

MARBEC SRL	Revision no. 9
	Revision date 06/14/2023
0030662 – PULI FUGHE	Printed on 06/14/2023
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	Replaces revision:8 (Revision date: 01/13/2023)

Safety Data Sheet

Complies with Annex II of REACH - Regulation (EU) 2020/878

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

1.1. Product identifier	
Code:	0030662
Name	PULIFUGHE
Chemical name and synonyms	PULIFUGHE
 1.2. Relevant identified uses of the substance or mixture and uses advised against	
Sector of use	SU22 – Professional uses SU21- Consumer uses
Product category	PC35 – Washing and cleaning products (including solvent-based products)
Description/Usage	alkaline cleaner for removing dirt stuck to the joints of ceramic floors
 1.3. Information about the supplier of the safety data sheet	
Business name	MARBEC SRL
Address	VIA CROCE ROSSA 5/i
Locality and State	51037 MONTALE (PISTOIA) ITALY
	tel. +039 0573/959848
 e-mail of the competent person, responsible for the safety data sheet	
	info@marbec.it

1.4. Emergency telephone number
For urgent information please contact
MARBEC srl
+390573959848 8.30am-1pm 2pm-6pm or +393348578502
Telephone number of Poison Control Centers active 24 hours a day
IRCSS Maugeri Foundation –
Pavia 0039-0382-24444
CAV Ospedali Riuniti –
Bergamo 0039-800-883300
CAV Niguarda Ca` Granda Hospital –
Milan 0039-02-66101029
CAV Careggi Hospital - Florence 0039-055-7947819
CAV Gemelli Polyclinic –
Rome 0039-06-3054343
CAV Policlinico Umberto I –
Rome 0039-06 49978000
CAV Cardarelli Hospital –
Naples 0039-081 5453333
CAV Verona Integrated Hospital Company - Verona 800011858

SECTION 2. Hazard Identification

2.1. Substance or mixture classification

The product is classified as dangerous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments). The product therefore requires a safety data sheet compliant with the provisions of Regulation (EU) 2020/878. Any additional information regarding risks to health and/or the environment is reported in the sections. 11 and 12 of this sheet.

Hazard classification and indications:

Skin corrosion, category 1A

H314

It causes serious skin burns and serious eye injuries.

Serious eye damage, category 1

H318

Causes serious eye damage.

2.2. Label elements

Hazard labeling pursuant to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments.

Hazard pictograms:



Warnings:

Danger

Hazard Statements:

H314

Causes severe skin burns and eye damage.

Precautionary advice:

P260 Do not breathe dust / fume / gas / mist / vapours / spray.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P280 Wear protective gloves/ protective clothing / eye protection / face protection.
P310 Immediately call a POISON CENTER / doctor / . . .
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Contains:

Potassium hydroxide
Ethanolamine

Ingredients compliant with Regulation (EC) No. 648/2004

Non-ionic surfactants <5%, anionic surfactants <5%, phosphates <5%

2.3. Other dangers

Based on available data, the product does not contain PBT or vPvB substances in percentages $\geq 0.1\%$.

