

GLACELF NEOTECH

SDS # :C3FVCM6VK

Previous revision date : 2025/05/08

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

1.1 Product identifier

Product name : GLACELF NEOTECH
UFI : 1X1Y-S80A-800R-WA5F

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

Identified uses
Coolant and antifreeze.

1.3 Details of the supplier of the safety data sheet

TotalEnergies Lubrifiants
562 Avenue du Parc de L'île
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 Denmark A/S
Amerika Plads 29
DK - 2100 København Ø
Tel : +45 45813701
sm.nordic-reach@totalenergies.com

See section 16 to have the contact details of the local supplier

Contact

H.S.E

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : Toxicity Center: +354 543 2222

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
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.

For more details about adverse physical, human health and environmental effects, see sections 9 to 12.

2.2 Label elements

Hazard pictograms



Signal word

: Warning

Hazard statements

: H302 - Harmful if swallowed.
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.

Prevention

: P260 - Do not breathe gas, vapor or spray.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.

Response

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

Storage

: Not applicable.

Disposal

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

Contains

: ethylene glycol

Supplemental label elements

: Not applicable.

Labelling element REACH Annex XVII

: 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 spilled product.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

Product/substance	Identifiers	%	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	≥ 80 - < 98	Acute Tox. 4, H302 STOT RE 2, H373 (kidneys) (oral)	ATE [Oral] = 1600 mg/kg	[1] [2]
sodium benzoate	REACH #: 01-2119460683-35 EC: 208-534-8 CAS: 532-32-1	≥ 3 - < 5	Eye Irrit. 2, H319	-	[1]

methyl-1H-benzotriazole	REACH #: 01-2119979081-35 EC: 249-596-6 CAS: 29385-43-1	≥0.1 - <1	Acute Tox. 4, H302 Repr. 2, H361d (oral) Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 720 mg/kg	[1]
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Component : % (w/w)

Additional information : Product with ethylene-glycol base This product contains an approved repellent (bitter), for the purpose of avoiding the risk of accidental ingestion

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

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.

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.

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 toxic 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, CO₂, alcohol-resistant foam or water spray (fog).

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : No specific fire or explosion hazard.

Hazardous combustion products : Carbon monoxide
carbon dioxide
Ketone.
Aldehyde.

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. Do not breathe 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. Absorb with an inert 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. 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). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
See Section 10 for incompatible materials before handling or use.

Advice on general occupational hygiene

- : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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



Product/substance	Exposure limit values
ethylene glycol	Ministry of Welfare, List of Exposure Limits (Iceland, 11/2024) Absorbed through skin. TWA 8 hours: 26 mg/m ³ . Form: aerosol. TWA 8 hours: 26 mg/m ³ . TWA 8 hours: 10 ppm. TWA 8 hours: 10 ppm. Form: aerosol. EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 52 mg/m ³ . STEL 15 minutes: 40 ppm. STEL 15 minutes: 104 mg/m ³ .

Biological Limit Values (BLV)

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following:
European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Advisory OEL : Not available.

DNELs/DMELs

Product/substance	Result
ethylene glycol	DNEL - General population - Long term - Inhalation 7 mg/m ³ <u>Effects</u> : Local DNEL - Workers - Long term - Inhalation 35 mg/m ³ <u>Effects</u> : Local DNEL - General population - Long term - Dermal 53 mg/kg bw/day <u>Effects</u> : Systemic DNEL - Workers - Long term - Dermal 106 mg/kg bw/day <u>Effects</u> : Systemic
sodium benzoate	DNEL - General population - Long term - Inhalation 1.5 mg/m ³ <u>Effects</u> : Systemic DNEL - Workers - Long term - Inhalation 3 mg/m ³ <u>Effects</u> : Systemic DNEL - General population - Long term - Oral 16.6 mg/kg bw/day <u>Effects</u> : Systemic DNEL - Workers - Long term - Dermal

methyl-1H-benzotriazole

62.5 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

0.06 mg/m³

Effects: Local

DNEL - Workers - Long term - Inhalation

0.1 mg/m³

Effects: Local

DNEL - General population - Long term - Dermal

31.25 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Oral

0.01 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Dermal

0.01 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Dermal

0.3 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

350 µg/m³

Effects: Systemic

DNEL - Workers - Long term - Inhalation

21.2 mg/m³

Effects: Systemic

PNECs

Product/substance	Result
ethylene glycol	Fresh water - Assessment Factors 10 mg/l Marine water - Assessment Factors 1 mg/l Fresh water sediment - Equilibrium Partitioning 37 mg/kg dwt Marine water sediment 3.7 mg/kg dwt Soil - Equilibrium Partitioning 1.53 mg/kg dwt Sewage Treatment Plant - Assessment Factors 199.5 mg/l
sodium benzoate	Fresh water 581 µg/l Marine water 58 µg/l

methyl-1H-benzotriazole

Fresh water sediment

2.5 mg/kg dwt

Marine water sediment

250 µg/kg dwt

Soil

159 µg/kg dwt

Sewage Treatment Plant

10 mg/l

Secondary Poisoning

300 mg/kg

Fresh water

0.008 mg/l

Marine water

0.02 mg/l

Fresh water sediment

0.117 mg/kg dwt

Marine water sediment

0.292 mg/kg dwt

Soil

0.0187 mg/kg dwt

Sewage Treatment Plant

39.4 mg/l

8.2 Exposure controls

Appropriate engineering controls

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

Individual protection measures

Hygiene measures

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

Eye/face protection

: safety 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.

