Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.07.2026 *Version number 4 (replaces version 3)* *Revision: 14.07.2026*

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

· **1.1 Product identifier**

· **Trade name: PULISEC**

· **Article number:** G04-012/13
· **UFI:** NR20-40JP-500M-UDJU
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Life cycle stages** PW Widespread use by professional workers
· **Sector of Use**
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
· **Product category** PC35 Washing and cleaning products (including solvent based products)
· **Application of the substance / the mixture** Cleaning the inside of a dry-cleaning machine
· **Uses advised against** Any use other than those identified is not recommended.

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
G.B.M. Elettrochimica s.r.l.
via Fiumicino S. Mauro 120/130 - 47039 Savignano sul Rubicone (FC)
tel. 0541/930058 - Fax 0541/810218
www.gbmprodottichimici.it - E-mail gbm@prodottichimici.it

· **Further information obtainable from:** info@gbmprodottichimici.it
· **1.4 Emergency telephone number:**
G.B.M. Elettrochimica srl - Tel. +39 0541 930058 (office hours)
National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)
Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

GHS07

Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

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· **Hazard pictograms**

GHS05 GHS07 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**
Alcol sintetico etossilato
d-Limonene
Benzenesulfonic acid, 4-C10-13-sec-alkylderivs.
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

· **Hazard statements**
H332 Harmful if inhaled.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P273	Avoid release to the environment.
P280	Wear protective gloves / eye protection / face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P391	Collect spillage.
P404	Store in a closed container.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

· **Regulation (EC) No 648/2004 on detergents / Indication of content**	
non-ionic surfactants, anionic surfactants	≥5 - <15%
perfumes (d-Limonene), preservation agents (Methylchloroisothiazolinone, Methylisothiazolinone)	

· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:**
According to the available data, the product does not contain any PBT substances in a proportion ≥ 0.1%.
· **vPvB:** According to the available data, the product does not contain vPvB substances in a proportion ≥ 0.1%.
· **Determination of endocrine-disrupting properties**
The substance/mixture does not contain components considered to have endocrine disrupting properties according to Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or more;

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

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· **Dangerous components:**

CAS: 111-76-2 EINECS: 203-905-0 Index number: 603-014-00-0 Reg.nr.: 01-2119475108-36-xxxx	2-butoxyethanol Acute Tox. 3, H331; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE: LD50 oral: 1,200 mg/kg LC50/4 h inhalative: 3 mg/l	15-25%
CAS: 160901-19-9 Reg.nr.: esente in quanto Polimero	Alcoli, C12-13 ramificati e lineari, etossilati Eye Dam. 1, H318; Acute Tox. 4, H302 ATE: LD50 oral: 500 mg/kg	5-15%
CAS: 69011-36-5 Reg.nr.: Esentato	Ethoxylated alcohol Eye Dam. 1, H318; Acute Tox. 4, H302 ATE: LD50 oral: 500 mg/kg	2-5%
CAS: 85536-14-7 EINECS: 287-494-3 Reg.nr.: 01-2119490234-40-xxxx	Benzenesulfonic acid, 4-C10-13-sec-alkylderivs. Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Aquatic Chronic 3, H412 ATE: LD50 oral: 500 mg/kg	2-5%
CAS: 68155-07-7 Reg.nr.: 01-2119490100-53-0001	Dietanolammide di cocco Eye Dam. 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315	2-5%
CAS: 31800-88-1	2 -ethylhexanol, ethoxylated, phospated Eye Dam. 1, H318; Skin Irrit. 2, H315	2-5%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 01-2119457558-25-	propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	2-5%
CAS: 577-11-7 EINECS: 209-406-4 Reg.nr.: 01-2119491296-29-	diethylhexyl sodium sulfosuccinate Eye Dam. 1, H318; Skin Irrit. 2, H315	2-5%
CAS: 8028-48-6 EINECS: 232-433-8	d-Limonene Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	1-2%
CAS: 3380-30-1 ELINCS: 429-290-0 Index number: 605-023-00-5	5-chloro-2-(4-chlorophenoxy)phenol Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10)	0.1-<1%
CAS: 55965-84-9 Index number: 613-167-00-5	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; Skin Corr. 1B, H314; Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); Skin Sens. 1A, H317, EUH071 ATE: LD50 oral: 100 mg/kg LD50 dermal: 300 mg/kg LC50/4 h inhalative: 3 mg/l Specific concentration limits: Skin Corr. 1C; H314: C ≥ 0.6 % Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 % Eye Dam. 1; H318: C ≥ 0.6 % Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 % Skin Sens. 1A; H317: C ≥ 0.0015 %	<0.01%

