Exposure	Test
Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene	Acute EC50 1000 mg/l	Algae - *Selenastrum capricornutum*	72 hours	-
	Acute LC50 5056 mg/l	Daphnia - *Americamysis bahia*	48 hours	-
	Acute LC50 5003 mg/l	Fish	96 hours	-
	Acute NOEL >5003 mg/l	Fish - *Cyprinodon variegatus*	96 hours	OECD 203
	Chronic NOEC 1001 mg/l	Daphnia	21 days	OECD 211
reaction mass of: branched icosane;branched docosane; branched tetracosane	Acute EC50 >1000 mg/l	Algae - *Pseudokirchneriella subcapitata*	96 hours	-
	Acute EC50 151 mg/l	Daphnia - *Daphnia magna*	48 hours	-
Distillates (petroleum), hydrotreated middle	Acute EC50 22 mg/l	Algae	72 hours	OECD 201
	Acute EC50 68 mg/l	Daphnia	48 hours	OECD 202
	Chronic NOEL 0.163 mg/l	Daphnia	21 days	-
	Chronic NOEL 0.069 mg/l	Fish	14 days	-
Dec-1-ene, trimers, hydrogenated	Acute EC50 >1000 mg/l	Algae - *Scenedesmus capricornutum*	72 hours	OECD 201
	Acute EC50 >5002 ppm	Daphnia - *Americamysis bahia*	96 hours	OECD 202
	Acute EC50 >150 mg/l	Daphnia - *Daphnia magna*	48 hours	-
	Acute NOEL 1000 mg/l	Algae - *Scenedesmus capricornutum*	72 hours	OECD 201
	Acute NOEL 1000 mg/l	Fish - *Oncorhynchus mykiss*	96 hours	-
	Chronic NOEL 125 mg/l	Daphnia - *Daphnia magna*	21 days	OECD 211
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	Acute EC50 0.12 mg/l	Algae	72 hours	-
	Acute LC50 0.6 mg/l	Fish	96 hours	-
	Chronic NOEC 0.32 mg/l	Daphnia	21 days	-

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

SECTION 12: Ecological information

Product/substance	Aquatic half-life	Photolysis	Biodegradability
Hydrogenated dimerization products of 1-decene, 1-dodecene and 1-octene	-	-	Readily
Distillates (petroleum), hydrotreated middle	-	-	Readily

12.3 Bioaccumulative potential

Product/substance	$LogP_{ow}$	BCF	Potential
Hydrogenated dimerization products of 1-decene and reaction products of 1-decene,hydrogenated	6.5	-	High
reaction mass of: branched icosane;branched docosane; branched tetracosane	>6.5	-	High
Dec-1-ene, trimers, hydrogenated	>6.5	-	High
2,2'-(C16-18 (evennumbered, C18 unsaturated) alkyl imino) diethanol	3.6	-	Low

12.4 Mobility in soil

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

Mobility : Not available.

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 in a concentration >= 0,1 %.

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 06*

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

	ADR/RID	ADN	IMDG	ICAO/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.

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.

SECTION 14: Transport information

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)

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

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.

SECTION 15: Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia inventory (AIIC)	:	Not determined.
Canada inventory	:	Not determined.
China inventory (IECSC)	:	Not determined.
Europe inventory	:	All components are listed or exempted.
Japan inventory	:	**Japan inventory (CSCL)**: Not determined. **Japan inventory (ISHL)**: Not determined.
New Zealand Inventory of Chemicals (NZIoC)	:	Not determined.
Philippines inventory (PICCS)	:	Not determined.
Korea inventory (KECI)	:	All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	:	Not determined.
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 : See exposure scenarios

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

SECTION 16: Other information

Classification	Justification
Acute Tox. 4, H332 Asp. Tox. 1, H304	Calculation method 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.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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
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

Date of printing : 2024/07/23

Date of issue/ Date of revision : 2024/07/23

Date of previous issue : 2024/07/11

Version : 3.02

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.