

# Raise3D PA NEXT Black V1 Powder Safety Data Sheet (SDS)

According to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878, Regulation (EC) 1272/2008

amended by Regulation (EU) 2024/2865

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

### 1.1. Product identifier

Product form: Mixture

Product name: Raise3D PA NEXT Black V1 Powder

Additional identification: Nanoform is NOT covered by this SDS.

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture: For Raise3D SLS 3D Printers.

#### 1.2.2. Uses advised against

Restrictions on use: Not available

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

#### Supplier

Raise3D Technologies Inc.

13310 Pike Road, Stafford, TX 77477

T +1 888 963 9028

hailey.shao@raise3d.com

#### Importer

Raise3D B.V.

Tenorweg 6, 3363LN, Sliedrecht

T +31 (0)6 23872606

enquiry@raise3d.eu

### 1.4. Emergency telephone number

+49 (0) 761-270 19234

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to GHS (8th revised edition).



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Not classified

### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

### 2.2. Label elements

#### Labelling according to Regulation GHS (8th revised edition).

No labelling applicable

### 2.3. Other hazards

None.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name                                   | CAS-No.       | Range % by Wt. |
|--|---------------|----------------|
| PA1012                                 | 1239600-88-4  | >95            |
| Carbon black                           | 1333-86-4     | < 3            |
| Silicon dioxide                        | 10279-57-9    | <0.5           |
| Titanium dioxide                       | 1317-70-0     | <0.5           |
| Tris(2,4-ditert-butylphenyl) phosphite | 1) 31570-04-4 | <1.0           |

## SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse eyes with water as a precaution. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. If you feel unwell, seek medical advice.

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

Symptoms/effects after inhalation: None under normal conditions. Dust of the product, if present, may cause respiratory irritation after excessive inhalation exposure.

Symptoms/effects after skin contact: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Symptoms/effects after eye contact: None under normal conditions. Dust from this product may cause eye irritation.

Symptoms/effects after ingestion: None under normal conditions.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Use any means suitable for extinguishing surrounding fire.

Suitable extinguishing media: water spray, alcohol-resistant foam, dry powder, carbon dioxide, etc.



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

Fire hazard: No fire hazard.

Explosion hazard: No direct explosion hazard.

Hazardous decomposition products in case of fire: Carbon oxides, nitrogen oxides(NOx), phosphorus oxides and other toxic or irritating fumes.

## 5.3. Advice for firefighters

Firefighting instructions: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

#### 6.1.1. For non-emergency personnel

Protective equipment: Wear recommended personal protective equipment.

Emergency procedures: Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid dust formation. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures: Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment.



### 6.3. Methods and material for containment and cleaning up

For containment: Using a clean shovel, put the material in a dry container and cover without compressing it.

Methods for cleaning up: Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

Other information: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Use with adequate ventilation. Minimize dust generation and accumulation. Keep container tightly closed.

Avoid inhalation of dust. Wash skin thoroughly after handling.

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

Stored in a cool, dry, well-ventilated area.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values



|  |  |
|--|--|
| <b>Carbon black (1333-86-4)</b>                      |  |
| <b>Belgium - Occupational Exposure Limits</b>        |  |
| Local name   | Carbone (noir de) # Koolzwart  |
| OEL TWA  | 3 mg/m <sup>3</sup>  |
| Regulatory reference                                 | Koninklijk besluit/Arrêté royal 16/11/2023   |
| <b>Croatia - Occupational Exposure Limits</b>        |  |
| Local name   | Ugljik-crni  |
| GVI (OEL TWA)  | 3,5 mg/m <sup>3</sup>  |
| KGVI (OEL STEL)                                      | 7 mg/m <sup>3</sup>  |
| Regulatory reference                                 | Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 148/2023) |
| <b>Czech Republic - Occupational Exposure Limits</b> |  |
| Local name   | Amorfni uhlík (Carbon Black)   |



|   |  |
|---|--|
| <b>Carbon black (1333-86-4)</b>               |  |
| PEL (OEL TWA)                                 | 10 mg/m <sup>3</sup> (pro celkovou koncentraci)  |
| Remark  | Prachy s převážně nespecifickým účinkem.   |
| Regulatory reference                          | Nařízení vlády č. 361/2007 Sb. (Předpis 330/2023 Sb.)  |
| <b>Denmark - Occupational Exposure Limits</b> |  |
| Local name                                    | Carbon black   |
| OEL TWA                                       | 3,5 mg/m <sup>3</sup>  |
| Remark  | K (betyder, at stoffet anses for at kunne være kræftfremkaldende og omfattet af bekendtgørelse om foranstaltninger til forebyggelse af risici ved arbejde med stoffer og materialer, der kan være kræftfremkaldende, mutagene eller reproduktionstoksiske) |
| Regulatory reference                          | BEK nr 1619 af 19/12/2024  |



