

# 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: NanoPhos\_280621-001  
Product name: SurfaPore FX WB  
UFI: UXQV-Q0MJ-V00K-9RSR

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

Intended use: Repairing and fixing solution for loose or damaged building surfaces.

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

Name: NANOPHOS S.A.  
Full address: Technological & Cultural Park  
District and Country: 19 500 Lavrio (Greece)  
Greece

Tel. +30 22920 69312

Fax +30 22920 69303

e-mail address of the competent person

responsible for the Safety Data Sheet: iarabatz@NanoPhos.com  
Supplier: Ioannis Arabatzis

### 1.4. Emergency telephone number

For urgent inquiries refer to: +30 210 7793777

## 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  
Skin irritation, category 2

H318  
H315

Causes serious eye damage.  
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

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 or a doctor.

**P321** Specific treatment (see . . . on this label).

**P362+P364** Take off contaminated clothing and wash it before reuse.

**P501** Dispose of contents or container according to local/national/international regulations

**P102** Keep out of reach of children.

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

**P264** Wash with plenty of water and soap thoroughly after handling.

**Contains:** Potassium methylsilanetriolate

Product not intended for uses provided for by Directive 2004/42/EC.

### 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%.

The product does not contain substances with endocrine disrupting properties in concentration greater than 0.1%.

## SECTION 3. Composition/information on ingredients

### 3.2. Mixtures

Contains:

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

**Silic acid, potassium salt**

INDEX - 5 x &lt; 10 Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335

EC 215-199-1

CAS 1312-76-1

**Potassium methylsilanetriolate**

INDEX - 3 x &lt; 5 Skin Corr. 1A H314, Eye Dam. 1 H318

EC 250-807-9

CAS 31795-24-1

**Methanol**INDEX 603-001-00-X 0 < x < 3 Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370  
STOT SE 2 H371: 3% - < 10%

EC 200-659-6

CAS 67-56-1 LD50 Oral: 100 mg/kg, LD50 Dermal: 300 mg/kg, LC50 Inhalation vapours: 3 mg/l/4h

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**

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

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

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 immediate medical attention and special treatment needed**

Immediately call a POISON CENTER or a doctor.

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

Running water for skin and eye wash.

## 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

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Dated 18/07/2024

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Printed on 18/07/2024

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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**

Regulatory references:

|     |        |                                                                                                                                                                                                                                                                                                                                                         |
|-----|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GRC | Ελλάδα | Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ``σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία``» |
| EU  | OEL EU | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.                                                              |

**Potassium methylsilanetriolate**

Predicted no-effect concentration - PNEC

|                                              |      |       |
|----------------------------------------------|------|-------|
| Normal value in fresh water                  | 4,2  | mg/l  |
| Normal value in marine water                 | 0,42 | mg/l  |
| Normal value for fresh water sediment        | 3,3  | mg/kg |
| Normal value for marine water sediment       | 0,33 | mg/kg |
| Normal value of STP microorganisms           | 1    | mg/l  |
| Normal value for the terrestrial compartment | 0,54 | 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              |                      |                |               | 0,42 mg/kg bw/d  |                    |                |               |                  |
| Inhalation        |                      | 10 mg/m3       |               | 10 mg/m3         |                    | 47 mg/m3       |               | 47 mg/m3         |
| Skin              |                      | 4 mg/kg bw/d   |               | 4 mg/kg bw/d     |                    | 6,6 mg/kg/d    |               | 6,6 mg/kg bw/d   |

**Methanol****Threshold Limit Value**

| Type | Country | TWA/8h | STEL/15min | Remarks / Observations |
|------|---------|--------|------------|------------------------|
|      |         | mg/m3  | ppm        |                        |
| TLV  | GRC     | 260    | 200        | 325                    |
| OEL  | EU      | 260    | 200        | 250                    |

Predicted no-effect concentration - PNEC

|                              |      |      |
|------------------------------|------|------|
| Normal value in fresh water  | 20,8 | mg/l |
| Normal value in marine water | 2,08 | mg/l |

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Dated 18/07/2024

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Printed on 18/07/2024

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|                                                |                      |                    |               |                  |             |                |               |                  |
|------------------------------------------------|----------------------|--------------------|---------------|------------------|-------------|----------------|---------------|------------------|
| Normal value for fresh water sediment          | 77                   | mg/kg              |               |                  |             |                |               |                  |
| Normal value for marine water sediment         | 7,7                  | mg/kg              |               |                  |             |                |               |                  |
| Normal value of STP microorganisms             | 100                  | mg/l               |               |                  |             |                |               |                  |
| Normal value for the terrestrial compartment   | 100                  | mg/kg              |               |                  |             |                |               |                  |
| Health - Derived no-effect level - DNEL / DMEL |                      |                    |               |                  |             |                |               |                  |
|                                                | Effects on consumers | Effects on workers |               |                  |             |                |               |                  |
| Route of exposure                              | Acute local          | Acute systemic     | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral                                           |                      | 4 mg/kg            |               | 4 mg/kg          |             |                |               |                  |
| Inhalation                                     | 26 mg/m3             | 26 mg/m3           | 26 mg/m3      | 26 mg/m3         | 130 mg/m3   | 130 mg/m3      | 130 mg/m3     | 130 mg/m3        |
| Skin                                           |                      | 4 mg/kg            |               | 4 mg/kg          |             | 20 mg/kg       |               | 20 mg/kg         |

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = 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**

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, permeability time.

