Safety Data Sheet

In accordance 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:	**0030170**
Name	**PULIGRAFF CREMA**
Chemical name and synonyms	**PULIGRAFF CREMA**

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

Sector of use	**SU22 – Professional uses**
Product Category	**PC35 – Washing and cleaning products (including solvent-based products)**
Description/Use	**Alkaline/solvent cream stain remover for removing ink and graffiti**

1.3. Details of the supplier of the safety data sheet

Company Name	**MARBEC SRL**
Address	**VIA CROCE ROSSA 5/i**
Location and State	**51037 MONTALE (PISTOIA)** **ITALIA**
	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
0573959848 8.30am-1pm 2pm-6pm or +393348578502
Telephone number of Poison Control Centers active 24/7
National Poisons Information Service (Birmingham Unit) +44 844 892 0111

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as dangerous according 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 health and/or environmental risks is given in sections 11 and 12 of this sheet.

Classification and hazard statements:

Skin corrosion, category 1A	H314	Causes severe skin burns and serious eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin sensitization, category 1B	H317	May cause an allergic skin reaction.

2.2. Label elements

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

Hazard pictograms:

Warnings: Danger

Hazard statements:

H314 Causes severe skin burns and serious eye damage.

H317 May cause an allergic skin reaction.

Precautionary statements:

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/clothing and eye/face protection.

P310 Contact a POISON CENTER / doctor immediately / . . .

P301+P330+P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

P362+P364 Remove contaminated clothing and wash before reusing.

Contains: Benzyl alcohol, Sodium hydroxide

2.3. Other dangers

Based on available data, the product does not contain PBT or vPvB substances in percentage ≥ 0.1%.

The product does not contain substances with endocrine-disrupting properties in concentrations ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
DIETHYLENE GLYCOL MONOETHYL ETHER		
INDEX -	9 ≤ x < 30	
EC 203-919-7		
CAS 111-90-0		
REACH Reg. 01-2119475105-42		
Silicic acid, calcium salt (crystalline)		
INDEX -	10 ≤ x < 30	Eye Irrit. 2 H319
EC 215-710-8		
CAS 1344-95-2		
REACH Reg. 01-2119990740-32-xxxx		
3-methoxy-3-methyl-1-butanol		
INDEX -	10 ≤ x < 30	Eye Irrit. 2 H319
EC 260-252-4		
CAS 56539-66-3		
REACH Reg. 01-2119976333-33-xxxx		
2-BUTOXYETHANOL		
INDEX 603-014-00-0	9 ≤ x < 10	Acute Tox. 3 H331, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 203-905-0		LD50 Oral: >1200 mg/kg, LC50 Inhalation vapours: 3 mg/l/4h
CAS 111-76-2		
REACH Reg. 01-2119475108-36-0005		
BENZYL ALCOHOL		
INDEX 603-057-00-5	3 ≤ x < 9	Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Sens. 1B H317
EC 202-859-9		LD50 Oral: 1200 mg/kg
CAS 100-51-6		
REACH Reg. 01-2119492630-38-xxxx		
SODIUM HYDROXIDE		
INDEX 011-002-00-6	1 ≤ x < 2	Met. Corr. 1 H290, Skin Corr. 1A H314, Eye Dam. 1 H318
EC 215-185-5		Skin Corr. 1B H314: ≥ 2% - < 5%, Skin Corr. 1C H314: ≥ 2% - < 5%, Skin Irrit. 2 H315: ≥ 0.5% - < 2%, Eye Dam. 1 H318: ≥ 2%, Eye Irrit. 2 H319: ≥ 0.5% - < 2%
CAS 1310-73-2		
REACH Reg. 01-2119457892-27-xxxx		

The full text of the hazard statements (H) is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

If in doubt or if you experience symptoms, contact a doctor and show this document.
In case of more serious symptoms, call 118 for immediate medical assistance.

