Safety Data Sheet

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

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

1.1. Product identifier

Denomination: **DCM DAILY VEGAN 8 BLEACHING POWDER**

1.2. Relevant identified uses of the substance or mixture and discouraged uses

Description/Use: **Bleaching powder for hair (for cosmetic use only). All standard colours (A, B, GR, VA, VE, VI, N) All standard perfumes (AN, CO, RO, F, FB, FR, LA, MAN, MEL, MEN, PI, RO, VI). All the ingredients, non-hazardous, added to the basic formula and initialed from 01 to 99 or with adjectives (defence, nutra, protect, rebound, revive)**

1.3. Information on the safety data sheet provider

Name: **DIAPASON COSMETICS SRL**
Address: **Piazza Emilia 1**
Location and State: **20029 Milan**
Italy

tel. +39 0331 937211

1.4. Emergency telephone number

For urgent information, please contact: **"Antonio Cardarelli" Hospital, III Anesthesia and Resuscitation Service, via Antonio Cardarelli 9, Naples;**
Careggi University Hospital, Medical Toxicology Unit, via Largo Brambilla 3, Florence;
National Centre for Toxicological Information, IRCCS Salvatore Maugeri Foundation Clinic of Work and Rehabilitation, via Salvatore Maugeri 10, Pavia;
Niguarda Ca' Grande Hospital, Piazza Ospedale Maggiore 3, Milan; "Papa Giovanni XXIII" Hospital, clinical toxicology, Department of Clinical Pharmacy and Pharmacology, piazza OMS 1, Bergamo;
Policlinico "Umberto I", PRGM emergency toxicology, viale del Policlinico 155, Rome;
the "Agostino Gemelli" Polyclinic, Clinical Toxicology Service, largo Agostino Gemelli 8, Rome;
Azienda ospedaliera universitaria riuniti, viale Luigi Pinto 1, Foggia;
Bambino Gesù Children's Hospital, DEA Emergency and Admission Department, Piazza Sant'Onofrio 4, Rome;
of the Integrated University Hospital (AOUI) of Verona headquarters in Borgo Trento, piazzale Aristide Stefani, 1 - 37126 Verona.

SECTION 2. Hazard identification

2.1. Classification of the substance or mixture

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

statements:

Acute toxicity, category 4	H302	Harmful was ingested.
Serious eye injuries, category 1	H318	It causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Specific Target Organ Toxicity - Single Exposure, Category 3	H335	It can irritate the respiratory tract.
Respiratory sensitization, category 1	H334	It can cause allergic or asthmatic symptoms or difficulty breathing if inhaled.
Skin sensitization, category 1	H317	It can cause an allergic skin reaction.

2.2. Label elements

Hazard labelling in accordance with Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adaptations.

Hazard pictograms:

Warnings: Danger

Hazard statements:

H302	Harmful was ingested.
H318	It causes serious eye damage.
H315	Causes skin irritation.
H335	It can irritate the respiratory tract.
H334	It can cause allergic or asthmatic symptoms or difficulty breathing if inhaled.
H317	It can cause an allergic skin reaction.

Precautionary statements:

P261	Avoid breathing dust/fumes/gases/mist/vapors/aerosols.
P305+P351+P338	IF IN CONTACT WITH EYES: Rinse thoroughly for several minutes. Remove any contact lenses if it is easy to do so. Continue rinsing.
P280	Wear protective gloves and protect your eyes/face.
P310	Contact a POISON CENTER / doctor / . . . immediately
P304+P340	IN CASE OF INHALATION: Carry the victim to fresh air and keep him or her at rest in a position conducive to respiration.
P403+P233	Keep the container tightly closed and in a well-ventilated place.
P264	Wash your hands thoroughly after use.

Contains: SODIUM METASILICATE ANHYDROUS
SODIUM SILICATE
POTASSIUM PERSULFATE
AMMONIUM PERSULFATE

2.3. Other hazards

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

The product does not contain endocrine-disrupting substances in a concentration ≥ 0.1%.

