

# Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

### 1.1. Product identifier

Code: **0770036**  
Product name: **CONSILEX MUFFA CLEANER**  
UFI: **3Q10-20A2-H002-WQS5**

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

Intended use: **Cleaning agent, descaler, mold remover**

### 1.3. Details of the supplier of the safety data sheet

Name: **AZICHEM SRL**  
Full address: **Via G. Gentile 16/A**  
District and Country: **46044 Goito (Mantova)**  
Italia  
Tel.: **0376604185**  
e-mail address of the competent person responsible for the Safety Data Sheet: **laboratorio@azichem.com**

### 1.4. Emergency telephone number

For urgent inquiries refer to:  
**Osp. Pediatrico Bambino Gesù ROMA: 06 68593726**  
**Az. Osp. Univ. Foggia FOGGIA: 800183459**  
**Az. Osp. "A. Cardarelli" NAPOLI: 081-5453333**  
**Policlinico "Umberto I" ROMA: 06-49978000**  
**Policlinico "A. Gemelli" ROMA: 06-3054343**  
**Az. Osp. "Careggi" U.O. Tossicologia Medica FIRENZE: 055-7947819**  
**Centro Nazionale di Informazione Tossicologica PAVIA: 0382-24444**  
**Osp. Niguarda Ca' Granda MILANO: 02-66101029**  
**Azienda Ospedaliera Papa Giovanni XXII BERGAMO: 800883300**  
**Azienda Ospedaliera Integrata VERONA: 800011858**

## 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 (EU) Regulation 2020/878.

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:

Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.

### 2.2. Label elements

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

Hazard pictograms:



Signal words: **Danger**

## SECTION 2. Hazards identification ... / >>

Hazard statements:

**H318** Causes serious eye damage.  
**H315** Causes skin irritation.

Precautionary statements:

**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P280** Wear protective gloves / eye protection / face protection.  
**P310** Immediately call a POISON CENTER / doctor / . . .  
**P264** Wash . . . thoroughly after handling.

**Contains:** DISODIUM METASILICATE  
 TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

### 2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients

### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>DISODIUM METASILICATE</b>		
INDEX 014-010-00-8	$2 \leq x < 2,5$	<b>Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335</b>
EC 229-912-9		
CAS 6834-92-0		
<b>TETRASODIUM ETHYLENEDIAMINOTETRAACETATE</b>		
INDEX 607-428-00-2	$2 \leq x < 2,5$	<b>Acute Tox. 4 H302, Acute Tox. 4 H332, STOT RE 2 H373, Eye Dam. 1 H318 LD50 Oral: 1780 mg/kg, STA Inhalation mists/powders: 1,5 mg/l</b>
EC 200-573-9		
CAS 64-02-8		
REACH Reg. 01-2119486762-27-XXXX		

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 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

**INGESTION:** Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

**INHALATION:** Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

### 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

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

### 5.2. Special hazards arising from the substance or mixture

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### 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

Block the leakage if there is no hazard.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. 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

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. 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

#### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	2,2	mg/l
Normal value in marine water	0,22	mg/l
Normal value for water, intermittent release	1,2	mg/l
Normal value of STP microorganisms	43	mg/l
Normal value for the terrestrial compartment	0,72	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	25 mg/kg/d				
Inhalation	1,2 mg/m3		0,6 mg/m3		3 mg/m3	3 mg/m3	1,5 mg/m3	1,5 mg/m3

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

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

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### 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

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	not available	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not available	

## SECTION 9. Physical and chemical properties ... / >>

Lower explosive limit	not available
Upper explosive limit	not available
Flash point	not available
Auto-ignition temperature	not available
Decomposition temperature	not available
pH	6 - 8
Kinematic viscosity	not available
Solubility	soluble in water
Partition coefficient: n-octanol/water	not available
Vapour pressure	not available
Density and/or relative density	1,01 g/cm <sup>3</sup>
Relative vapour density	not available
Particle characteristics	not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Information not available

#### 9.2.2. Other safety characteristics

Information not available

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

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

#### DISODIUM METASILICATE

The aqueous solutions act as: strong bases.

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

#### DISODIUM METASILICATE

May react dangerously with: fluorine,lithium.

### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

### 10.5. Incompatible materials

#### DISODIUM METASILICATE

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

#### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Strong acids; oxidizing agents, aluminium+humidity, strong bases.

### 10.6. Hazardous decomposition products

#### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

May release toxic gases and fumes.

## SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

## SECTION 11. Toxicological information ... / >>

### 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

ATE (Inhalation - mists / powders) of the mixture: > 5 mg/l  
ATE (Oral) of the mixture: >2000 mg/kg  
ATE (Dermal) of the mixture: Not classified (no significant component)

DISODIUM METASILICATE  
LD50 (Oral): 600 mg/kg Rat

TETRASODIUM ETHYLENEDIAMINOTETRAACETATE  
LD50 (Oral): 1780 mg/kg

TETRASODIUM ETHYLENEDIAMINOTETRAACETATE  
Method: OECD 401  
Reliability (Klimisch score): 2  
Species: rat (Wistar; Male/Female)  
Routes of exposure: oral  
Results: LD50: 1780 mg/kg  
The substance is harmful if ingested (Harmonized classification, Annex VI, Regulation 1272/2008)

Method: OECD 412  
Reliability (Klimisch score): 1  
Species: Rat (Wistar; Male)  
Routes of exposure: inhalation (aerosol)  
LOAEC results: 30 mg/m<sup>3</sup>  
The substance is harmful by inhalation.