The product does not contain substances with properties that interfere with the endocrine system in concentrations $\geq 0.1\%$.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
POTASSIUM PYROPHOSPHATE		
CAS 7320-34-5	$1 \leq x < 5$	Eye Irrit. 2 H319
CE 230-785-7		
INDEX -		
REACH Reg. 01-2119489369-18		
BENZYL ALCOOL		
CAS 100-51-6	$1 \leq x < 5$	Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319
CE 202-859-9		LD50 Oral: 1620 mg/kg, ATE Vapor inhalation: 11 mg/l
INDEX 603-057-00-5		
REACH Reg. 01-2119492630-38		
ETHANOLAMINE		
CAS 141-43-5	$1 \leq x < 3$	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335
CE 205-483-3		STOT SE 3 H335: $\geq 5\%$
INDEX 603-030-00-8		LD50 Oral: 1515 mg/kg, ATE Dermal: 1100 mg/kg, ATE Vapor inhalation: 11 mg/l
REACH Reg. 01-2119486455-28		
3-methoxy-3-methyl-1-butanol		
CAS 56539-66-3	$1 \leq x < 3$	Eye Irrit. 2 H319
CE 260-252-4		
INDEX -		
REACH Reg. 01-2119976333-33-xxxx		
sodium cumene sulfonate		
CAS 28348-53-0	$1 \leq x < 3$	Eye Irrit. 2 H319
CE 248-983-7		
INDEX -		
REACH Reg. 01-2119489411-37-0001		
POTASSIUM HYDROXIDE		
CAS 1310-58-3	$1 \leq x < 2$	Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1A H314, Eye Dam. 1 H318
CE 215-181-3		Skin Corr. 1B H314: $\geq 2\%$, Skin Irrit. 2 H315: $\geq 0.5\%$, Eye Dam. 1 H318: $\geq 2\%$, Eye Irrit. 2 H319: $\geq 0.5\%$
INDEX 019-002-00-8		Oral LD50: 333
REACH Reg. 01-2119487136-33-xxxx		
1-METHOXY-2-PROPANOL		
CAS 107-98-2	$1 \leq x < 3$	Flam. Liq. 3 H226, STOT SE 3 H336
CE 203-539-1		
INDEX 603-064-00-3		
REACH Reg. 01-2119457435-35		

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The complete text of the hazard indications (H) is shown in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove any contact lenses. Wash immediately and abundantly with water for at least 30/60 minutes, opening the eyelids wide. Consult a doctor immediately.

SKIN: Take off contaminated clothing. Shower immediately. Consult a doctor immediately.

INGESTION: Drink as much water as possible. Consult a doctor immediately. Do not induce vomiting unless specifically authorized by your doctor.

INHALATION: Call a doctor immediately. Move the person to fresh air, away from the scene of the accident. If breathing stops, give artificial respiration. Adopt adequate precautions for the rescuer.

4.2. Main symptoms and effects, both acute and delayed

There is no specific information on the symptoms and effects caused by the product.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

SECTION 5. Fire fighting measures

5.1. Fire fighting

SUITABLE EXTINGUISHING MEANS

Choose the most appropriate extinguishing media for the specific situation.

UNSUITABLE EXTINGUISHING MEANS

No one in particular.

5.2. Special hazards arising from the substance or mixture

DANGERS DUE TO EXPOSURE IN THE EVENT OF FIRE

The product is not flammable or combustible.

5.3. Recommendations for fire fighters

EQUIPMENT

Normal clothing for fighting fire, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN469), flame retardant gloves (EN 659) and boots for firefighters (HO A29 or A30).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop the leak if there is no danger.

Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These indications are valid both for workers and for emergency interventions.

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6.2. Environmental precautions

Prevent the product from entering sewers, surface waters and groundwater.

6.3. Methods and materials for containment and cleanup

Suck up the spilled product into a suitable container. Evaluate the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material.
Provide sufficient ventilation of the area affected by the leak. Disposal of contaminated material must be carried out in accordance with the provisions of point 13.

6.4. Reference to other sections

Any information regarding personal protection and disposal is reported in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for Safe Handling

Ensure an adequate earthing system for systems and people. Avoid contact with eyes and skin. Do not inhale any dust, vapor or mists. Do not eat, drink or smoke during use. Wash your hands after use. Avoid dispersing the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a ventilated place, away from sources of ignition. Keep containers tightly closed. Keep product in clearly labeled containers. Avoid overheating. Avoid violent impacts. Store containers away from any incompatible materials, checking section 10.

Storage class TRGS 510 (Germany):
8B

7.3. Specific end uses

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Normative requirements:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
EXP	Spain	Professional exposure limits for chemical agents in Spain 2021
BETWEEN	France	Value limits of professional exposure to chemical agents in France. ED 984 - INRS
ITA	Italy	Legislative Decree 9 April 2008, n.81
PRT	Portugal	Decree-Lei n.º 1/2021 of 6 January, indicative professional exposure limit values for chemical agents. Legislative Decree no. 35/2020 of 13 July, protection of workers against risks linked to exposure during work with cancerous or mutagenic agents
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2021