SECTION 3. Composition/ingredient information

3.1. Substances

Information not applicable

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
SODIUM SILICATE		
CAS 1344-09-8	25 ≤ x < 50	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
CE 215-687-4		
INDEX -		
Reg. REACH 01-2119448725-31-0011		
POTASSIUM PERSULFATE		
CAS 7727-21-1	20 ≤ x < 25	Ox. Sol. 3 H272, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317
CE 231-781-8		LD50 Orale: 1130 mg/l
INDEX 016-061-00-1		
Reg. REACH 01-2119495676-19-0000		
AMMONIUM PERSULFATE		
CAS 7727-54-0	10 ≤ x < 20	Ox. Sol. 3 H272, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317
CE 231-786-5		Oral STA: 500 mg/kg
INDEX 016-060-00-6		
Reg. REACH 01-2119495973-19-0000		
SODIUM METASILICATE ANHYDROUS		
CAS 6834-92-0	3 ≤ x < 5	Met. Corr. 1 H290, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335
CE 229-912-9		

INDEX 014-010-00-8

Reg. REACH 01-2119449811-37-xxxx

The full text of the hazard statements (H) can be found in section 16 of the data sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

Not specifically necessary. In any case, compliance with the rules of good industrial hygiene is recommended.

4.2. Main symptoms and effects, both acute and delayed

No specific information is known about the symptoms and effects caused by the product.

4.3. Indication of whether medical attention and special treatment are required immediately

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEANS
The means of extinguishing are the traditional ones: carbon dioxide, foam, dust and water spray.
UNSUITABLE MEANS OF EXTINGUISHING
No one in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS DUE TO EXPOSURE IN THE EVENT OF FIRE
Avoid breathing in the combustion products. The product is combustible and, when the dust is dispersed in the air in sufficient concentrations and in the presence of an ignition source, it can give explosive mixtures with air. The fire can develop or be further fueled by the solid, possibly leaking from the container, when it reaches high temperatures or by contact with ignition sources.

5.3. Recommendations for Fire Extinguishers

GENERAL INFORMATION
Cool the containers with water jets to prevent the product from decomposing and developing substances that are potentially hazardous to health. Always wear full fire protection equipment. Collect extinguishing water that should not be discharged into the sewers. Dispose of contaminated water used for extinguishing and residual fire according to current regulations.
EQUIPMENT
Normal firefighting clothing, such as an open-circuit compressed air breathing apparatus (EN 137), flame-retardant suit (EN469), flame-retardant gloves (EN 659) and firefighter boots (HO A29 or A30).

SECTION 6. Measures in the event of accidental release

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

In the event of airborne vapours or dust, respiratory protection should be used. These indications are valid both for workers and for emergency interventions.

6.2. Environmental Precautions

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

6.3. Methods and materials for containment and remediation

Dam with earth or inert material. Collect most of the material and remove the residue with water jets. Disposal of contaminated material shall be carried out in accordance with the provisions of point 13.

6.4. Reference to other sections

Any information regarding personal protection and disposal can be found in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Handle the product after consulting all other sections of this safety data sheet. Avoid dispersing the product into the environment. Do not eat, drink, or smoke during use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labeled containers. Store containers away from any incompatible materials, checking section 10.

Keep in a cool (below 30°C) and dry place. Avoid contamination, reducing agents such as lotions for perms. Do not store after mixing with developers and lightening lotions. Containers may break. AVOID moist organic materials such as paper towels, wood, clothing, etc., as they may cause spontaneous combustion.
Protect from heat and sunlight; Store away from rain and humidity and in any case never outdoors. Store separately from other hazardous and incompatible substances.

7.3. Special end uses

Information not available

SECTION 8. Exposure/Personal Protection Controls

8.1. Control parameters

Regulatory references:

Extrasensory perception	España	Occupational exposure limits for chemical agents in Spain 2021

TLV-ACGIH	ACGIH 2021

SODIUM SILICATE

Predicted concentration of no effect on the environment - NECP

Reference value in fresh water	7,5	mg/l
Reference value for sediment in seawater	1	mg/l
Water reference value, intermittent release	7,5	mg/l
Reference value for STP microorganisms	348	mg/l

Health - Derived Level of No-Effect - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic Premises	Systemic Chronic	Acute rooms	Acute systemic	Chronic Systemic Premises	Chronic
Oral			VND	0.80 mg/kg BW/D				
Inhalation			VND	1.38 mg/m3			VND	5.61 mg/m3
Dermal			VND	0.8 mg/kg BW/D			VND	1.59 mg/kg BW/D

POTASSIUM PERSULFATE

Predicted concentration of no effect on the environment - NECP

Reference value in fresh water	0,0763	mg/l
Reference value in seawater	0,011	mg/l
Reference value for freshwater sediment	0,275	mg/kg
Reference value for sediment in seawater	0,0396	mg/kg
Water reference value, intermittent release	0,763	mg/l
Reference value for STP microorganisms	3,6	mg/l
Reference value for the land compartment	0,015	mg/kg