### SKIN CORROSION / IRRITATION

Causes skin irritation

TETRASODIUM ETHYLENEDIAMINOTETRAACETATE  
Method: OECD 404  
Reliability (Klimisch score): 1  
Species: rabbit (Vienna White)  
Routes of exposure: dermal  
Results: non-irritating.

### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

TETRASODIUM ETHYLENEDIAMINOTETRAACETATE  
Method: equivalent or similar to OECD 405  
Reliability (Klimisch score): 2  
Species: rabbit (Vienna White)  
Routes of exposure: ocular  
Results: causes serious eye damage (Harmonised classification, Annex VI, Regulation 1272/2008)

### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

## SECTION 11. Toxicological information ... / >>

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Method: OECD 406

Reliability (Klimisch score): 1

Species: Guinea Pig (Hartley; Female)

Routes of exposure: dermal

Results: non-sensitizing.

### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Method: equivalent or similar to OECD 471 - In vitro test

Reliability (Klimisch score): 2

Species: S. typhimurium, E. coli

Results: negative with and without metabolic activation

Method: OECD 474 - In vivo test

Reliability (Klimisch score): 1

Species: Mouse (NMRI; Male)

Routes of exposure: oral

Results: negative.

### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Reference: study report (1977)

Reliability (Klimisch score): 2

Species: rat (Fischer 344; Male/Female)

Routes of exposure: oral

Results: negative. NOAEL (carcinogenicity)  $\geq$  500 mg/kg body weight/day. NOAEL (toxicity)  $\geq$  500 mg/kg body weight/day

### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

#### Adverse effects on sexual function and fertility

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Bibliographic reference: Oser, B.L. et al, Toxicology and Applied Pharmacology (1963)

Reliability (Klimisch score): 2

Species: Rat (FDRL; Male/Female)

Routes of exposure: oral

Results: negative. NOAEL (P0/F1/F2/F3):  $\geq$  250 mg/kg body weight/day

#### Adverse effects on development of the offspring

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Bibliographic reference: Schardein, J.L. et al, Toxicology and Applied Pharmacology (1981)

Reliability (Klimisch score): 2

Species: rat (albino CD)

Routes of exposure: oral

Results: negative. NOAEL (development)  $\geq$  1374 mg/kg body weight/day. NOAEL (foetotoxicity)  $\geq$  1374 mg/kg body weight/day

### STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Based on available data, the substance does not present specific target organ toxicity effects for single exposure and is not classified under the relevant CLP hazard class.

### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

## SECTION 11. Toxicological information ... / >>

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Method: OECD 413

Reliability (Klimisch score): 1

Species: rat (Wistar; Male/Female)

Routes of exposure: inhalation (dust)

Results: Exposure of 6 hours per day for 5 consecutive days by inhalation causes lesions in the larynx and lungs that are completely reversible within 14 days.

#### Target organs

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Respiratory tract.

#### Route of exposure

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

Inhalation.

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

There are no data available on the danger in case of aspiration.

### 11.2. Information on other hazards

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

## SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

### 12.1. Toxicity

#### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

LC50 - for Fish	121 mg/l/96h <i>Lepomis macrochirus</i> (EU RAR)
EC50 - for Crustacea	140 mg/l/48h <i>Daphnia magna</i> (DIN 38412, part 11, read across)
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h <i>Desmodesmus subspicatus</i> (EU C.3)
Chronic NOEC for Fish	> 25,7 mg/l/35d <i>Danio rerio</i> (OECD 210)
Chronic NOEC for Crustacea	25 mg/l/21d <i>Daphnia magna</i> (EEC XI/681/86, Draft 4, read across)
Chronic NOEC for Algae / Aquatic Plants	100 mg/l/72h <i>Desmodesmus subspicatus</i> (EU C.3)

### 12.2. Persistence and degradability

#### DISODIUM METASILICATE

Solubility in water 210000 mg/l  
Degradability: information not available

#### TETRASODIUM ETHYLENEDIAMINOTETRAACETATE

NOT rapidly degradable 10% in 28 giorni (OECD 301 B)

### 12.3. Bioaccumulative potential

Information not available

### 12.4. Mobility in soil

Information not available

### 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  $\geq$  than 0,1%.



## SECTION 12. Ecological information ... / >>

### 12.6. Endocrine disrupting properties

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

### 12.7. Other adverse effects

Information not available

## SECTION 13. Disposal considerations

### 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 or ID number

not applicable

### 14.2. UN proper shipping name

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. Maritime transport in bulk according to IMO instruments

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/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3

Contained substance

Point 75

## SECTION 15. Regulatory information ... / >>

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors  
 not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

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.

### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

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

<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>H302</b>	Harmful if swallowed.
<b>H332</b>	Harmful if inhaled.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.

#### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 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: 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: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value

## SECTION 16. Other information ... / >>

- 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 Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

### GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) 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
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 (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII 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
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

### Note for users:

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.

### CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

### Changes to previous review:

The following sections were modified:

01.