EYES: Remove contact lenses, if present, if the situation allows this to be done easily. Wash immediately with plenty of water for at least 15 minutes,

holding the eyelids wide open. Consult a doctor immediately.

SKIN: Remove immediately all contaminated clothing. Wash immediately with plenty of running water (and soap if possible). Seek medical attention immediately. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless specifically authorized by your doctor. Rinse the mouth with running water. Do not administer anything by mouth if the person is unconscious. Seek medical attention immediately.

INHALATION: Remove the victim to fresh air, away from the accident site. If respiratory symptoms occur (cough, dyspnea, difficulty breathing, asthma) keep the victim in a comfortable position for breathing. If necessary, administer oxygen. If breathing stops, perform artificial respiration. Seek medical attention immediately.

Protection of rescuers

It is good practice for the rescuer who provides assistance to a subject who has been exposed to a chemical substance or mixture to wear personal protective equipment. The nature of such protection depends on the dangerousness of the substance or mixture, the method of exposure and the extent of contamination. In the absence of other more specific indications, it is recommended to use disposable gloves in case of possible contact with biological fluids. For the type of PPE suitable for the characteristics of the substance or mixture, refer to section 8.

4.2. Main symptoms and effects, both acute and delayed

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

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

4.3. Indication of any need to immediately consult a doctor and require special treatment

Contact a POISON CENTER / doctor immediately / . . .

Means to have available in the workplace for specific and immediate treatment

Running water for washing skin and eyes.

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEANS
The extinguishing means are the traditional ones: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING MEANS
No one in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS DUE TO EXPOSURE IN CASE OF FIRE
Avoid breathing combustion products.

5.3. Recommendations for firefighters

GENERAL INFORMATION
Cool containers with water jets to prevent product decomposition and the development of substances potentially hazardous to health. Always wear complete fire protection equipment. Collect extinguishing water that must not be discharged into drains. Dispose of contaminated fire extinguishing water and fire residue according to current regulations.
EQUIPMENT
Normal firefighting clothing, such as open-circuit compressed air breathing apparatus (EN 137), flame-retardant overalls (EN469), flame-retardant gloves (EN 659) and firefighter's boots (HO A29 or A30).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop the leak if it is safe to do so.
Wear appropriate protective equipment (including personal protective equipment as per section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These instructions apply to both workers and emergency response personnel.

6.2. Environmental precautions

Prevent the product from entering sewers, surface water or groundwater.

6.3. Methods and materials for containment and remediation

Suck up the spilled product into a suitable container. Assess the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material.
Provide adequate ventilation of the area affected by the spill. 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 given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Ensure adequate earthing for equipment and people. Avoid contact with eyes and skin. Do not inhale any dust or vapors or mists. Do not eat, drink or smoke during use. Wash 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 the product in clearly labelled containers. Avoid overheating. Avoid violent impacts. Store containers away from any incompatible materials, checking section 10.

Storage class TRGS 510 (Germany):
10

7.3. Specific end uses

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory references:

DEU	Germany	Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58
ESP	Spain	Professional exposure limits for chemical agents in Spain 2023
BETWEEN	France	Value limits for professional exposure to chemical agents in France Decree n° 2021-1849 of 28 December

		2021
ITA	Italy	Legislative Decree 9 April 2008, n.81
PRT	Portugal	Legislative Decree n. 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	TLV-ACGIH	ACGIH 2023
	RCP TLV	

ACGIH TLVs and BEIs – Appendix H

DIETHYLENE GLYCOL MONOETHYL ETHER

Threshold limit value

Type	State	TWA/8h		STEL/15min		Notes / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	35	6	70	12	11
MAKE	DEU	50		100		INALAB

Predicted no-effect concentration - PNEC		
Reference value in fresh water	1.98	mg/l
Reference value in sea water	0.198	mg/l
Reference value for sediments in fresh water	7.32	mg/kg/day
Reference value for sediments in seawater	0.732	mg/kg/day
Reference value for STP microorganisms	500	mg/l
Reference value for the terrestrial compartment	0.34	mg/kg/day

