SAFETY DATA SHEET

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

GLACELF AUTO SUPRA

SDS # : 31319

Date of previous revision : 2022/11/04

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

1.1 Product identifier

Product name : GLACELF AUTO SUPRA

UFI : D61X-G8ME-X00N-50JK

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

Identified uses
Antifreezes

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 Norge AS
Finnestadveien 44,
N-4029 Stavanger,
Norge
Tlf. +47 22019559
sm.nordic-reach@totalenergies.com

Contact

H.S.E

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : Poisoning Information : +472 259 1300

Supplier

Telephone number : Emergency phone: +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, H302
Repr. 2, H361d
STOT RE 2, H373 (kidneys)

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

Hazard pictograms :

Signal word : Warning

Hazard statements : H302 - Harmful if swallowed.
H361d - Suspected of damaging the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure. (kidneys)

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 : P280 - Wear protective gloves, protective clothing and eye or face protection.
P260 - Do not breathe gas, vapor or spray.

Response : P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

Storage : Not applicable.

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

Contains : ethylene glycol
sodium 2-ethylhexanoate

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

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 spilled product.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/substance	Identifiers	% (w/w)	Classification	Specific Conc. Limits, M-factors and ATEs	Type
ethylene glycol	REACH #: 01-2119456816-28 EC: 203-473-3 CAS: 107-21-1 Index: 603-027-00-1	≥90	Acute Tox. 4, H302 STOT RE 2, H373 (kidneys) (oral)	ATE [Oral] = 1600 mg/kg	[1] [2]
sodium 2-ethylhexanoate	EC: 243-283-8 CAS: 19766-89-3	≤5	Repr. 2, H361d **See Section 16 for the full text of the H statements declared above.**	-	[1]

Additional information : Product with ethylene-glycol base

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

Type

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Take victim immediately to hospital SYMPTOMS MAY NOT APPEAR IMMEDIATELY Wash out mouth with water. Remove dentures if any. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact	:	No specific data.
Inhalation	:	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	:	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. nausea or vomiting abdominal cramps and pain convulsive seizures Can cause central nervous system (CNS) depression. Repeated or prolonged exposure to the substance can produce kidney damage.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	:	Rinse mouth. Induce vomiting, but only if victim is fully conscious Ingestion, depending on the dose, can cause i.a. abnormal behaviour, unconsciousness, convulsions, respiratory paralysis, pulmonary oedemas, as well as damages to liver and kidneys and can lead, in the worst case, to death. A quick treatment of an ethylene-glycol intoxication, when necessary with haemodialysis, may reduce the toxical effects. Intravenous ethyl alcohol in sodium bicarbonate solution is an approved antitoxin.
Specific treatments	:	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Use dry chemical, CO_2, 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	:	carbon monoxide carbon dioxide Sodium oxides smoke

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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 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 solutions : Coolant and antifreeze.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/substance	Exposure limit values
ethylene glycol	**FOR-2011-12-06-1358 (Norway, 6/2021). Absorbed through skin. Notes: indicative limit value** TWA: 52 mg/m³ 8 hours. TWA: 20 ppm 8 hours. **FOR-2011-12-06-1358 (Norway, 6/2021). Absorbed through skin.** STEL: 104 mg/m³ 15 minutes. STEL: 40 ppm 15 minutes.

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 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.

Advisory OEL : No known significant effects or critical hazards.

DNELs/DMELs

Product/substance	Type	Exposure	Value	Population	Effects
ethylene glycol	DNEL	Long term Inhalation	7 mg/m³	General population	Local
	DNEL	Long term Inhalation	35 mg/m³	Workers	Local
	DNEL	Long term Dermal	53 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	106 mg/kg bw/day	Workers	Systemic
sodium 2-ethylhexanoate	DNEL	Long term Oral	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg	General	Systemic

			bw/day	population	
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.5 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	14 mg/m³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Name	Method Detail
ethylene glycol	Fresh water	10 mg/l	Assessment Factors
	Marine water	1 mg/l	Assessment Factors
	Fresh water sediment	37 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	3.7 mg/kg dwt	-
	Soil	1.53 mg/kg dwt	Equilibrium Partitioning
	Sewage Treatment Plant	199.5 mg/l	Assessment Factors
sodium 2-ethylhexanoate	Fresh water	0.36 mg/l	Assessment Factors
	Marine water	0.036 mg/l	Assessment Factors
	Fresh water sediment	0.301 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.0301 mg/kg dwt	Equilibrium Partitioning
	Soil	0.0579 mg/kg dwt	Equilibrium Partitioning
	Sewage Treatment Plant	71.7 mg/l	Assessment Factors

8.2 Exposure controls

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

Individual protection measures

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

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.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.
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.
Neoprene gloves.
nitrile rubber
butyl rubber
Polyvinylchloride

		Viton® 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. Chemical-resistant protective suit. Non-skid safety shoes or boots
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/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.
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. [limpid]
Color	:	Orange.
Odor	:	Mild.
Odor threshold	:	Not available.
pH	:	8.7
Melting point/freezing point	:	-18°C [ISO 3016]
Initial boiling point and boiling range	:	175°C [ISO 3405]
Flash point	:	Closed cup: 122°C [Pensky-Martens]
Evaporation rate	:	Not available.
Flammability	:	Not applicable.
Lower and upper explosion limit	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	1.113 [ISO 3675]
Density	:	1.113 g/cm³ [20°C] [ISO 3675]
Solubility(ies)	:	

Media	Result
water	Easily soluble

Miscible with water	:	Yes.