POTASSIUM PYROPHOSPHATE

Predicted no-effect concentration on the environment - PNEC								
Reference value in fresh water			0.05			mg/l		
Reference value in sea water			0			mg/l		
Reference value for water, intermittent release			0.5			mg/l		
Reference value for STP microorganisms			50			mg/l		
Health - Derived No Effect Level - DNEL / DMEL								
	Effects on consumers					Effects on workers		
Exhibition Street	Acute rooms	Acute systemic	Chronic premises	Chronic systemic		Acute rooms	Acute systemic	Chronic premises
Oral				70 mg/kg bw/d				
Inhalation				0.68 mg/m3				2.79 mg/m3

BENZYL ALCOOL								
Predicted no-effect concentration on the environment - PNEC								
Reference value in fresh water			1		mg/l			
Reference value in sea water			0.1		mg/l			
Reference value for sediments in fresh water			5.27		mg/kg/d			
Reference value for sediments in sea water			0.527		mg/kg/d			
Reference value for water, intermittent release			2,3		mg/l			
Reference value for STP microorganisms			39		mg/l			
Reference value for the terrestrial compartment			0.456		mg/kg/d			
Health - Derived No Effect Level - DNEL / DMEL								
	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic
Oral	VND	20 mg/kg bw/d	VND	4 mg/kg bw/d				
Inhalation	VND	27 mg/m3	VND	5.4 mg/m3	VND	110 mg/m3	VND	22 mg/m3
Dermal					VND	40 mg/kg bw/d	VND	8 mg/kg bw/d

ETHANOLAMINE						
Threshold limit value						
Guy	State	TWA/8h		STEL/15min		Notes / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	0.5	0.2	0.5	0.2	SKIN
MAK	DEU	0.51	0.2	0.51	0.2	
VLA	EXP	2.5	1	7.5	3	SKIN
VLEP	BETWEEN	2.5	1	7.6	3	SKIN
VLEP	ITA	2.5	1	7.6	3	SKIN
VLE	PRT	2.5	1	7.6	3	SKIN
WEL	GBR	2.5	1	7.6	3	SKIN
OEL	EU	2.5	1	7.6	3	SKIN
TLV-ACGIH		7.5	3	15	6	
Predicted no-effect concentration on the environment - PNEC						
Reference value in fresh water		0.085			mg/l	
Reference value in sea water		0.0085			mg/l	
Reference value for sediments in fresh water		0.425			mg/kg	

Reference value for sediments in sea water	0.0425	mg/kg
Reference value for water, intermittent release	0.025	mg/l
Reference value for STP microorganisms	100	mg/l
Reference value for the terrestrial compartment	0.035	mg/kg

Health - Derived No Effect Level - DNEL / DMEL								
	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic
Oral				3.75 mg/kg/d				
Inhalation			2 mg/m3				3.3 mg/m3	
Dermal				0.24 mg/kg/d				1 mg/kg/d

3-methoxy-3-methyl-1-butanol								
Health - Derived No Effect Level - DNEL / DMEL								
	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic
Oral				2.5 mg/kg bw/d				
Inhalation				4.4 mg/m3				18 mg/m3
Dermal				3.1 mg/kg bw/d				6.25 mg/kg bw/d

sodium cumene sulfonate								
Predicted no-effect concentration on the environment - PNEC								
Reference value in fresh water	0.23	mg/l						
Reference value for water, intermittent release	2,3	mg/l						
Reference value for STP microorganisms	100	mg/l						
Health - Derived No Effect Level - DNEL / DMEL								
	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic
Oral				3.8 mg/kg bw/d				
Inhalation				13.2 mg/m3				53.6 mg/m3
Dermal				3.8 mg/kg bw/d				7.6 mg/kg bw/d

POTASSIUM HYDROXIDE								
Threshold limit value								
Guy	State	TWA/8h		STEL/15min		Notes / Observations		
		mg/m3	ppm	mg/m3	ppm			
VLA	EXP	1		4		BREATH		
VLEP	BETWEEN			2				
WEL	GBR			2				
TLV-ACGIH				2 (C)				
Health - Derived No Effect Level - DNEL / DMEL								
	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic
Inhalation			1 mg/m3				1 mg/m3	