Health - Derived No-Effect Level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exposure Way	Sharp locals	Acute systemic	Chronic premises	Chronic systemic	Sharp locals	Acute systemic	Chronic premises	Chronic systemic
Oral				50 mg/kg bw/d				
Inhalation			18 mg/m3	37 mg/m3			30 mg/m3	61 mg/m3
Dermal				25 mg/kg bw/d				83 mg/kg bw/d

Silicic acid, calcium salt (crystalline)

Threshold limit value

Type	State	TWA/8h		STEL/15min		Notes / Observations
		mg/m3	ppm	mg/m3	ppm	
RCP TLV		10				INALAB
RCP TLV		3				BREATH

3-methoxy-3-methyl-1-butanol

Health - Derived No-Effect Level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exposure Way	Sharp locals	Acute systemic	Chronic premises	Chronic systemic	Sharp locals	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

2-BUTOXYETHANOL

Threshold limit value

Type	State	TWA/8h		STEL/15min		Notes / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	49	10	98	20	SKIN	
MAKE	DEU	49	10	98	20	SKIN	Note
VLA	ESP	98	20	245	50	SKIN	
VLEP	BETWEEN	49	10	246	50	SKIN	
VLEP	ITA	98	20	246	50	SKIN	
VLE	PRT	98	20	246	50	SKIN	
WELL	GBR	123	25	246	50	SKIN	
OEL	EU	98	20	246	50	SKIN	
TLV-ACGIH		97	20				

Predicted no-effect concentration - PNEC		
Reference value in fresh water	8.8	mg/l
Reference value in sea water	0.88	mg/l
Reference value for sediments in fresh water	34.6	mg/kg
Reference value for sediments in seawater	3.46	mg/kg
Reference value for water, intermittent release	9.1	mg/l
Reference value for STP microorganisms	463	mg/l
Reference value for the food chain (secondary poisoning)	20	mg/kg
Reference value for the terrestrial compartment	2.33	mg/kg

Health - Derived No-Effect Level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exposure Way	Sharp locals	Acute systemic	Chronic premises	Chronic systemic	Sharp locals	Acute systemic	Chronic premises	Chronic systemic
Oral		26.7 mg/kg bw/d		6.3 mg/kg bw/d				
Inhalation	147 mg/m3	426 mg/m3		59 mg/m3	246 mg/m3	1091 mg/m3		98 mg/m3
Dermal				38 mg/kg bw/d				

BENZYL ALCOHOL

Threshold limit value

Type	State	TWA/8h		STEL/15min		Notes / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	22	5	44	10	SKIN	11
MAKE	DEU	22	5	44	10	SKIN	

Predicted no-effect concentration - 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
Reference value for sediments in seawater	0.527	mg/kg
Reference value for water, intermittent release	2.3	mg/l
Reference value for STP microorganisms	39	mg/l
Reference value for the terrestrial compartment	0.45	mg/kg/day

Health - Derived No-Effect Level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exposure Way	Sharp locals	Acute systemic	Chronic	Chronic	Sharp locals	Acute	Chronic	Chronic

		premises	systemic		systemic	premises	systemic
Oral	20 mg/kg bw/d		4 mg/kg bw/d				
Inhalation	27 mg/m3		5.4 mg/m3		110 mg/m3		22 mg/m3
Dermal	20 mg/kg bw/d		4 mg/kg bw/d		40 mg/kg bw/d		8 mg/kg bw/d

SODIUM HYDROXIDE

Threshold limit value

Type	State	TWA/8h		STEL/15min		Notes / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP			2		
VLEP	BETWEEN	2				
WELL	GBR			2		
TLV-ACGIH				2 (C)		

Health - Derived No-Effect Level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exposure Way	Sharp locals	Acute systemic	Chronic premises	Chronic systemic	Sharp locals	Acute systemic	Chronic premises	Chronic systemic
Inhalation			1 mg/m3	1 mg/m3			1 mg/m3	1 mg/m3

Legend:

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

VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified; LOW = low hazard; MED = medium hazard; HIGH = high hazard.

