Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 1/14

004_016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

Safety data sheet

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

1.1. Product identifier

Code: **3SPXXBX008100**

Product name SOFT LAVATRICE POLVERE BLUE OXYGEN

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

Identified Uses Industrial Professional Consumer laundry detergent

Uses Advised Against

Do not use for uses other than those indicated

1.3. Details of the supplier of the safety data sheet

Name Biochimica S.p.A. Full address Via Roma, 49

District and Country 40069 Zola Predosa (BO) tel. +39 051 755269

fax +39 051 752707

ITALIA

e-mail address of the competent person

responsible for the Safety Data Sheet sds@chimicahts.it

1.4. Emergency telephone number

For urgent inquiries refer to CAVp Osp. Pediatrico Bambino Gesu, Piazza Sant Onofrio, 4 00165 Roma Tel.:

0668593726

Az. Osp. Univ. Foggia, V.le Luigi Pinto, 1 71122 Foggia Tel.: 0881732326 Az. Osp. A. Cardarelli, Via A. Cardarelli, 9 80131 Napoli Tel.: 0817472870

CAV Policlinico Umberto I, V.le del Policlinico, 155 00161 Roma Tel.: 0649978000 CAV Policlinico A. Gemelli, Largo Agostino Gemelli, 8 00168 Roma Tel.: 063054343 Az. Osp. Careggi U.O. Tossicologia Medica, Largo Brambilla, 3 50134 Firenze Tel.:

0557947819

CAV Centro Nazionale di Inf. Tossicologica, Via Salvatore Maugeri, 10 27100 Pavia Tel.:

038224444

Osp. Niguarda Ca' Granda Piazza Ospedale Maggiore,3 20162 Milano Tel.: 0266101029

Azienda Ospedaliera Papa Giovanni XXII, Piazza

OMS, 1 24127 Bergamo Tel.: 800883300

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2

H319

Causes serious eye irritation.

Classified according to the Det Net / 233 report.

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 2/14

004 016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

2.2. Label elements

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

Hazard pictograms:



Signal words: Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P337+P313 If eye irritation persists: Get medical advice / attention.

Ingredients according to Regulation (EC) No. 648/2004

Less than 5% anionic surfactants, non-ionic surfactants, soap, zeolites, polycarboxylates

5% or over but less than oxygen-based bleaching agents

15%

enzymes, optical brighteners

perfumes

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification x = Conc. % Classification 1272/2008 (CLP)

SODIUM CARBONATE

CAS 497-19-8 10 < x ≤ 20 Eye Irrit. 2 H319

EC 207-838-8

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 3/14

004_016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

INDEX 011-005-00-2

Reg. no. 01-2119485498-19

DISODIUM CARBONATE, COMPOUND WITH HYDROGEN PEROXIDE (2:3)

CAS 15630-89-4

5 < x ≤ 10

Ox. Sol. 3 H272, Acute Tox. 4

H302, Eye Dam. 1 H318

EC 239-707-6

INDEX -

Reg. no. 01-2119457268-30 SILICIC ACID, SODIUM SALT

CAS 1344-09-8

1 < x ≤ 5

Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335

EC 215-687-4

INDEX -

Reg. no. 01-2119448725-31

ALCOHOLS, C12-13, BRANCHED AND LINEAR,

ETHOXYLATED

CAS 160901-19-9 $1 < x \le 5$

Acute Tox. 4 H302, Eye Dam.

1 H318

EC 931-954-4

INDEX -

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS

CAS 68411-30-3

1 < x ≤ 5

Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315

EC 270-115-0

INDEX -

Reg. no. 01-2119489428-22

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again. INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 4/14

004_016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide and chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water.

Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

If there are no contraindications, spray powder with water to prevent the formation of dust.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

004_016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 5/14

Collect the leaked product and place it in containers for recovery or disposal. If the product is flammable, use explosion-proof equipment. If there are no contraindications, use jets of water to eliminate product residues.

Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

SODIUM	CARBO	NATE
Health - I	Derived	no-effe

Health - Derived no-e	effect level - DNEL / DMEL	
	Effects on	Effects on
	consumers	workers
Route of exposure		

Inhalation 10 mg/m3 10 mg/m3

DISODIUM CARBONATE, COMPOUND WITH HYDROGEN PEROXIDE (2:3)

l	Trodicted the check softwarter. Tribe		
I	Normal value in fresh water	0,035	mg/l
I	Normal value in marine water	0,035	mg/l
I	Normal value for water, intermittent release	0,035	mg/l
l	Normal value of STP microorganisms	16,24	mg/l

Health - Derived no-effect level - DNEL / DMEL

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 6/14

Route of exposure	Effects on consumers		Effects on workers	
Inhalation				5 mg/m3
Skin	6,4 mg/cm2	6,4 mg/cm2	12,8 mg/cm2	12,8 mg/cm2

	, C10-13-ALKYL DERIVS., SODIUM SALTS	S	
Predicted no-effect concentration	n - PNEC		
Normal value in fresh water		0,268	mg/l
Normal value in marine water		0,027	mg/l
Normal value for fresh water sed	iment	8,1	mg/kg
Normal value for marine water se	ediment	6,8	mg/kg
Normal value for water, intermitte	ent release	0,017	mg/l
Normal value of STP microorgan	isms	3,43	mg/l
Normal value for the terrestrial co	ompartment	35	mg/kg
Health - Derived no-effect I	evel - DNEL / DMEL		
	Effects on		Effects on
Route of exposure	consumers		workers
Oral		0.425 ma/ka	

Rout	Effects on consumers e of exposure			Effects on workers		
Oral Inha	lation	1,5 mg/m3	0,425 mg/kg bw/d 1,5 mg/m3		6 mg/m3	6 mg/m3
Skin			42,5 mg/kg bw/d			85 mg/kg bw/d

SILICIC ACID, SODIUM SALT		
Predicted no-effect concentration - PNEC		
Normal value in fresh water	7,5	mg/l
Normal value in marine water	1	mg/l
Normal value of STP microorganisms	348	mg/l

Health - Derived no-effect level - DNEL / DMEL

VND = hazard identified but no DNF	I /PNFC available · NFA =	no exposure expected	NPI = no hazard identified

	ONEL/PNEC available ; NE	EA = no exposure expected ;	NPI = no hazard identified.	
	Effects on		Effects on	
	consumers		workers	
Route of exposure				
Oral		0,8 mg/kg bw/d		
Inhalation				5,61 mg/m3
Skin		0,8 mg/kg bw/d		1,59 mg/kg bw/d
	Inhalation	Consumers Route of exposure Oral Inhalation	consumers Route of exposure 0,8 mg/kg bw/d Oral 0,8 mg/kg bw/d Inhalation 5kin Skin 0,8 mg/kg	Consumers Route of exposure Oral Inhalation Skin Consumers O,8 mg/kg bw/d O,8 mg/kg consumers O,8 mg/kg bw/d O,8 mg/kg

8.2. Exposure controls

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for inert particulate not otherwise classified (PNOC respirable fraction: 3 mg/m3; PNOC inhalable fraction: 10 mg/m3). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 7/14

004_016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

RESPIRATORY PROTECTION

Use a type P filtering facemask, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment (see standard EN 149).

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance white powder with granules

Colour blue
Odour characteristic
Odour threshold Not available

pH Solution 10% 10.8 - 11.3

Melting point / freezing point Not available Initial boiling point Not available Boiling range Not available Not available Flash point Evaporation rate Not available Flammability (solid, gas) not flammable Lower inflammability limit Not available Upper inflammability limit Not available Lower explosive limit Not available Upper explosive limit Not available Not available Vapour pressure Vapour density Not available Relative density Not available Solubility soluble in water Partition coefficient: n-octanol/water Not available Auto-ignition temperature Not available Decomposition temperature Not available

Explosive properties not classified as explosive, contains no explosive substances according to

CLP Art. (14 (2))

Not available

Oxidising properties the product is not an oxidizing substance

9.2. Other information

Information not available

Viscosity

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 8/14

004 016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

The powders are potentially explosive when mixed with air.