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 ISO 16321).

**RESPIRATORY PROTECTION**

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. 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).

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                                 | white          |             |
| Odour                                  | not available  |             |
| Melting point / freezing point         | not available  |             |
| Initial boiling point                  | not available  |             |
| Flammability                           | not available  |             |
| Lower explosive limit                  | not available  |             |
| Upper explosive limit                  | not available  |             |
| Flash point                            | > 100 °C       |             |
| Auto-ignition temperature              | not available  |             |
| Decomposition temperature              | not available  |             |
| pH                                     | 11,3           |             |
| Kinematic viscosity                    | not available  |             |
| Solubility                             | not available  |             |
| Partition coefficient: n-octanol/water | not available  |             |
| Vapour pressure                        | not available  |             |
| Density and/or relative density        | 1.10±0.05 kg/l |             |
| 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.

**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.

**10.4. Conditions to avoid**

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

**10.5. Incompatible materials**

Information not available

**10.6. Hazardous decomposition products**

Information not available

## 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**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) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

Silic acid, potassium salt

LD50 (Dermal):

> 5000 mg/kg Rat- male and female

LD50 (Oral):

> 5000 mg/kg Rat-female

LC50 (Inhalation vapours):

> 2,06 mg/l/4h Rat- male and female

Methanol

LD50 (Dermal):

300 mg/kg RAT

LD50 (Oral): 100 mg/kg RAT  
LC50 (Inhalation vapours): 3 mg/l/4h RAT

#### SKIN CORROSION / IRRITATION

Causes skin irritation

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

#### 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

#### **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**

Silic acid, potassium salt

LC50 - for Fish > 146 mg/l/48h Leuciscus idus (Golden orfe)

Potassium methylsilanetriolate

LC50 - for Fish

> 500 mg/l/96h Zebra fish

EC50 - for Crustacea

> 500 mg/l/48h Daphnia magna

Chronic NOEC for Algae / Aquatic Plants

100 mg/l Daphnia magna

Methanol

LC50 - for Fish

15400 mg/l/96h

Chronic NOEC for Fish

15800 mg/l 200H Oryzias latipes

#### 12.2. Persistence and degradability

Methanol

Rapidly degradable

#### 12.3. Bioaccumulative potential

Potassium methylsilanetriolate

BCF

< 100

Methanol

Partition coefficient: n-octanol/water

-0,77 Log Kow

BCF

10 χρυσοκέφαλος

#### 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 greater than 0,1%.

#### 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 - 40

Contained substance

Point 69 Methanol

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 greater 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:

**Flam. Liq. 2** Flammable liquid, category 2

|                      |                                                              |
|----------------------|--------------------------------------------------------------|
| <b>Acute Tox. 3</b>  | Acute toxicity, category 3                                   |
| <b>STOT SE 1</b>     | Specific target organ toxicity - single exposure, category 1 |
| <b>Skin Corr. 1A</b> | Skin corrosion, category 1A                                  |
| <b>Eye Dam. 1</b>    | Serious eye damage, category 1                               |
| <b>Eye Irrit. 2</b>  | Eye irritation, category 2                                   |
| <b>Skin Irrit. 2</b> | Skin irritation, category 2                                  |
| <b>STOT SE 3</b>     | Specific target organ toxicity - single exposure, category 3 |
| <b>STOT SE 2</b>     | Specific target organ toxicity - single exposure, category 2 |
| <b>H225</b>          | Highly flammable liquid and vapour.                          |
| <b>H301</b>          | Toxic if swallowed.                                          |
| <b>H311</b>          | Toxic in contact with skin.                                  |
| <b>H331</b>          | Toxic if inhaled.                                            |
| <b>H370</b>          | Causes damage to organs.                                     |
| <b>H314</b>          | Causes severe skin burns and eye damage.                     |
| <b>H318</b>          | Causes serious eye damage.                                   |
| <b>H319</b>          | Causes serious eye irritation.                               |
| <b>H315</b>          | Causes skin irritation.                                      |
| <b>H335</b>          | May cause respiratory irritation.                            |
| <b>H371</b>          | May cause damage to organs.                                  |

## 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
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- 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
- 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
- vPvM: Very persistent and very mobile
- 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)
23. Delegated Regulation (UE) 2023/707
24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
24. Delegated Regulation (UE) 2023/1435 (XX 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:

03 / 04 / 08 / 09 / 11 / 12 / 15 / 16.