8.2. Exposure controls

Considering that the use of appropriate 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, seek advice from your chemical suppliers.
Personal protective equipment must bear the CE marking which certifies their compliance with current regulations.

Provide emergency shower with eye basin.

HAND PROTECTION
Protect hands with category III work gloves.
For the final choice of work glove material (ref. EN 374 standard) the following must be considered: compatibility, degradation, permeation time.
In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is not predictable. Gloves have a wear time that depends on the duration and method of use.

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

EYE PROTECTION
It is recommended to wear a hood visor or protective visor combined with airtight glasses (ref. standard EN ISO 16321).

RESPIRATORY PROTECTION
The use of respiratory protection devices is necessary if the technical measures adopted are not sufficient to limit the worker's exposure to the threshold

values taken into consideration. It is recommended to wear a mask with a type A filter, the class of which (1, 2 or 3) must be chosen in relation to the limit concentration of use. (ref. standard EN 14387).
In case the substance in question 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 an external air-supplied respirator (ref. standard EN 138). For the correct choice of respiratory protection device, refer to standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
Emissions from manufacturing processes, including those from ventilation equipment, should be monitored to comply with environmental protection legislation.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	Value	Information
Physical State	pasta	
Color	Havana	
Odor	characteristic of solvent	
Melting or freezing point	not available	
Initial boiling point	not available	
Flammability	non-flammable	
Lower explosive limit	not applicable	
Upper explosive limit	not applicable	
Flash point	> 90 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	14	
Kinematic viscosity	not available	
Solubility	partially soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapor pressure	not available	
Density and/or Relative Density	0.94 kg/l	
Relative vapor density	not available	
Particle Characteristics	not applicable	

9.2. Other information

9.2.1. Information relating to physical hazard classes

Information not available

9.2.2. Other security features

VOC (Directive 2010/75/EU)	61.70% - 580.00	g/liter
Explosive properties	non-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 hazardous reactions

Under normal conditions of use and storage, no hazardous reactions are expected.

10.4. Conditions to avoid

None in particular. However, take the usual precautions when handling chemicals.

10.5. Incompatible materials

BENZYL ALCOHOL

Incompatible with: sulfuric acid, oxidizing substances, aluminum.

SODIUM HYDROXIDE

Incompatible with: strong acids, ammonia, zinc, lead, aluminum, water, flammable liquids.

10.6. Hazardous decomposition products

2-BUTOXYETHANOL

May develop: hydrogen.

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Metabolism, kinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapors) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Cutaneous) of the mixture:	Not classified (no relevant components)

DIETHYLENE GLYCOL MONOETHYL ETHER

LD50 (Dermal):	9143 mg/kg rabbit
LD50 (Oral):	6031 mg/kg mouse (male)
LC50 (Inhalation of vapours):	0.02 mg/l/8h rat

Silicic acid, calcium salt (crystalline)

LC50 (Inhalation of mists/dusts):	> 4.9 mg/l/4h inhalation rat

3-methoxy-3-methyl-1-butanol

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

2-BUTOXYETHANOL

LD50 (Dermal):	> 2000 mg/kg Guinea pig (OECD - guideline 402)
LD50 (Oral):	> 1200 mg/kg Guinea pig
LC50 (Inhalation of vapours):	3 mg/l/4h Rat

BENZYL ALCOHOL

LD50 (Dermal):	2000 mg/kg Rabbit
LD50 (Oral):	1200 mg/kg Rat
LC50 (Inhalation of vapours):	> 4.1 mg/l/4h Rat