Health - Derived Level of No-Effect - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic Premises	Systemic Chronic	Acute rooms	Acute systemic	Chronic Systemic Premises	Chronic
Oral		30 mg/kg bw/d		9.1 mg/kg bw/d				
Inhalation	295 mg/m3	295 mg/m3	1.03 mg/m3	1.03 mg/m3		590 mg/m3	2.06 mg/m3	2.06 mg/m3
Dermal	1.124 mg/cm2	200 mg/kg bw/d	0,051 mg/cm2	9.1 mg/kg bw/d	2,248 mg/cm2	400 mg/kg BW/D	0,102 mg/cm2	18.2 mg/kg bw/d

AMMONIUM PERSULFATE

Threshold limit value

Type	State	THREE/8h		COUPLE/15min		Notes / Remarks
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	0,1				
TLV-ACGIH		0,1				

Predicted concentration of no effect on the environment - NECP

Reference value in fresh water	0,0763	mg/l
Reference value in seawater	0,011	mg/l

Reference value for freshwater sediment	0,275	mg/kg
Reference value for sediment in seawater	0,0396	mg/kg
Water reference value, intermittent release	0,763	mg/l
Reference value for STP microorganisms	3,6	mg/l
Reference value for the land compartment	0,015	mg/kg

Health - Derived Level of No-Effect - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic Premises	Systemic Chronic	Acute rooms	Acute systemic	Chronic Systemic Premises	Chronic
Oral		30 mg/kg bw/d		9.1 mg/kg bw/d				
Inhalation	295 mg/m3	295 mg/m3	1.03 mg/m3	1.03 mg/m3		590 mg/m3	2.06 mg/m3	2.06 mg/m3
Dermal	1.124 mg/cm2	200 mg/kg bw/d	0,051 mg/cm2	9.1 mg/kg bw/d	2,248 mg/cm2	400 mg/kg BW/D	0,102 mg/cm2	18.2 mg/kg bw/d

SODIUM METASILICATE ANHYDROUS
Health - Derived Level of No-Effect - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic Premises	Systemic Chronic	Acute rooms	Acute systemic	Chronic Systemic Premises	Chronic
Oral				0.74 mg/kg BW/D				
Inhalation				1.55 mg/m3		6,22		6.22 mg/m3
Dermal				0.74 mg/kg BW/D				1.49 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.

It is recommended to consider in the risk assessment process the occupational exposure limit values provided by the ACGIH for inert dusts not otherwise classified (PNOC respirable fraction: 3 mg/mc; PNOC inhalable fraction: 10 mg/mc). If these limits are exceeded, it is advisable to use a type P filter, the class of which (1, 2 or 3) must be chosen according to the outcome of the risk assessment.

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 by means of effective local suction.
When choosing personal protective equipment, seek advice from your chemical suppliers if necessary. Personal protective equipment must bear the CE marking certifying its compliance with current standards.

Provide emergency showers with visocular basin. HAND

PROTECTION
If prolonged contact with the product is expected, it is recommended to protect your hands with penetration-resistant work gloves (ref. EN 374 standard). For the final choice of the material of the work gloves, the process of use of the product and any other products derived from it must also be evaluated. It should also be remembered that latex gloves can give rise to sensitization phenomena.

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

EYE PROTECTION
It is recommended to wear airtight protective goggles (ref. EN 166 standard).

If there is a risk of being exposed to splashes or splashes in relation to the work carried out, adequate protection of the mucous membranes (mouth, nose, eyes) must be provided in order to avoid accidental absorption.

RESPIRATORY PROTECTION
We recommend the use of a type P filtering face mask whose class (1, 2 or 3) and actual need must be defined according to the outcome of the risk assessment (ref. EN 149 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 fundamental physical and chemical properties

Property	Value	Information
Physical State	dust	
Color	light blue, white, gray, green, purple, purple-light blue, black	
Smell	characteristic	
Melting or freezing point	Unavailable	
Initial boiling point	Unavailable	
Inflammability	Unavailable	
Lower explosive limit	Unavailable	
Upper explosive limit	Unavailable	
Flash point	Unavailable	
Auto-ignition temperature	Unavailable	
ph	10,4 - 11,4 (sol 1%)	
Kinematic viscosity	Unavailable	
Solubility	Partially soluble	
Partition coefficient: n-octanol/water	Unavailable	
Vapour pressure	Unavailable	
Density and/or Relative Density	Unavailable	
Relative vapor density	Unavailable	
Particle characteristics	Unavailable	

9.2. Other information

9.2.1. Information related to classes of physical

hazards Information not available

9.2.2. Other security features

Information not available

SECTION 10. Stability and responsiveness

10.1. Reactivity

There is no particular danger of reaction with other substances under normal conditions of use.