1-METHOXY-2-PROPANOL								
Threshold limit value								
Guy	State	TWA/8h		STEL/15min		Notes / Observations		
		mg/m3	ppm	mg/m3	ppm			
AGW	DEU	370	100	740	200			
MAK	DEU	370	100	740	200			
VLA	EXP	375	100	568	150	SKIN		
VLEP	BETWEEN	188	50	375	100	SKIN		
VLEP	ITA	375	100	568	150	SKIN		
VLE	PRT	375	100	568	150			
WEL	GBR	375	100	560	150	SKIN		
OEL	EU	375	100	568	150	SKIN		
TLV-ACGIH		184	50	368	100			
Health - Derived No Effect Level - DNEL / DMEL								
	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic
Oral			VND	3.3 mg/kg bw/d				
Inhalation			VND	43.9 mg/m3	553.5 mg/m3	VND		369 mg/m3
Dermal			VND	18.1 mg/kg bw/d		VND		50.6 mg/kg bw/d

Legend:

(C) = CEILING ; INALAB = Inhalable Fraction; RESPIR = Respirable Fraction; TORAC = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available; NEA = no expected exposure; NPI = no hazard identified.

8.2. Exposure controls

Considering that the use of adequate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local extraction.
When choosing personal protective equipment, ask your chemical suppliers for advice if necessary.
Personal protective equipment must bear the CE marking which certifies their compliance with current regulations.

Provide emergency shower with eyecup.

HAND PROTECTION

Protect your hands with category III work gloves (ref. Directive 89/686/EEC and standard EN 374) such as PVA, butyl, fluoroelastomer or equivalent.
-Material: Butyl rubber, PVC, polychloroprene with natural latex coating, material thickness: 0.5 mm, penetration time: > 480 min.
- Material: nitrile rubber, fluorinated rubber, material thickness: 0.35-0.4 mm, penetration time: > 480 min.
Observations: for the final choice of work glove material, the following must be considered: compatibility, degradation, breaking time and permeation.
In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is unpredictable. The gloves have a wear time that depends on the duration and method of use.

SKIN PROTECTION

Wear work clothes with long sleeves and safety footwear for professional category III use (ref. Regulation 2016/425 and standard EN ISO 20344). Wash with soap and water after removing protective clothing.

EYE PROTECTION

It is advisable to wear a hooded visor or protective visor combined with airtight glasses (ref. standard EN 166).

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RESPIRATORY PROTECTION

Not necessary for normal use. If the threshold value (e.g. TLV-TWA) of the substance or one or more of the substances present in the product is exceeded (e.g. use in unventilated environments, formation of dust or aerosol) use respiratory protection equipped with a combined filter of type ABEK-P1 whose class (1, 2 or 3) must be chosen in relation to the limit concentration of use. (ref. standard EN 14387).
The use of respiratory protection means is necessary if the technical measures adopted are not sufficient to limit the worker's exposure to the threshold values taken into consideration.
In the event that the substance considered is odorless or its olfactory threshold is higher than the relevant TLV-TWA and in case of emergency, wear an open-circuit compressed air breathing apparatus (ref. standard EN 137) or a self-contained breathing apparatus external air (ref. EN 138 standard). For the correct choice of respiratory protection device, refer to the EN 529 standard.

ENVIRONMENTAL EXPOSURE CONTROLS

Emissions from production processes, including those from ventilation equipment, should be controlled for compliance with environmental protection legislation.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	Value	Information
Physical State	liquid	
Color	colorless	
Odor	characteristic	
Melting or freezing point	Not available	
Initial boiling point	Not available	
Flammability	incombustible	
Lower explosive limit	Not applicable	
Upper explosive limit	Not applicable	
Flash point	> 60 °C	
Auto-ignition temperature	Not applicable	
pH	12	
Kinematic viscosity	Not available	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	Not available	
Vapor pressure	Not available	
Density and/or Relative density	1.06 kg/l	
Relative vapor density	Not available	
Characteristics of the particles	Not applicable	

9.2. More information

9.2.1. Information regarding physical hazard classes

Information not available

9.2.2. Other safety features

VOC (Directive 2010/75/EU)	5.66% - 60.00 g/litre
Explosive properties	not explosive
Oxidizing properties	non-oxidizing

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular dangers of reaction with other substances under normal conditions of use.

