# SAFETY DATA SHEET

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

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

### 1.1 Product identifier

**Product name:**
SIPERNAT® 22 S

**Additional identification**

| | |
|---|---|
| **Chemical name:** | Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) |
| **Chemical formula:** | SiO2 |
| **INDEX No.** | - |
| **CAS-No.** | 112926-00-8 |
| **EC No.** | 231-545-4 |
| **UK-REACH Registration No.:** | UK-01-2509930461-7-0035 (TPR) |
| **REACH Registration No.:** | 01-2119379499-16-0000 (TPR) |

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

**Identified uses:**
Anticaking agent
Flow-promoting agent.
Carrier
Thickening agent
Cosmetics
Defoamant

**Uses advised against:** Not determined.

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

Company Name : Evonik Operations GmbH
Rellinghauser Str. 1-11
45128 Essen
Germany

Telephone : +49 6181 59 4787

E-mail : sds-hu@evonik.com

### 1.4 Emergency telephone number:

24-Hour Health Emergency : +49 7623 919191

National Poison Information Service (NPIS)
England, Scotland and Wales: NHS: 111

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

**Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567**
Not classified

**2.2 Label Elements** Not applicable

**2.3 Other hazards**

**PBT/vPvB data**
Not a PBT, vPvB substance as per the criteria of the REACH Regulation.

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

**Chemical name:** Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9)
**INDEX No.:**
**CAS-No.:** 112926-00-8
**EC No.:** 231-545-4
**UK-REACH Registration No.:** UK-01-2509930461-7-0035 (TPR)

**REACH Registration No.:** 01-2119379499-16-0000 (TPR)

| Chemical name | Concentration | CAS-No. | EC No. | UK-REACH Registration No. | REACH Registration No. | M-Factor: | Notes |
|---|---|---|---|---|---|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | | 112926-00-8 | 231-545-4 | UK-01-2509930461-7 | 01-2119379499-16 | No data available. | # |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
# This substance has workplace exposure limit(s).
## This substance is listed as SVHC.

**Classification**

| Chemical name | Classification | Notes |
|---|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | Classification**:** None known.<br><br>Supplemental label information**:** None known. | Not applicable |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

| | |
|---|---|
| **Inhalation:** | In case product dust is released: Possible discomfort: cough, sneezing Move to fresh air. |
| **Skin Contact:** | Wash off with plenty of water and soap. |
| **Eye contact:** | Possible discomfort is due to foreign substance effect. Rinse thoroughly with plenty of water keeping eyelid open. In case of persistent discomfort: Consult an ophthalmologist. |
| **Ingestion:** | Clean mouth with water and drink afterwards plenty of water. After absorbing large amounts of substance / In case of discomfort: Supply with medical care. |
| **Personal Protection for First-aid Responders:** | No data available. |

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

| | |
|---|---|
| **Symptoms:** | None known. |
| **Hazards:** | None known. |

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

| | |
|---|---|
| **Treatment:** | No data available. |

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

| | |
|---|---|
| **Suitable extinguishing media:** | Water spray, foam, CO2, dry powder. Adapt fire-extinguishing measures to surroundings |
| **Unsuitable extinguishing media:** | Do not use a solid water stream as it may scatter and spread fire. |

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

None known.

### 5.3 Advice for firefighters

| | |
|---|---|
| **Special fire fighting procedures:** | Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| **Special protective equipment for fire-fighters:** | In the event of fire, wear self-contained breathing apparatus. |

## SECTION 6: Accidental release measures

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

Use personal protective equipment. Avoid dust formation.

### 6.1.1 For non-emergency personnel:

No data available.

**6.1.2 For emergency responders:** No data available.

**6.2 Environmental Precautions:** Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

**6.3 Methods and material for containment and cleaning up:** Vacuum up immediately. A vacuum cleaner with a high-efficiency filtration system is recommended. To avoid raising dust do not use brooms or compressed air. Collect and place in correctly labelled containers. For disposal see Section 13.

**6.4 Reference to other sections:** For personal protection see section 8. For disposal considerations see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Technical measures:** Ensure suitable suction/aeration at the work place and with operationalmachinery.Local ventilation if necessary. see also section 7.

**Local/Total ventilation:** No data available.

**Safe handling advice:** If necessary: Local ventilation.Handle in accordance with good industrial hygiene and safety practice. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.