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· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:**
Rescue workers must wear the protective equipment described in section 8.2 of this safety data sheet.
· **IF INHALATED:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:**
Call for a doctor immediately.
If ingested do not induce vomiting, seek medical assistance showing the safety data sheet or the hazard label
· **4.2 Most important symptoms and effects, both acute and delayed**
Eyes: corrosive, corneal damage, irritation
Skin: irritation
Skin contact: allergic skin reaction, redness, dryness.
· **4.3 Indication of any immediate medical attention and special treatment needed**
If any symptoms appear and/or if in doubt, contact a physician and provide this MSDS.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:** CO2, powder or water spray. Fight larger fires with water spray.
· **For safety reasons unsuitable extinguishing agents:**
Do not use water jets that can cause the spread and extension of fire.
· **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NOx)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
· **5.3 Advice for firefighters**
· **Protective equipment:**
As in any fire, wear self-contained breathing apparatus and appropriate protective clothing including gloves and eye / face protection.
See Section 8 for information on personal protection equipment.
· **Additional information**
Do not inhale gases resulting from explosions and fires. Cool containers with jets of water to prevent decomposition of the product and the development of substances potentially hazardous to health.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **For non-emergency personnel**
Provide adequate ventilation and move away from the danger area. For personal protection, see section 8.
· **For emergency responders**
The intervention personnel must wear appropriate personal protective equipment (overalls, gloves, goggles and dust mask). Keep non-emergency personnel away from the affected area.

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· **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with eyes and skin.
· **Information about fire - and explosion protection:**
The product is not flammable.
Emergency cooling must be available in case of nearby fire.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
· **Information about storage in one common storage facility:** Not required
· **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
· **7.3 Specific end use(s)** No further data; see section 1.2.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
CAS: 111-76-2 2-butoxyethanol (15-25%)	
OEL	Short-term value: 246 mg/m³, 50 ppm Long-term value: 98 mg/m³, 20 ppm Skin, IOELV
CAS: 67-63-0 propan-2-ol (2-5%)	
OEL	Short-term value: 400 ppm Long-term value: 200 ppm Skin

· **Regulatory information** OEL: 2026 CoP for the Safety, Health and Welfare at Work

· **DNELs**		
CAS: 111-76-2 2-butoxyethanol		
Oral	Long term, systemic effect	6.3 mg/kg bw/day (general population)
Dermal	Long term, systemic effect	75 mg/kg bw/day (general population)
		125 mg/kg bw/day (professional workers)
Inhalative	Short term, local effect	147 mg/m3 (general population)
		246 mg/m3 (professional workers)

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	Short term, systemic effect	426 mg/m3 (general population)
		652 mg/m3 (professional workers)
	Long term, systemic effect	59 mg/m3 (general population)
		98 mg/m3 (professional workers)
	Lungo termine, effetti sistemici	67.5 mg/Kg bw/day (professional workers)
CAS: 67-63-0 propan-2-ol		
Oral	Long term, systemic effect	26 mg/kg bw/day (general population)
Dermal	Long term, systemic effect	319 mg/kg bw/day (general population)
		888 mg/kg bw/day (professional workers)
Inhalative	Long term, systemic effect	89 mg/m3 (general population)
		500 mg/m3 (professional workers)
CAS: 55965-84-9 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)		
Inhalative	Short term, local effect	0.04 mg/m3 (industry workers)
	Lungo termine, effetti locali	0.02 mg/Kg (industry workers)

· **PNECs**

CAS: 111-76-2 2-butoxyethanol	
PNEC	34.6 mg/kg (fresh water sediments)
	3.46 mg/kg (marine water sediments)
	2.33 mg/kg (soil)
PNEC	8.8 mg/l (freshwater)
	9.1 mg/l (intermittent releases)
	0.88 mg/l (marine water)
	463 mg/l (sewage treatment plant)
CAS: 67-63-0 propan-2-ol	
PNEC	140.9 mg/l (freshwater)
	140.9 mg/l (fresh water sediments)
	140.9 mg/l (intermittent releases)
	140.9 mg/l (marine water)
	552 mg/l (marine water sediments)
	28 mg/l (soil)
	2,251 mg/l (sewage treatment plant)
CAS: 55965-84-9 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	
PNEC	0.027 mg/kg (fresh water sediments)
	0.027 mg/kg (marine water sediments)
	0.01 mg/kg (soil)
PNEC	0.0033 mg/l (freshwater)
	0.0033 mg/l (marine water)
	0.23 mg/l (sewage treatment plant)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

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· **Individual protection measures, such as personal protective equipment**
· **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Hand protection**
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation


Protective gloves

· **Material of gloves**
Neoprene gloves
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
Breakthrough time:> = 480 min - Material thickness:> = 0.7 mm
Breakthrough time:> = 60 min - Material thickness:> = 0.5 mm
Breakthrough time:> = 30 min - Material thickness:> = 0.2 mm
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye/face protection**


Tightly sealed goggles

· **Environmental exposure controls** Observe safety measures related to the environment; refer to Section 6.2.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**

· **Physical state**	Liquid
· **Colour:**	Light yellow
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined
· **Melting point/freezing point:**	Not relevant for product characterisation.
· **Boiling point or initial boiling point and boiling range**	100 °C
· **Flammability**	Non-flammable (mixture in aqueous solution).
· **Lower and upper explosion limit**	
· **Lower:**	Not applicable (the product has no explosive properties).
· **Upper:**	Not applicable (the product has no explosive properties).