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of dangerous reactions

Exothermic reaction with strong acids.

10.4. Conditions to avoid

As foreseen in 10.3

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

It does not decompose if used for its intended uses.

SECTION 11. Toxicological information

11.1. Information on the hazard classes defined in Regulation (EC) no. 1272/2008

Metabolism, kinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

1-METHOXY-2-PROPANOL

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

Immediate, delayed and chronic effects resulting from short- and long-term exposures

1-METHOXY-2-PROPANOL

The main route of entry is the skin, while the respiratory route is less important, given the low vapor pressure of the product. Above 100 ppm there is irritation of the ocular, nasal and oropharyngeal mucous membranes. At 1000 ppm, balance disturbances and severe eye irritation are noted. The clinical and biological tests carried out on the exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation upon direct contact. No

chronic effects on humans are reported.

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

POTASSIUM PYROPHOSPHATE

LD50 (Dermal):	> 2000 mg/kg Rabbit
LD50 (Oral):	> 2000 mg/kg Rat
LC50 (Inhalation of mists/dusts):	> 1.1 mg/l/4h rat

BENZYL ALCOOL

LD50 (Oral):	1620 mg/kg male rat
LC50 (Vapour inhalation):	> 4178 mg/l/4h
STA (Vapour inhalation):	11 mg/l estimated from table 3.1.2 of Annex I of CLP (data used to calculate the estimate of the acute toxicity of the mixture)

ETHANOLAMINE

LD50 (Dermal):	2504 mg/kg rat
STA (Cutaneous):	1100 mg/kg estimated from table 3.1.2 of Annex I of CLP (data used to calculate the estimate of the acute toxicity of the mixture)
LD50 (Oral):	1515 mg/kg rat
LC50 (Vapour inhalation):	1.48 mg/l/4h rat
STA (Vapour inhalation):	11 mg/l estimated from table 3.1.2 of Annex I of CLP (data used to calculate the estimate of the acute toxicity of the mixture)

3-methoxy-3-methyl-1-butanol

LD50 (Dermal):	> 2000 mg/kg Rat
LD50 (Oral):	4400 mg/kg Female rat

sodium cumene sulfonate

LD50 (Dermal):	> 2000 mg/kg
LD50 (Oral):	> 7000 mg/kg

POTASSIUM HYDROXIDE

LD50 (Oral):	333 mg/kg Rat
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1-METHOXY-2-PROPANOL

LD50 (Dermal):	> 2000 mg/kg Rabbit
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LD50 (Oral):
LC50 (Vapour inhalation):

4016 mg/kg Rat
> 7000 mg/l/4h Rat

SKIN CORROSION / SKIN IRRITATION

Corrosive to the skin

SERIOUS EYE DAMAGE / EYE IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITIZATION

It does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

Information not available

MUTAGENICITY ON GERM CELLS

It does not meet the classification criteria for this hazard class

CARCINOGENICITY

It does not meet the classification criteria for this hazard class

REPRODUCTION TOXICITY

It does not meet the classification criteria for this hazard class

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Harmful effects on sexual function and fertility

Information not available

Harmful effects on the development of offspring

Information not available

Effects on or through breastfeeding

Information not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

It does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

It does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

DANGER IN CASE OF ASPIRATION

It does not meet the classification criteria for this hazard class

11.2. Information about other hazards

Based on available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with effects on human health being evaluated.

SECTION 12. Ecological information

12.1. Toxicity

1-METHOXY-2-PROPANOL

The product is most likely not harmful to aquatic organisms. The correct introduction of low concentrations into a biological purification plant should not compromise the degradation activity of the active sludge.