SODIUM HYDROXIDE

LD50 (Dermal):	1350 mg/kg Rat
LD50 (Oral):	1350 mg/kg Rat

SKIN CORROSION / SKIN IRRITATION

Corrosive to the skin

Classification based on the experimental value of the pH

SERIOUS EYE DAMAGE / EYE IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITIZATION

Skin sensitizer

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

DANGER IN CASE OF ASPIRATION

Does not meet the classification criteria for this hazard class

11.2. Information on 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 under evaluation.

SECTION 12. Ecological information

Use according to good working practices, avoiding dispersal of the product into the environment. Notify the competent authorities if the product has reached water courses or if it has contaminated the soil or vegetation.

12.1. Toxicity

2-BUTOXYETHANOL
Aquatic toxicity assessment (supplier): The product is most likely not harmful to aquatic organisms. There is a high probability that the product is not chronically harmful to aquatic organisms. Correct introduction of low concentrations into a biological wastewater treatment plant should not compromise the degradation activity of the activated sludge. Terrestrial toxicity assessment (supplier): Study not scientifically justified.

DIETHYLENE GLYCOL MONOETHYL ETHER

LC50 - Fish	6010 mg/l/96h fish
EC50 - Crustaceans	1982 mg/l/48h daphnia magna
EC50 - Algae / Aquatic Plants	> 100 mg/l/96h scenedesmus subspicatus

2-BUTOXYETHANOL

LC50 - Fish	1474 mg/l/96h oncorhynchus mykiss
EC50 - Crustaceans	1550 mg/l/48h daphnia magna
EC50 - Algae / Aquatic Plants	1840 mg/l/72h pseudokirchneriella subcapitata
NOEC Chronic Fish	> 100 mg/l Brachydanio rerio
NOEC Chronic Crustaceans	100 mg/l daphnia magna

BENZYL ALCOHOL

LC50 - Fish	460 mg/l/96h Pimephales promelas
EC50 - Crustaceans	230 mg/l/48h daphnia magna
EC50 - Algae / Aquatic Plants	770 mg/l/72h Pseudokircheneriella subcapitata

3-methoxy-3-methyl-1-butanol

LC50 - Fish	> 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

Silicic acid, calcium salt (crystalline)
The substance is inorganic and therefore not subject to biodegradation.

SODIUM HYDROXIDE

Solubility in water	> 10000 mg/l

Degradability: data not available

DIETHYLENE GLYCOL MONOETHYL ETHER

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

2-BUTOXYETHANOL

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

BENZYL ALCOHOL

Rapidly degradable

3-methoxy-3-methyl-1-butanol

Rapidly degradable

12.3. Bioaccumulative potential

Silicic acid, calcium salt (crystalline)
The substance is inorganic, therefore not subject to accumulation.

DIETHYLENE GLYCOL MONOETHYL ETHER

Partition coefficient: n-octanol/water	-0.54
BCF	< 100 poorly bioaccumulative

2-BUTOXYETHANOL

Partition coefficient: n-octanol/water	0.81
BCF	3.16 (calculated QSAR value). This substance is not expected to bioaccumulate.

BENZYL ALCOHOL

Partition coefficient: n-octanol/water	1.1

3-methoxy-3-methyl-1-butanol

Partition coefficient: n-octanol/water	0.18

12.4. Mobility in soil

Silicic acid, calcium salt (crystalline)
The substance has a low potential for absorption.

2-BUTOXYETHANOL
Assessment of transport between environmental compartments (supplier): The substance does not evaporate into the atmosphere from the water surface. Adsorption to the solid phase of soil is not expected. Study not scientifically justified. Stability in water: Not expected to be immediately hydrolyzed; does not contain functional groups that are considered to be hydrolyzed in water. Stability in soil: Low adsorption to soil particles is expected.

12.5. Results of PBT and vPvB assessment

Based on available data, the product does not contain PBT or vPvB substances in percentage ≥ 0.1%.