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· **Flash point:**	non flammable
· **Auto-ignition temperature:**	Not applicable. The product has no flammable properties.
· **Decomposition temperature:**	Not determined as not relevant for product characterisation.
· **pH**	Not determined
· **Viscosity:**	
· **Kinematic viscosity**	Not determined
· **Dynamic:**	Not determined
· **Solubility**	
· **water:**	Soluble.
· **Partition coefficient n-octanol/water (log value)**	Not determined
· **Vapour pressure at 20 °C:**	23 hPa
· **Density and/or relative density**	
· **Density:**	Not determined
· **Relative density**	Not determined
· **Vapour density**	Not determined

· **9.2 Other information**	
· **Appearance:**	
· **Form:**	Liquid
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Solvent content:**	
· **Organic solvents:**	21.5 %
· **Water:**	55.1 %
· **Evaporation rate**	Not determined

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No hazardous reactions when stored and handled according to instructions
· **10.2 Chemical stability** The product is stable under normal conditions of use and storage
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** Excessive variations in temperature, below 0 ° C and above 40 ° C
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:**
When heated or in case of fire can release gases and vapors which are dangerous to health.
carbon monoxide, carbon dioxide
Nitrogen oxides (NOx)
No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· **Acute toxicity**
Harmful if inhaled.

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· **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)		
Oral	LD50	2,243 mg/kg
Inhalative	LC50/4 h	15.5 mg/l

CAS: 111-76-2 2-butoxyethanol		
Oral	LD50	1,200 mg/kg (ATE)
		1,200 mg/kg (mouse)
		1,776 mg/kg (rat)
		mg/kg (rabbit)
Dermal	LD50	1,000-2,000 mg/kg (rat)
Inhalative	LC50/4 h	3 mg/l (ATE)
		11 mg/l (rat)

CAS: 160901-19-9 Alcoli, C12-13 ramificati e lineari, etossilati		
Oral	LD50	500 mg/kg (ATE)

CAS: 69011-36-5 Ethoxylated alcohol		
Oral	LD50	500 mg/kg (ATE)
		500 mg/kg (rat)

CAS: 85536-14-7 Benzenesulfonic acid, 4-C10-13-sec-alkylderivs.		
Oral	LD50	500 mg/kg (ATE)

CAS: 67-63-0 propan-2-ol		
Oral	LD50	5,045 mg/kg (rat)
Dermal	LD50	12,800 mg/kg (rabbit)
Inhalative	LC50/4 h	27.2 mg/l (mouse) (Esposizione 4 h)
		72.6 mg/l (rat) (Esposizione 4 h)

CAS: 577-11-7 diethylhexyl sodium sulfosuccinate		
Oral	LD50	mg/kg (rat)

CAS: 55965-84-9 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)		
Oral	LD50	100 mg/kg (ATE)
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4 h	3 mg/l (ATE)

· **Primary irritant effect:**
· **Skin corrosion/irritation** Causes skin irritation.
· **Serious eye damage/irritation** Causes serious eye damage.
· **Respiratory or skin sensitisation** May cause an allergic skin reaction.
· **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.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **11.2 Information on other hazards**
· **Endocrine disrupting properties**
The substance/mixture does not contain components considered to have endocrine disrupting properties according to Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or more;

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SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
CAS: 160901-19-9 Alcoli, C12-13 ramificati e lineari, etossilati	
EC50	>10-100 mg/kg (daphnia) (Esposizione 48 h)
EC50	>10-100 mg/l (algae) (Esposizione 72 h)
CAS: 69011-36-5 Ethoxylated alcohol	
EC50	1-10 mg/l (algae) (durata 72 h)
	1-10 mg/l (daphnia) (durata 48 h)
CAS: 85536-14-7 Benzenesulfonic acid, 4-C10-13-sec-alkylderivs.	
EC50	2.9 mg/kg (daphnia)
CAS: 67-63-0 propan-2-ol	
CL50	1,400 mg/l (fish) (Esposzione 96 h)
EC50	2,285 mg/l (daphnia) (Esposzione 48 h)
CAS: 3380-30-1 5-chloro-2-(4-chlorophenoxy)phenol	
EC50	<1 mg/l (algae) (Esposizione 72 h)
	<1 mg/l (daphnia) (Esposizione 48 h)
NOEC	<0.1 mg/l (algae) (Esposizione 72 h)