Nitrile 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.

Neoprene gloves.

Polyvinylchloride

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

: **W**ear suitable protective clothing.
Protective shoes or boots.

Respiratory protection

: **E**nsure 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..

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	: L iquid. [Clear to slightly hazy]
Color	: Orange. [Light]
Odor	: Mild.
pH	: 8.6
Melting point/freezing point	: -37°C
Initial boiling point and boiling range	: 7 77°C
Flash point	: O pen cup: 122°C [Cleveland Open Cup (COC)]
Flammability	: W ill burn if involved in a fire
Lower and upper explosion limit	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.122 to 1.126
Density	: 1.122 to 1.126 g/cm ³ [20°C]
Solubility(ies)	:

Media	Result
water	Soluble

Miscible with water : Yes.



Partition coefficient: n-octanol/ water : Not applicable.

Auto-ignition temperature : 398°C

Decomposition temperature : Not available.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): 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 : No specific data.

10.5 Incompatible materials : ☒ Strong oxidizing agents
chlorates
nitrates
peroxides
strong acids

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
☒ ethylene glycol	Cat - Oral - LD50 1600 mg/kg Rat - Male, Female - Oral - LD50 7712 mg/kg Mouse - Dermal - LD50 >3500 mg/kg Rat - Male, Female - Inhalation - LC50 Dusts and mists >2500 mg/m ³ [6 hours]
sodium benzoate	Rat - Oral - LD50 >2000 mg/kg

methyl-1H-benzotriazole	Rabbit - Dermal - LD50 >2000 mg/kg
	Rat - Inhalation - LC50 Dusts and mists 12.2 mg/l [4 hours]
	Rat - Oral - LD50 720 mg/kg OECD 401
	Rabbit - Male, Female - Dermal - LD50 >2000 mg/kg OECD 402

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 NEOTECH	1700.1	N/A	N/A	N/A	N/A
ethylene glycol	1600	N/A	N/A	N/A	N/A
sodium benzoate	N/A	N/A	N/A	N/A	12.2
methyl-1H-benzotriazole	720	N/A	N/A	N/A	N/A

Based on available data, the classification criteria are met.

Skin corrosion/irritation

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

Serious eye damage/eye irritation

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

Respiratory corrosion/irritation

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

Respiratory or skin sensitization

Skin

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

Respiratory

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

Product/substance	Result
ethylene glycol	STOT RE 2, H373 (kidneys) (oral)

Based on available data, the classification criteria are met.

Aspiration hazard

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	: No specific data.
Skin contact	: No specific data.
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.

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

Potential chronic health effects

Product/substance	Result
ethylene glycol	Chronic - Rat - Male - Oral - NOAEL OECD [Chronic Toxicity Studies] 150 mg/kg [12 months] <u>Toxic effects:</u> Kidney, Ureter, and Bladder - Other changes
methyl-1H-benzotriazole	Sub-acute - Rat - Male, Female - Oral - NOAEL OECD 150 mg/kg

General	: May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/substance	Result
ethylene glycol	Chronic - NOEC - Fresh water Algae - <i>Raphidocelis subcapitata</i> OECD [201] 100 mg/l [72 hours] <u>Effect:</u> (growth rate) Acute - EC10 Micro-organism - <i>Activated sludge</i> ISO 8192 >1995 mg/l [30 minutes] Acute - EC50 - Fresh water Daphnia OECD [202] >100 mg/l [48 hours] <u>Effect:</u> Mobility Acute - LC50 - Fresh water Daphnia - Water flea - <i>Daphnia magna</i> - Neonate US EPA, ASTM 41 g/l [48 hours] <u>Effect:</u> Mortality
sodium benzoate	Acute - EC50 Algae - Algae - <i>Pseudokirchneriella subcapitata</i> 201 30.5 mg/l [72 hours] Acute - LC50 Fish 484 mg/l [96 hours] Acute - EC50 Daphnia - Daphnia - <i>Daphnia magna</i> >100 mg/l [48 hours]
methyl-1H-benzotriazole	Chronic - EC10 - Fresh water Algae - <i>Desmodesmus subspicatus</i> OECD 201 [201] 1.18 mg/l [72 hours] <u>Effect:</u> (growth rate) Acute - LC50 Fish - <i>Cyprinodon variegatus</i> OECD 203 55 mg/l [96 hours] Acute - EC50 Crustaceans - <i>Daphnia galatea</i> OECD 202 8.58 mg/l [48 hours] <u>Effect:</u> Mobility Chronic - NOEC