|   |  |
|---|--|
| <b>Carbon black (1333-86-4)</b>               |  |
| <b>Finland - Occupational Exposure Limits</b> |  |
| Local name                                    | Nokimusta  |
| HTP (OEL TWA)                                 | 3,5 mg/m <sup>3</sup>  |
| HTP (OEL STEL)                                | 7 mg/m <sup>3</sup>  |
| Regulatory reference                          | HTP-ARVOT 2025 (Sosiaali- ja terveysministeriö)                        |
| <b>France - Occupational Exposure Limits</b>  |  |
| Local name                                    | Noir de carbone  |
| VME (OEL TWA)                                 | 3,5 mg/m <sup>3</sup>  |
| Remark  | Valeurs recommandées/admises   |
| Regulatory reference                          | Circulaire du Ministère du travail (réf.: INRS ED 6443, 2022; Outil65) |



|   |   |
|---|---|
| <b>Carbon black (1333-86-4)</b>               |   |
| <b>Greece - Occupational Exposure Limits</b>  |   |
| Local name                                    | Αιθάλη  |
| OEL TWA                                       | 3,5 mg/m <sup>3</sup>   |
| OEL STEL                                      | 7 mg/m <sup>3</sup>   |
| Regulatory reference                          | Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους |
| <b>Hungary - Occupational Exposure Limits</b> |   |
| Local name                                    | Ipari korom [„Carbon Black“ ]   |
| AK (OEL TWA)                                  | 3 mg/m <sup>3</sup> belélegezhető koncentráció  |
| Regulatory reference                          | 5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről        |



|   |   |
|---|---|
| <b>Carbon black (1333-86-4)</b>               |   |
| <b>Ireland - Occupational Exposure Limits</b> |   |
| Local name                                    | Carbon black  |
| OEL TWA                                       | 3 mg/m <sup>3</sup> I (Inhalable Fraction)  |
| Remark  | Advisory OELV (Advisory Occupational Exposure Limit Values)   |
| Regulatory reference                          | Chemical Agents Code of Practice 2024   |
| <b>Poland - Occupational Exposure Limits</b>  |   |
| Local name                                    | Sadza techniczna  |
| NDS (OEL TWA)                                 | 4 mg/m <sup>3</sup> frakcja wdychalna   |
| Remark  | Frakcja wdychalna – frakcja aerozolu wnikać przez nos i usta, która stwarza zagrożenie dla zdrowia po zdeponowaniu w drogach oddechowych. |
| Regulatory reference                          | Dz. U. 2024 poz. 1017 wraz z późn. zm.  |



|  |  |
|--|--|
| <b>Carbon black (1333-86-4)</b>                      |  |
| <b>Portugal - Occupational Exposure Limits</b>       |  |
| Local name   | Carbono, preto (Negro de fumo)   |
| OEL TWA  | 3 mg/m <sup>3</sup> I (Fração inalável)  |
| Remark   | A3 (Agente carcinogénico confirmado nos animais de laboratório com relevância desconhecida no Homem) |
| Regulatory reference                                 | Norma Portuguesa NP 1796:2014  |
| <b>Spain - Occupational Exposure Limits</b>          |  |
| Local name   | Negro de humo  |
| VLA-ED (OEL TWA)                                     | 3,5 mg/m <sup>3</sup>  |
| Regulatory reference                                 | Límites de Exposición Profesional para Agentes Químicos en España 2025. INSHT                        |
| <b>United Kingdom - Occupational Exposure Limits</b> |  |
| Local name   | Carbon black   |



|   |   |
|---|---|
| <b>Carbon black (1333-86-4)</b>               |   |
| WEL TWA (OEL TWA)                             | 3,5 mg/m <sup>3</sup>   |
| WEL STEL (OEL STEL)                           | 7 mg/m <sup>3</sup>   |
| Regulatory reference                          | EH40/2005 (Fourth edition, 2020). HSE   |
| <b>Iceland - Occupational Exposure Limits</b> |   |
| Local name                                    | Kolefni   |
| OEL TWA                                       | 3,5 mg/m <sup>3</sup>   |
| Regulatory reference                          | Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009) |
| <b>Norway - Occupational Exposure Limits</b>  |   |
| Local name                                    | Carbon Black (lampesot)   |
| Grenseverdi (OEL TWA)                         | 3,5 mg/m <sup>3</sup>   |
| Regulatory reference                          | FOR-2024-04-05-581  |