12.6. Endocrine disrupting properties

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 under evaluation.

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 hazardousness of wastes containing part of this product must be assessed according to the current legislative provisions.
Disposal must be entrusted to a company authorised to manage waste, in compliance with national and, where applicable, local legislation.
The 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. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: UN 1760

14.2. UN official shipping name

ADR / RID:	CORROSIVE LIQUID, NOS (Sodium Hydroxide)
IMDG:	CORROSIVE LIQUID, NOS (sodium hydroxide)
IATA:	CORROSIVE LIQUID, NOS (sodium 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, IATA: III

14.5. Environmental hazards

ADR / RID: NO
IMDG: non-marine pollutant
IATA: NO

14.6. Special precautions for users

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 5 L	Tunnel restriction code: (E)
	Special provision: 274		
IMDG:	EMS: FA, SB	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging Instructions: 856
	Passengers:	Maximum quantity: 5 L	Packaging Instructions: 852
	Special provision:	A3, A803	

14.7. Bulk maritime transport in accordance with IMO acts

Irrelevant information

SECTION 15. Regulatory Information

15.1. Legislative and regulatory provisions on health, safety and environment specific for the substance or mixture

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or the substances contained in accordance with Annex XVII of Regulation (EC) 1907/2006

Product
Point 3

Substances contained

Point 75

Regulation (EU) 2019/1148 - on 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 percentage ≥ 0.1%.

Substances subject to authorisation (Annex XIV REACH)

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Health Checks

Workers exposed to this chemical agent which is hazardous to health must be subjected to health surveillance carried out in accordance with the provisions of 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 in the mixture:
Sodium hydroxide, Silicic acid, calcium salt (crystalline), 3-methoxy-3-methyl-1-butanol **,** diethylene glycol monoethyl ether, 2-butoxyethanol, benzyl alcohol

SECTION 16. Other information

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

Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1B	Skin sensitization, category 1B
H290	May be corrosive to metals.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H314	Causes severe skin burns and serious eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.

H317 May cause an allergic skin reaction.

LEGEND:
- ADR: European Agreement concerning the carriage of dangerous goods by road
- ATE / STA: Acute Toxicity Estimation
- 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 produces an effect in 50% of the test population
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulations
- IC50: Immobilization concentration of 50% of the test population
- IMDG: International Maritime Dangerous Goods Code
- 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, bioaccumulative and toxic
- PEC: Predicted environmental concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted No Effect Concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulations for the international carriage of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time Weighted Average Exposure Limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic compound
- vPvB: Very Persistent and Very Bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard class (Germany).

GENERAL BIBLIOGRAPHY:
1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
2. Regulation (EC) 1272/2008 of the European Parliament and of the Council (CLP)
3. Regulation (EU) 2020/878 (Annex II 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)
22. Delegated Regulation (EU) 2022/692 (XVIII Atp. CLP)
23. Delegated Regulation (EU) 2023/707
24. Delegated Regulation (EU) 2023/1434 (XIX Atp. CLP)
25. Delegated Regulation (EU) 2023/1435 (XX Atp. CLP)
- The Merck Index. - 10th Edition
- Chemical Safety Handling

- 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 user:
The information contained in this sheet is based on the knowledge available to us at the date of the last 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 construed as a guarantee of any specific property of the product.
Since the use of the product is not under our direct control, it is the user's obligation to observe under his own responsibility the laws and provisions in force regarding hygiene and safety. We assume no responsibility for improper use.
Provide adequate training to personnel involved in the use of chemicals.
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 for evaluating the chemical-physical properties are reported in section 9.
Health hazards: The classification of the product 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 in Annex I of CLP Part 4, unless otherwise indicated in section 12.

Changes from the previous revision
Changes have been made to the following sections:
02 / 03 / 04 / 08 / 09 / 11 / 12 / 14 / 16.