ETHANOLAMINE

LC50 - Pisces	349 mg/l/96h cyprinus carpio
EC50 - Crustaceans	65 mg/l/48h daphnia magna
EC50 - Algae / Aquatic Plants	2.5 mg/l/72h pseudokirchneriella subcapitata

1-METHOXY-2-PROPANOL

LC50 - Pisces	> 6800 mg/l/96h leuciscus idus
EC50 - Crustaceans	23300 mg/l/48h daphnia magna

POTASSIUM PYROPHOSPHATE

LC50 - Pisces	> 100 mg/l/96h oncorhynchus mykiss
EC50 - Crustaceans	> 100 mg/l/48h daphnia magna
EC50 - Algae / Aquatic Plants	> 100 mg/l/72h algae
Chronic NOEC Fish	100 mg/l oncorhynchus mykiss
Chronic NOEC Algae / Aquatic Plants	> 100 mg/l algae

BENZYL ALCOOL

LC50 - Pisces	460 mg/l/96h Pimephales
EC50 - Crustaceans	230 mg/l/48h Daphnia magna
Chronic NOEC Crustaceans	51 mg/l Daphnia magna
Chronic NOEC Algae / Aquatic Plants	310 mg/l Algae - Pseudokirchneriella subcapitata

sodium cumene sulfonate

LC50 - Pisces	> 1000 mg/l/96h
EC50 - Crustaceans	> 1000 mg/l/48h

EC50 - Algae / Aquatic Plants

310 mg/l/72h

3-methoxy-3-methyl-1-butanol

LC50 - Pisces

> 100 mg/l/96h *Oryzias latipes*

EC50 - Crustaceans

> 1000 mg/l/48h *Daphnia Magna*

EC50 - Algae / Aquatic Plants

> 1000 mg/l/72h *Raphidocelis subcapitata*

12.2. Persistence and degradability

1-METHOXY-2-PROPANOL

Evaluation of biodegradability and elimination (H₂O): easily biodegradable (according to OECD criteria). Disposal considerations: 90-100% (28 days) (OECD 301E/92/96/EEC, C 4-B) (aerobic, effluent from a municipal water treatment plant). In water, hydrolytic stability was not determined but rapid biodegradability was found (96% degraded in 28 days). OECD 301E tests. Atmospheric vapor photodegraded rapidly (half-life <1 day)

POTASSIUM HYDROXIDE

Solubility in water

> 10000 mg/l

Degradability: data not available

ETHANOLAMINE

Solubility in water

1000 - 10000 mg/l

Rapidly degradable

1-METHOXY-2-PROPANOL

Solubility in water

1000 - 10000 mg/l

Rapidly degradable

POTASSIUM PYROPHOSPHATE

Solubility in water

> 10000 mg/l

Degradability: data not available

BENZYL ALCOOL

Rapidly degradable

sodium cumene sulfonate

Rapidly degradable

3-methoxy-3-methyl-1-butanol

Rapidly degradable

12.3. Bioaccumulative potential

ETHANOLAMINE

Partition coefficient: n-octanol/water

-2.3

1-METHOXY-2-PROPANOL

Partition coefficient: n-octanol/water

< 1

BENZYL ALCOOL

Partition coefficient: n-octanol/water

1.05 Log Kow

BCF

1.37 calculated

sodium cumene sulfonate

Partition coefficient: n-octanol/water

1.1 Log Kow

3-methoxy-3-methyl-1-butanol

Partition coefficient: n-octanol/water

0.18

12.4. Mobility in soil

ETHANOLAMINE

Partition coefficient: soil/water

-0.5646

12.5. Results of PBT and vPvB assessment

Based on available data, the product does not contain PBT or vPvB substances in percentages $\geq 0.1\%$.

12.6. Endocrine disrupting properties

POTASSIUM PYROPHOSPHATE

Ecology - water: Product that does not present particular risks for the environment. Phosphate is a nutrient for plants and therefore can promote the growth of phytoplankton in water.

Based on available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with effects on the environment being evaluated.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal Considerations**13.1. Waste treatment methods**

Reuse if possible. Product residues are to be considered hazardous special waste. The dangerousness of waste that partly contains this product must be assessed based on current legislative provisions.

Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local regulations.