### 8.1.2. Recommended monitoring procedures



No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

Eye protection: Safety glasses

#### 8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Protective gloves

#### 8.2.2.3. Respiratory protection

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment

#### 8.2.2.4. Thermal hazards

No additional information available



### 8.2.3. Environmental exposure controls

Environmental exposure controls: Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                           |                 |
|---------------------------|-----------------|
| Physical state            | Solid           |
| Colour                    | Black.          |
| Appearance                | Powder.         |
| Odour                     | odourless.      |
| Odour threshold           | Not available   |
| Melting point             | 180-188 °C      |
| Freezing point            | Not applicable  |
| Boiling point             | Not available   |
| Flammability              | Non flammable.  |
| Explosive limits          | Not applicable  |
| Lower explosion limit     | Not applicable. |
| Upper explosion limit     | Not applicable. |
| Flash point               | Not applicable  |
| Auto-ignition temperature | > 350 °C        |
| Decomposition temperature | > 300 °C        |
| pH                        | Not available   |



|  |                               |
|--|-------------------------------|
| pH solution  | Not available                 |
| Viscosity, kinematic                               | Not applicable                |
| Solubility   | Immiscible with water.        |
| Partition coefficient<br>n-octanol/water (Log Kow) | Not available                 |
| Vapour pressure                                    | Not available                 |
| Vapour pressure at 50°C                            | Not available                 |
| Bulk density                                       | 0.48-0.54 g/cm <sup>3</sup> . |
| Relative vapour density at 20°C                    | Not applicable                |
| Particle size                                      | Not available                 |

## 9.2. Other information

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

No additional information available

### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.



#### 10.4. Conditions to avoid

Incompatible materials.

#### 10.5. Incompatible materials

Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

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

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

#### **Carbon black (1333-86-4)**

LD50 oral rat: > 8000 mg/kg

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified

STOT-repeated exposure: Not classified

Aspiration hazard: Not classified

#### **Titanium dioxide (CAS No. 1317-70-0)**

LD50 • Oral - Rat - >5000 mg/kg



LC50 - Inhalation - Rat - 4h - >6.82 mg/1

**Tris(2,4-ditert-butylphenyl 1) phosphite (CAS No. 31570-04-4)**

LD50 - Oral - Rat - >6000 mg/kg

LD50 - Dermal • Rat - >2000 mg/kg

**11.2. Information on other hazards**

**11.2.1. Endocrine disrupting properties**

Adverse health effects caused by endocrine disrupting properties: The substance/mixture has no endocrine disrupting properties.

**11.2.2. Other information**

No additional information available

## SECTION 12: Ecological information

**12.1. Toxicity**

Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not classified

Hazardous to the aquatic environment, long-term (chronic): Not classified

**Carbon black (1333-86-4)**

LC50 96h - Fish [1]: > 1000 mg/l

EC50 72h - Algae [1]: > 10000 mg/l

NOEC chronic algae: ≥ 10000 mg/l

Tris(2,4-ditert-butylphenyl) phosphite (CAS No. 31570-04-4):

Toxicity to fishes LC0 - Danio rerio - >100 mg/l - 96 h

Toxicity to algae and other aquatic plants EC50 - Desmodesmus subspicatus - >75 mg/l - 72 h

Toxicity to Crustacea EC50 - Daphnia magna - >510 mg/l - 24 h

**12.2. Persistence and degradability**



No additional information available

### **12.3. Bioaccumulative potential**

No additional information available

### **12.4. Mobility in soil**

No additional information available

### **12.5. Results of PBT and vPvB assessment**

Raise3D PA NEXT Black V1 Powder

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### **12.6. Endocrine disrupting properties**

Adverse effects on the environment caused by endocrine disrupting properties: The substance/mixture has no endocrine disrupting properties.

### **12.7. Other adverse effects**

No additional information available

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

Regional waste regulation: Disposal must be done according to official regulations.

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations: Disposal must be done according to official regulations.

Product/Packaging disposal recommendations: Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.

Additional information: Do not re-use empty containers.

## **SECTION 14: Transport information**



In accordance with ADR / IMDG / IATA / ADN / RID

| ADR                                     | IMDG          | IATA          | ADN           | RID           |
|---|---------------|---------------|---------------|---------------|
| <b>14.1. UN number or ID number</b>     |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.2. UN proper shipping name</b>    |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.3. Transport hazard class(es)</b> |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.4. Packing group</b>              |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| <b>14.5. Environmental hazards</b>      |               |               |               |               |
| Not regulated                           | Not regulated | Not regulated | Not regulated | Not regulated |
| No supplementary information available  |               |               |               |               |

#### 14.6. Special precautions for user

Overland transport: Not regulated

Transport by sea: Not regulated

Air transport: Not regulated

Inland waterway transport: Not regulated

Rail transport: Not regulated

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information



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## **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

### **15.1.1. EU-Regulations**

#### **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### **Ozone Regulation (1005/2009)**

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

#### **Explosives Precursors Regulation (EU 2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (EC 273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

### **15.1.2. National regulations**



## Germany

Employment restrictions: Observe restrictions according Act on the Protection of Working Mothers (MuSchG).

Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).

Water hazard class (WGK): WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

Override matching entry (12. BImSchV): Is not subject to the Major Accidents Ordinance (12. BImSchV)

## Netherlands

ABM category: A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment

SZW-lijst van kankerverwekkende stoffen: None of the components are listed

SZW-lijst van mutagene stoffen: None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding: None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid: None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling: None of the components are listed

## Denmark

Danish National Regulations: The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

## Switzerland

Storage class (LK): NG - Non-hazardous

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information



| <b>Abbreviations and acronyms:</b> |   |
|------------------------------------|---|
| ACGIH                              | American Conference of Government Industrial Hygienists   |
| ADN                                | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR                                | European Agreement concerning the International Carriage of Dangerous Goods by Road             |
| ATE                                | Acute Toxicity Estimate   |
| BCF                                | Bioconcentration factor   |
| BLV                                | Biological limit value  |
| BOD                                | Biochemical oxygen demand (BOD)   |
| CAS-No.                            | Chemical Abstract Service number  |
| CLP                                | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                     |
| COD                                | Chemical oxygen demand (COD)  |
| CSA                                | Chemical safety assessment  |



| <b>Abbreviations and acronyms:</b> |   |
|------------------------------------|---|
| DMEL                               | Derived Minimal Effect level                |
| DNEL                               | Derived-No Effect Level                     |
| EC-No.                             | European Community number                   |
| EC50                               | Median effective concentration              |
| ED                                 | Endocrine disruptor                         |
| EN                                 | European Standard                           |
| EWC                                | European waste catalogue                    |
| IARC                               | International Agency for Research on Cancer |
| IATA                               | International Air Transport Association     |
| IMDG                               | International Maritime Dangerous Goods      |
| LC50                               | Median lethal concentration                 |
| LD50                               | Median lethal dose                          |



| <b>Abbreviations and acronyms:</b> |  |
|------------------------------------|--|
| LOAEL                              | Lowest Observed Adverse Effect Level                   |
| Log Kow                            | Partition coefficient n-octanol/water (Log Kow)        |
| Log Pow                            | Partition coefficient n-octanol/water (Log Pow)        |
| MAK                                | maximum workplace concentration                        |
| NOAEC                              | No-Observed Adverse Effect Concentration               |
| NOAEL                              | No-Observed Adverse Effect Level                       |
| NOEC                               | No-Observed Effect Concentration                       |
| N.O.S.                             | Not Otherwise Specified                                |
| OECD                               | Organisation for Economic Co-operation and Development |
| OEL                                | Occupational Exposure Limit                            |
| OSHA                               | Occupational Safety & Health Administration            |
| PBT                                | Persistent Bioaccumulative Toxic                       |



| <b>Abbreviations and acronyms:</b> |  |
|------------------------------------|--|
| PNEC                               | Predicted No-Effect Concentration  |
| PPE                                | Personal protection equipment  |
| RID                                | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS                                | Safety Data Sheet  |
| STP                                | Sewage treatment plant   |
| TF                                 | Technical function   |
| ThOD                               | Theoretical oxygen demand (ThOD)   |
| TLM                                | Median Tolerance Limit   |
| TWA                                | Time Weighted Average  |
| VOC                                | Volatile Organic Compounds   |
| vPvB                               | Very Persistent and Very Bioaccumulative                                     |
| UFI                                | Unique Formula Identifier  |

**Disclaimer:**

The information in this Safety Data Sheet (SDS) applies only to the specified product. Unless otherwise specified, it does not apply to mixtures of this product with other substances. This Safety Data Sheet (SDS) is based on currently available information and the author assumes no responsibility for its continued currency. This Safety Data Sheet (SDS) is intended solely for properly trained personnel operating this product. Users of this Safety Data Sheet (SDS) must independently determine its applicability under specific conditions of use. The author of the SDS assumes no responsibility for any injuries resulting from the use of this Safety Data Sheet (SDS) under specific circumstances. Each user should carefully read the contents of this Safety Data Sheet (SDS) before operating the product. For further information to ensure a proper evaluation, please contact the product supplier. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