Partition coefficient: n-octanol/ water	:	Not applicable.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Not available.
Particle characteristics		
Median particle size	:	Not applicable.

9.2 Other information

No other relevant physical and chemical parameters for the safe use of the product

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 : Strong oxidizing agents
strong acids
nitrates
peroxides
Chlorates

10.6 Hazardous decomposition products : carbon monoxide
carbon dioxide
Sodium oxides
smoke

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
ethylene glycol	LC50 Inhalation Dusts and mists	Rat	>2500 mg/m³	6 hours	-
	LD50 Dermal	Mouse	>3500 mg/kg	-	-
	LD50 Oral	Cat	1600 mg/kg	-	-
	LD50 Oral	Rat	7712 mg/kg	-	-
sodium 2-ethylhexanoate	LD50 Dermal	Rat	>2000 mg/kg Read across	-	OECD 402
	LD50 Oral	Rat	2043 mg/kg Read across	-	OECD 401

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

Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
GLACELF AUTO SUPRA ethylene glycol sodium 2-ethylhexanoate	1682.4 1600 2043	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A

Irritation/Corrosion

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.

Sensitization

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

Product/substance	Test	Experiment	Result
sodium 2-ethylhexanoate	OECD 473 *In vitro* Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	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

Product/substance	Result	Species	Dose	Exposure
sodium 2-ethylhexanoate	Positive - Oral	Rat	100 mg/kg NOAEL	-

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

Specific target organ toxicity (single exposure)

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
ethane-1,2-diol	Category 2	oral	kidneys

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

Aspiration hazard

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

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. nausea or vomiting abdominal cramps and pain convulsive seizures Can cause central nervous system (CNS) depression. Repeated or prolonged exposure to the substance can produce kidney damage.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/substance	Result	Species	Dose	Exposure
ethylene glycol	Chronic NOAEL Oral	Rat - Male	150 mg/kg	12 months

Conclusion/Summary : Not available.

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

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : Suspected of damaging the unborn child.

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

SECTION 12: Ecological information

12.1 Toxicity

Product/substance	Result	Species	Exposure	Test
ethylene glycol	Acute EC10 >1995 mg/l	Micro-organism - Activated sludge	30 minutes	ISO 8192
	Acute EC50 6500 to 13000 mg/l	Algae - Selenastrum capricornutum	96 hours	EPA
	Acute EC50 13900 to 57600 mg/l Fresh water	Daphnia	48 hours	OECD 202
	Acute LC50 72860 mg/l	Fish - Pimephales promelas	96 hours	OECD 203
	Chronic EC10 100 mg/l	Algae - Selenastrum capricornutum	-	-
	Chronic NOEC 8590 mg/l	Crustaceans - Ceriodaphnia dubia	7 days	EPA 600/4-89/001
	Chronic NOEC 15380 mg/l	Fish - Pimephales promelas	7 days	EPA 600/4-89/001
sodium 2-ethylhexanoate	Acute EC10 71.7 mg/l	Micro-organism - Pseudomonas putida	18 hours	ISO
	Acute EC50 49.3 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours	OECD 201
	Acute EC50 85.4 mg/l Fresh water	Crustaceans - Daphnia magna	48 hours	Directive 79/831/EEC, Annex V, Part C
	Acute LC50 >100 mg/l Fresh water	Fish - Oryzias latipes	96 hours	OECD 203
	Chronic EC10 32 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours	OECD 201
	Chronic NOEC 18 mg/l Fresh water	Crustaceans - Daphnia magna	21 days	OECD 211

12.2 Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
ethylene glycol	OECD 301A	90 % - Readily - 10 days	-	Activated sludge
sodium 2-ethylhexanoate	OECD 301E	99 % - Readily - 28 days	-	Activated sludge

Conclusion/Summary : Not available.

Product/substance	Aquatic half-life	Photolysis	Biodegradability
ethylene glycol	-	-	Readily
sodium 2-ethylhexanoate	-	-	Readily

12.3 Bioaccumulative potential

Product/substance	$LogK_{ow}$	BCF	Potential
ethylene glycol	-1.36	-	low
sodium 2-ethylhexanoate	1.3	-	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 is generally mobile in the ground the product may evaporate Soluble in water

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

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.

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: 16 01 14*

Packaging

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

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

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	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.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

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

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

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

Other EU regulations

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work
Take note of Dir 94/33/EC on the protection of young people at work.
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
Directive 2004/37/EC of the European Parliament and of the Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work

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

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

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

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.

LU - Luxembourg prohibited chemicals in the workplace

Not listed.

Inventory list

Australia inventory (AIIC)	: All components are listed or exempted.
Canada inventory (DSL/NDSL)	: All components are listed or exempted.
China inventory (IECSC)	: All components are listed or exempted.
Europe inventory (EC)	: 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.
Korea inventory (KECI)	: Not determined.
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
TWA = Time Weight Average
NOAEL No Observed Adverse Effect Level
CE50 Half maximal effective concentration
NOEC No Observed Effect Concentration
OECD = Organisation for Economic Co-operation and Development
LogPow = logarithm of the octanol/water partition coefficient
BCF = Bioconcentration Factor

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

Classification	Justification
Acute Tox. 4, H302 Repr. 2, H361d STOT RE 2, H373 (kidneys)	Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H302 H361d H373	Harmful if swallowed. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure.

Full text of classifications [CLP/GHS]

Acute Tox. 4 Repr. 2 STOT RE 2	ACUTE TOXICITY - Category 4 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Date of revision	:	2022/11/07
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Version	:	4

Notice to reader

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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.