SODIUM METASILICATE ANHYDROUS

Aqueous solutions act as: strong foundations.

10.2. Chemical Stability

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

10.3. Possibility of dangerous reactions

Dusts are potentially explosive when mixed with air. SODIUM

METASILICATE ANHYDROUS

It can react dangerously with: fluorine, lithium.

10.4. Conditions to avoid

Avoid the accumulation of dust in the environment.

10.5. Incompatible materials

SODIUM METASILICATE ANHYDROUS

The aqueous solution is incompatible with: acids, organic anhydrides, acrylates, alcohols, aldehydes, alkyl oxides, cresols, caprolactam, epichlorohydrin, ethylene dichloride, glycols, isocyanates, ketones, nitrates, phenols, vinyl acetate.

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental toxicological data on the product itself, the possible health hazards of the product were evaluated on the basis of the properties of the substances contained, according to the criteria provided for by the reference legislation for classification.
Therefore, consider the concentration of the individual hazardous substances that may be mentioned in section 3, to evaluate the toxicological effects deriving from exposure to the product.

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 probable routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available ACUTE

TOXICITY

ATE (Inhalation) of the mixture:	Unclassified (no relevant components)
ATE (Oral) of the mixture:	1609.69 mg/kg
ATE (Cutaneous) of the mixture:	Unclassified (no relevant components)

SODIUM SILICATE

LD50 (Cutanea):	> 5000 mg/kg (rat)
LD50 (Oral):	3400 mg/ kg (rat)
LC50 (Mist/Dust Inhalation):	> 2.06 g/m3 (rat)

POTASSIUM PERSULFATE

LD50 (Cutanea):	> 10000 mg/kg (coniglio)

LD50 (Oral):	1130 mg/kg (ratto)
LC50 (Mist/Dust Inhalation):	> 42,9 mg/l (ratto)

AMMONIUM PERSULFATE

LD50 (Cutanea):	> 2000 mg/kg Rat
LD50 (Oral):	272 mg/kg Rat
STA (Oral):	500 mg/kg estimated from Table 3.1.2 of Annex I of CLP (data used for the calculation of the estimation of the acute toxicity of the mixture)
LC50 (Mist/Dust Inhalation):	> 5,1 mg/l/4h Rat

SODIUM METASILICATE ANHYDROUS

LD50 (Cutanea):	> 5000 mg/kg bw (Ratto)
LD50 (Oral):	1152 mg/kg bw (Ratto)
LC50 (Mist/Dust Inhalation):	> 2,06 g/m3 (Ratto)

SKIN CORROSION / SKIN IRRITATION

Causes skin irritation

SEVERE EYE DAMAGE/EYE IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITIZATION

Skin sensitiser Respiratory sensitiser

Respiratory sensitization

Information not available

Skin sensitization

Information not available

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

Harmful effects on sexual function and fertility

Information not available

Harmful effects on the development of offspring

Information not available

Effects on or through lactation

Information not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

May irritate the respiratory tract

Target organs

Information not available

Route of exposure

Information not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

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 SUCTION

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain any 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 dispersing the product into the environment. Notify the competent authorities if the product has reached watercourses or if it has contaminated soil or vegetation.

12.1. Toxicity

SODIUM SILICATE

LC50 - Fish	1108 mg/l/96h (Brachydanio rerio)
EC50 - Crustaceans	1700 mg/l/48h (Daphnia magna)

POTASSIUM PERSULFATE

LC50 - Fish	107,6 mg/l/96h Scophthalmus maximus
EC50 - Crustaceans	120 mg/l/48h (daphnia)
EC50 - Algae / Aquatic Plants	320 mg/l/72h Phaeodactylum

SODIUM METASILICATE ANHYDROUS

LC50 - Fish	1108 mg/l/96h (Brachydanio rerio)
EC50 - Crustaceans	1700 mg/l/48h (Daphnia magna)
EC50 - Algae / Aquatic Plants	207 mg/l/72h (Schenedesmus subspicatus)