· **12.2 Persistence and degradability**
Easily biodegradable
The surfactants contained in the product correspond to the legislation on the environmental compatibility of detergents and are biodegradable.
· **Other information:** The product is easily biodegradable.
· **12.3 Bioaccumulative potential** Non significant accumulation in organisms
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:**
According to the available data, the product does not contain any PBT substances in a proportion ≥ 0.1%.
· **vPvB:** According to the available data, the product does not contain vPvB substances in a proportion ≥ 0.1%.
· **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
The substance/mixture does not contain components considered to have endocrine disrupting properties according to Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or more;
· **12.7 Other adverse effects**
· **Remark:** Harmful to fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Do not discard the product or its packaging. Do not empty into drains. Recycle the product. When recycling is not possible, dispose through an authorized company in compliance with the local or national regulations.
The assignment of the waste code is the user's responsibility, after determining the properties of the waste and the process generating it and after discussing it with the authorities responsible for disposal.

· **Uncleaned packaging:**

· **Recommendation:**

Empty the containers before disposal. Do not reuse the emptied containers. Send the empty containers to recycling or to an authorized company in compliance with local and national regulations.

· **Recommended cleansing agents:**

Water, if necessary together with cleansing agents.
Water.

SECTION 14: Transport information

· **14.1 UN number or ID number**	
· **ADR, IMDG, IATA**	*UN3082*
· **14.2 UN proper shipping name**	
· **ADR**	*3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (d-Limonene, Coconut diethanolamide)*
· **IMDG**	*ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (d-Limonene, Coconut diethanolamide), MARINE POLLUTANT*
· **IATA**	*ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (d-Limonene, Coconut diethanolamide)*
· **14.3 Transport hazard class(es)**	
· **ADR, IMDG, IATA**	
· **Class**	*9 Miscellaneous dangerous substances and articles.*
· **Label**	*9*
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	*III*
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	*Symbol (fish and tree)*
· **Special marking (ADR):**	*Symbol (fish and tree)*
· **Special marking (IATA):**	*Symbol (fish and tree)*
· **14.6 Special precautions for user**	*Warning: Miscellaneous dangerous substances and articles.*
· **Hazard identification number (Kemler code):**	*90*
· **EMS Number:**	*F-A,S-F*

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· **Stowage Category**	A
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable
· **Transport/Additional information:**	Not dangerous according to the above specifications.
· **ADR**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **Transport category**	3
· **Tunnel restriction code**	(-)
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (D-LIMONENE, COCONUT DIETHANOLAMIDE), 9, III

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
Safety data sheet prepared in accordance with Regulation 1907/2006/EC Article 31, Regulation (EU) No 878/2020 as subsequent amendments.

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category** E2 Hazardous to the Aquatic Environment
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· ***Relevant phrases***
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

· ***Classification according to Regulation (EC) No 1272/2008***
As required by Regulation 1272/2008/CE art. 9, the classification of this compound is based on the calculation method taken from the data of the single substances therein and from the experimental data of this compound where available (viewable in sections 9, 11 and 12 in this document).
Procedure used for the classification of the mixture
Skin Irrit. 2, H315 - Calculation method
Skin Sens 1 / 1A / 1B, H317 -Calculation method
Eye Dam. 1, H318 - Calculation method
Acute Tox. 4, H332 - Calculation method
Aquatic Chronic 2, H411 - Calculation method

· ***Version number of previous version:*** *3*

· ***Abbreviations and acronyms:***
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1

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Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· ***Sources***

-Safety data sheets and data sheets of raw material suppliers.
-ECHA (EU), registered substances database.
-ECHA (EU), C&L inventory database.
-ECHA (EU), SVHC candidate substances.
-IARC (F), International Agency for Research on Cancer.
-ISS (I), Istituto Superiore di Sanità, Hazardous Substances Database.
-ACGIH (USA), American Conference of Governmental Industrial Hygienists.
-INRS (F), Institut National de Recherche et de Sécurité : Les Mélanges Explosifs.
-Ministry of the Environment (I), Ecotoxicological database on chemicals.
-IFA (D), Institut für Arbeitsschutz, GESTIS database on hazardous substances.
-ILO, International Labour Organization, International Chemical Safety Cards database.
-OECD, Organisation for Economic Co-operation and Development, eChemPortal database.
-WHO, World Health Organization, Chemical Safety Information database. -TOXNET (USA), Toxicology Data Network database.
-ATSDRC (USA), Agency for Toxic Substances & Disease Registry database.
-SCOEL Opinion for crystalline free silica (respirable dust), 2003.
-SCOEL Opinion for the presence of hexavalent chromium in cement, 2002.