Crustaceans - *Daphnia galatea*
OECD 211
0.4 mg/l [21 days]
Effect: Reproduction

Acute - EC50
Algae - *Pseudokirchneriella subcapitata*
OECD 201
75 mg/l [72 hours]
Effect: (growth rate)

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

12.2 Persistence and degradability

Product/substance	Result
ethylene glycol	OECD 301A 90% [10 days]
methyl-1H-benzotriazole	OECD 301D 4% [28 days] - Not readily

Product/substance	Aquatic half-life	Photolysis	Biodegradability
ethylene glycol	-	-	Readily
sodium benzoate	-	-	Readily
methyl-1H-benzotriazole	-	-	Not readily

12.3 Bioaccumulative potential

Product/substance	LogK _{ow}	BCF	Potential
ethylene glycol	-1.36	-	Low
sodium benzoate	1.88	-	Low
methyl-1H-benzotriazole	1.1	-	Low

12.4 Mobility in soil

Soil/Water partition coefficient

Product/substance	logK _{oc}	K _{oc}
ethylene glycol	0.75	5.59292
sodium benzoate	1.5	31.66
methyl-1H-benzotriazole	2	110

Results of PMT and vPvM assessment

Product/substance	PMT	P	M	T	vPvM	vP	vM
ethylene glycol	N/A	N/A	Yes	Yes	N/A	N/A	Yes
sodium benzoate	No	N/A	Yes	No	N/A	N/A	Yes
methyl-1H-benzotriazole	N/A	N/A	Yes	Yes	No	N/A	No

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

Regulation (EC) No. 1272/2008 [CLP]



Product/substance	PBT	P	B	T	vPvB	vP	vB
ethylene glycol	N/A	N/A	N/A	Yes	N/A	N/A	N/A
sodium benzoate	No	N/A	N/A	No	N/A	N/A	N/A
methyl-1H-benzotriazole	N/A	N/A	N/A	Yes	N/A	N/A	N/A

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.
Regulation (EC) No. 1272/2008
[CLP]

12.6 Endocrine disrupting properties

The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

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. Should not be released into the environment.

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.
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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

Labeling : Not applicable.

Other EU regulations

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

Classification and labeling according to Regulation (EC) 1272/2008 (CLP)

Classification according to Regulation (EC) 1907/2006 (REACH)

Explosive precursors : Not applicable.

Ozone depleting substances (EU 2024/590)

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.

Inventory list

Australia inventory (AIIIC)	: All components are listed or exempted.
Canada inventory (DSL/NDL)	: 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)	: 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

: Risk management measures and safety conditions of use are included in the relevant sections of the SDS

Section 16. Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ACGIH = American Conference of Governmental Industrial Hygienists
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
B = Bioaccumulative
BCF = Bioconcentration Factor
DNEL = Derived No Effect Level
DMEL = Derived Minimal Effect Level
DMSO = Dimethyl Sulfoxide
EC50 = Half maximal effective concentration
EL50 = median Effective Loading
EUH statement = CLP-specific Hazard statement
HSE = Health, Safety and Environment
IATA = International Air Transport Association

IC50 = Half maximal inhibitory concentration
 IDHL = Immediately dangerous to life or health
 IMDG = International Maritime Dangerous Goods
 IMO = International Maritime Organization
 LC50 = Median lethal concentration
 LD50 = Median lethal dose
 LL50 = median Lethal Loading
 LogKow = logarithm of the octanol/water partition coefficient
 M = Mobile
 N/A = Not available
 NIOSH = National Institute of Occupational Safety and Health
 NOAEL = No Observed Adverse Effect Level
 NOEC = No Observed Effect Concentration
 NOEL = No Observed Effect Level
 NOELR = No observed Effect Loading Rate
 OECD = Organisation for Economic Co-operation and Development
 OEL = Occupational Exposure Limit
 OSHA = Occupational Safety and Health Administration.
 P = Persistent
 PBT = Persistent, Bioaccumulative and Toxic
 PMT = Persistent, Mobile and Toxic
 PNEC = Predicted No Effect Concentration
 POP = Persistent Organic Pollutants
 polyvinyl alcohol (PVA)
 QSAR = Quantitative Structure–Activity Relationship
 REL = Recommended Exposure Limit
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 SGG = Segregation Group
 STEL = Short Term Exposure Limit
 T = Toxic
 TLV = Threshold Limit Value
 TWA = Time Weight Average
 vB = Very Bioaccumulative
 vM = Very Mobile
 VOC = Volatile Organic Compound
 vP = Very Persistent
 vPvB = Very Persistent and Very Bioaccumulative
 vPvM = Very Persistent and Very Mobile
 UFI = Unique Formula Identifier
 UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

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

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

Full text of abbreviated H statements

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

Full text of classifications [CLP/GHS]



TotalEnergies

GLACELF NEOTECH

SDS # :C3FVCM6VK

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Repr. 2	TOXIC TO REPRODUCTION - Category 2
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Additional details on the supplier of the product

Date of revision : 1/21/2026

Date of previous issue : 5/8/2025

Version : 3

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.