Transport of waste may be subject to ADR.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14. Transportation Information**14.1. UN number or ID number**

ADR/RID, IMDG, 1760
IATA:

14.2. Official UN shipping name

ADR / RID: CORROSIVE LIQUID, NOS (ethanolamine, potassium hydroxide)
IMDG: CORROSIVE LIQUID, NOS (ethanolamine, potassium hydroxide)
IATA: CORROSIVE LIQUID, NOS (ethanolamine, potassium hydroxide)

14.3. Transport hazard classes

ADR / RID: Class: 8 Label: 8
IMDG: Class: 8 Label: 8
IATA: Class: 8 Label: 8



14.4. Packing group

ADR/RID, IMDG, III
IATA:

14.5. Dangers for the environment

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for users

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 5 L	Tunnel restriction code: (E)
	Special Provision:-		
IMDG:	EMS: F-A, S-B	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 856
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 852
	Special Provision:	A3, A803	

14.7. Maritime transport in bulk in accordance with IMO acts

Information not relevant

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SECTION 15. Regulatory information

15.1. Health, safety and environmental laws and regulations specific to the substance or mixture

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or substances contained according to Annex XVII Regulation (EC) 1907/2006

Product
Point 3 - 40

Substances contained

Point 75

Regulation (EU) 2019/1148 - relating to the placing on the market and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

Based on available data, the product does not contain SVHC substances in percentages $\geq 0.1\%$.

Substances subject to authorization (Annex XIV REACH)

None

Substances subject to export notification requirements Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Sanitary checks

Workers exposed to this chemical agent dangerous to health must be subjected to health surveillance carried out in accordance with the provisions of the art. 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the safety and health of the worker has been assessed as irrelevant, in accordance with the provisions of art. 224 paragraph 2.

15.2. Chemical safety assessment

A chemical safety assessment has been developed for the following substances contained in the mixture:
Potassium pyrophosphate, Benzyl alcohol, Ethanolamine, 3-methoxy-3-methyl-1-butanol, Sodium Cumensulfonate, Potassium hydroxide, 1-Methoxy-2-propanol.

SECTION 16. Other information

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Text of the hazard statements (H) mentioned in sections 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1A	Skin corrosion, category 1A
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
STOT IF 3	Specific target organ toxicity - single exposure, category 3
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if ingested.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H314	It causes serious skin burns and serious eye injuries.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May irritate the respiratory tract.
H336	May cause drowsiness or dizziness.

LEGEND:

- ADR: European Agreement for the transport of dangerous goods by road
- CAS: Chemical Abstract Service Number
- CE: Identification number in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived no-effect level
- EC50: Concentration that gives effect to 50% of the population subject to testing
- EmS: Emergency Schedule
- GHS: Globally Harmonized System for the Classification and Labeling of Chemical Products
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Immobilization concentration of 50% of the population subject to testing
- IMDG: International Maritime Code for the Transport of Dangerous Goods
- IMO: International Maritime Organization
- INDEX: Identification number in Annex VI of CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulating and toxic according to REACH
- PEC: Predictable environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predictable no-effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulations for the international transport of dangerous goods by train
- STA: Acute Toxicity Estimate
- TLV: Threshold limit value
- TLV CEILING: Concentration that must not be exceeded during any moment of occupational exposure.
- TWA: Weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulating according to REACH
- WGK: Aquatic hazard class (Germany).

GENERAL BIBLIOGRAPHY:

1. Regulation (EC) 1907/2006 of the European Parliament (REACH)

2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) 2020/878 (Annex II of the REACH Regulation)
4. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (EU) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (EU) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (EU) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (EU) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (EU) 2021/849 (XVII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- NI Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA Agency website
- Database of SDS models of chemical substances - Ministry of Health and Istituto Superiore di Sanità

Note for the user:

The information contained in this sheet is based on the knowledge available to us at the date of the latest version. The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

This document should not be interpreted as a guarantee of any specific property of the product.

Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force regarding hygiene and safety under his own responsibility. We do not assume responsibility for improper use.

Provide adequate training to personnel assigned to the use of chemical products.

CLASSIFICATION CALCULATION METHODS

Chemical-physical hazards: The classification of the product was derived from the criteria established by the CLP Regulation Annex I Part 2. The methods of evaluation of the chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on the calculation methods in Annex I of CLP Part 3, unless otherwise indicated in section 11.

Environmental hazards: The classification of the product is based on the calculation methods set out in Annex I of CLP Part 4, unless otherwise indicated in section 12.

Changes compared to the previous revision

Changes have been made to the following sections:

03 / 08 / 10 / 11 / 12.