10.4. Conditions to avoid

Avoid environmental dust build-up.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY
LC50 (Inhalation) of the mixture:Not classified (no significant component)

LD50 (Oral) of the mixture:>2000 mg/kg

LD50 (Dermal) of the mixture: Not classified (no significant component)

SILICIC ACID, SODIUM SALT LD50 (Oral) 3400 mg/kg

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 9/14

004 016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

LD50 (Dermal) > 5000 mg/kg LC50 (Inhalation)

DISODIUM CARBONATE, COMPOUND WITH HYDROGEN PEROXIDE (2:3)

LD50 (Oral) 893 mg/kg rat

LD50 (Dermal) > 2000 mg/kg rabbit

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

LD50 (Oral) > 300 mg/kg rat

LD50 (Dermal) > 2000 mg/kg rabbit

SODIUM CARBONATE

LD50 (Oral) 2800 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg rabbit

LC50 (Inhalation)

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS

LD50 (Oral) 1080 mg/kg rat

LD50 (Dermal) > 2000 mg/kg rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

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 STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

12.1. Toxicity

SILICIC ACID, SODIUM

SALT

260 mg/l/96h LC50 - for Fish EC50 - for Crustacea 1700 mg/l/48h 207 mg/l/72h EC50 - for Algae / Aquatic

Plants

DISODIUM CARBONATE, **COMPOUND WITH** HYDROGEN PEROXIDE

70,7 mg/l/48h 48h LC50 - for Fish 4,9 mg/l/48h EC50 - for Crustacea Chronic NOEC for Crustacea 2 mg/l

ALCOHOLS, C12-13, BRANCHED AND LINEAR, **ETHOXYLATED**

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 10/14

004 016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

Plants

EC50 - for Algae / Aquatic > 1 mg/l/72h Desmodesmus subspicatus

EC10 for Crustacea > 0,1 mg/l Daphnia magna

SODIUM CARBONATE

LC50 - for Fish 300 mg/l/96h EC50 - for Crustacea 200 mg/l/48h EC50 - for Algae / Aquatic 10 mg/l **Plants**

Chronic NOEC for Fish 560 mg/l 96h Chronic NOEC for Algae / 1 mg/l

Aquatic Plants

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS

1,67 mg/l/96h LC50 - for Fish 2,9 mg/l/48h EC50 - for Crustacea EC50 - for Algae / Aquatic 0,91 mg/l/72h **Plants** Chronic NOEC for Fish 0,23 mg/l 72d Chronic NOEC for Crustacea 0,5 mg/l 7d Chronic NOEC for Algae / 0,5 mg/l 96h

Aquatic Plants

12.2. Persistence and degradability

DISODIUM CARBONATE, COMPOUND WITH **HYDROGEN PEROXIDE** (2:3)

Degradability: information not available

ALCOHOLS, C12-13, BRANCHED AND LINEAR, **ETHOXYLATED** Rapidly degradable

SODIUM CARBONATE

Solubility in water 1000 - 10000 mg/l

Degradability: information not available

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS Rapidly degradable

12.3. Bioaccumulative potential

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 11/14

004_016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS

BCF 159

12.4. Mobility in soil

ALCOHOLS, C12-13, BRANCHED AND LINEAR, ETHOXYLATED

Partition coefficient: 3,69

soil/water

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018 004 016 - SOFT LAVATRICE POLVERE BLUE OXYGEN Page n. 12/14 Not applicable 14.3. Transport hazard class(es) Not applicable 14.4. Packing group Not applicable 14.5. Environmental hazards Not applicable 14.6. Special precautions for user Not applicable 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Information not relevant **SECTION 15. Regulatory information** 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Seveso Category - Directive 2012/18/EC: None Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006 None Substances in Candidate List (Art. 59 REACH) On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%. Substances subject to authorisarion (Annex XIV REACH) None Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 13/14

004_016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Regulation (EC) No. 648/2004

Ingredients according to Regulation (EC) No. 648/2004

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

German regulation on the classification of substances hazardous to water (VwVwS 2005)

WGK 2: Hazard to waters

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Ox. Sol. 3 Oxidising solid, category 3
Acute Tox. 4 Acute toxicity, category 4

Eye Dam. 1 Serious eye damage, 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

H272 May intensify fire; oxidiser.H302 Harmful if swallowed.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road

Revision nr. 1

Dated 27/02/2018

Printed on 19/03/2018

Page n. 14/14

004 016 - SOFT LAVATRICE POLVERE BLUE OXYGEN

- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 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
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.