AMMONIUM PERSULFATE

LC50 - Fish	107,6 mg/l/96h Scophthalmus maximus
EC50 - Crustaceans	120 mg/l/48h (Daphnia magna)
EC50 - Algae / Aquatic Plants	320 mg/l/72h Phaeodactylum
EC10 Algae / Aquatic Plants	36 mg/l/72h Pseudomonas putida

SODIUM METASILICATE ANHYDROUS

Water solubility	210000 mg/l

AMMONIUM PERSULFATE

Water solubility	> 10000 mg/l

and vPvB

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

12.6. Endocrine-disrupting properties

Based on the available data, the product does not contain any 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 waste containing part of this product must be assessed in accordance with the applicable legal provisions.
Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local legislation. CONTAMINATED PACKAGING
Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14. Transportation Information

The product is not to be considered dangerous under the current regulations on the transport of dangerous goods by road (A.D.R.), by rail (RID), by sea (IMDG Code) and by air (IATA).

14.1. UN number or ID number

Not applicable

14.2. Official UN Transport Designation

Not applicable

14.3. Transport hazard classes

Not applicable

14.4. Packaging unit

Not applicable

14.5. Hazards to the environment

Not applicable

14.6. Special precautions for users

Not applicable

14.7. Bulk shipping in accordance with IMO acts

Information not applicable

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 on the product or substances contained in Annex XVII Regulation (EC) 1907/2006

Substances

Point	75	
Point	65	AMMONIUM PERSULPHATE Reg. REACH: 01-2119495973-19-0000

Regulation (EU) 2019/1148 – on the marketing and use of explosives precursors

Not applicable

Sostanze in Candidate List (Art. 59 REACH)

Based on the available data, the product does not contain SVHC substances in a percentage ≥ to

0.1%. Substances subject to authorisation (Annex XIV REACH)

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

No health

checks

Workers exposed to this chemical agent dangerous 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.

Classification for water pollution in Germany (AwSV, vom 18. April 2017)

WGK 1: Not very dangerous for water

15.2. Chemical Safety Assessment

A chemical safety assessment has not been developed for the mixture/substances listed in section 3.

SECTION 16. Other information

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

Ox. Sol. 3	Oxidizing solid, category 3
Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye injuries, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2

STOT SE 3	Specific Target Organ Toxicity - Single Exposure, Category 3
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Sens. 1	Skin sensitization, category 1
H272	It can aggravate a fire; Combustion.
H290	It can be corrosive to metals.
H302	Harmful was ingested.
H314	It causes severe skin burns and serious eye damage.
H318	It causes serious eye damage.
H319	It causes severe eye irritation.
H315	Causes skin irritation.
H335	It can irritate the respiratory tract.
H334	It can cause allergic or asthmatic symptoms or difficulty breathing if inhaled.
H317	It can cause an allergic skin reaction.

LEGEND:
- ADR: European Agreement for the Carriage of Dangerous Goods by Road
- CAS: Chemical Abstract Service Number
- EC: Identification number in ESIS (European Repository of Existing Substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived Level with No Effect
- EC50: Concentration affecting 50% of the test population
- EmS: Emergency Schedule
- GHS: Global Harmonized System for the Classification and Labelling of Chemicals
- IATA DGR: Regulations for the Carriage of Dangerous Goods of the International Air Transport Association
- IC50: Immobilization concentration of 50% of the test population
- 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, bioaccumulative 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 Carriage of Dangerous Goods by Train
- STA: Acute Toxicity Estimation
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Weighted Average Exposure Limit
- TWA STEL: Short-Term Exposure Limit
- VOC: Volatile Organic Compound
- vPvB: Very persistent and very bioaccumulative 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 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
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- Sito Web IFA GESTIS
- ECHA Agency website
- Database of SDS models of chemical substances - Ministry of Health and Istituto Superiore di Sanità

Note to the 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 that the information is suitable and complete 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 does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force on hygiene and safety under their own responsibility. They do not accept responsibility for improper use.
Provide adequate training to personnel involved in the use of chemical products.
CLASSIFICATION CALCULATION METHODS
Chemical and physical hazards: The classification of the product has been derived from the criteria established by the CLP Regulation Annex I Part 2.
The methods for evaluating the chemical and physical properties are given in section 9.
Health hazards: The classification of the product is based on the calculation methods set out 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.