**Contact avoidance measures:** No data available.

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

**Safe storage conditions:** Take precautionary measures against static discharges.Keep in a dry place.

**Safe packaging materials:** No data available.

**7.3 Specific end use(s):** Applications; see Section 1. No further information available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

**Occupational Exposure Limits**

| Chemical name | Type | Form of exposure | Exposure Limit Values | | Source |
|---|---|---|---|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | TWA | Inhalable dust. | | 6 mg/m3 | EH40 WEL (12 2011) |
| | TWA | Respirable dust. | | 2.4 mg/m3 | EH40 WEL (12 2011) |

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

| Chemical name | Type | Form of exposure | Exposure Limit Values | | Source |
|---|---|---|---|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | TWA | Inhalable dust. | | 6 mg/m3 | EH40 WEL (12 2011) |
| | TWA | Respirable dust. | | 2.4 mg/m3 | EH40 WEL (12 2011) |

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

**Biological Limit Values**

No biological exposure limits noted for the ingredient(s).

**DNEL-Values**

| Critical component | Type | Route of Exposure | Health Warnings | Remarks |
|---|---|---|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | Workers | Inhalation | Systemic, long-term; 4 mg/m3 | respiratory tract irritation |
| | Workers | Eyes | Local effect; | No data available |
| | Workers | Eyes | Local effect; | Low hazard (no threshold derived) |
| | General population | Eyes | Local effect; | No data available |
| | General population | Eyes | Local effect; | Low hazard (no threshold derived) |

## 8.2 Exposure controls

**Appropriate Engineering Controls:** Ensure suitable suction/aeration at the work place and with operationalmachinery.Local ventilation if necessary. see also section 7.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:** Safety glasses with side shields In case of dusts: Wear tight-fitting eye protection (e.g. safety goggles)

**Hand Protection:** Additional Information: Wear protective gloves made of the following materials: material, rubber, leather.
Additional Information: The data about break through time/strength of material is not valid for undissolved solids/dust.

**Skin and Body Protection:** No special protective equipment required.

**Respiratory Protection:** No special protective equipment required. If dust occurs: Dust mask with P2 particle filter

**Hygiene measures:** When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. To ensure ideal skin protection: use super fatted soaps and skin cream for skin care. Wash contaminated clothing before reuse.

**Environmental Controls:** see section 6.

## SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

**Appearance**

**Physical state:** solid

| | |
|---|---|
| **Form:** | Powder |
| **Color:** | White |
| **Odor:** | Odorless |
| **Odor Threshold:** | Not applicable |
| **Melting Point:** | Approximate<br>1,700 °C |
| **Boiling Point:** | No data available. |
| **Flammability:** | Not applicable |
| **Upper/lower limit on flammability or explosive limits** | |
| **Explosive limit - upper:** | Not applicable |
| **Explosive limit - lower:** | Not applicable |
| **Flash Point:** | Not applicable (solid) |
| **Auto-ignition temperature:** | Not applicable |
| **Decomposition Temperature:** | > 2,000 °C |
| **pH:** | Approximate<br>6.5 at 20 °C<br>Method: DIN / ISO 787 / 9<br>Concentration: 50 g/l<br>Suspension |
| **Viscosity** | |
| **Dynamic viscosity:** | Not applicable (solid) |
| **Kinematic viscosity:** | Not applicable (solid) |
| **Solubility(ies)** | |
| **Solubility in Water:** | > 1 mg/l |
| **Partition coefficient (n-octanol/water):** | Not applicable |
| **Vapor pressure:** | Not applicable |
| **Relative density:** | No data available. |
| **Density:** | Approximate<br>2 g/cm3 at 20 °C |
| **Vapor density (air=1):** | No data available. |

**9.2 Other information**

| | |
|---|---|
| **Explosive properties:** | Not to be expected in view of the structure |
| **Oxidizing properties:** | Not to be expected in view of the structure |
| **Self-ignition:** | Not applicable |
| **Peroxides:** | Not applicable |
| **Dust explosion properties:** | Not dust explosive |
| **Evaporation Rate:** | Not applicable |
| **Minimum ignition energy:** | Not applicable |

## SECTION 10: Stability and reactivity

**10.1 Reactivity:** No dangerous reaction known under conditions of normal use.

| | | |
|---|---|---|
| **10.2** | **Chemical Stability:** | Stable under recommended storage conditions. |
| **10.3** | **Possibility of hazardous reactions:** | No hazardous reactions are known if properly handled and stored. |
| **10.4** | **Conditions to avoid:** | No specific hazards are known. |
| **10.5** | **Incompatible Materials:** | None known. |
| **10.6** | **Hazardous Decomposition Products:** | None known. Stable under normal conditions. Product will not undergo hazardous polymerization. |

## SECTION 11: Toxicological information

**General information:** Silicosis or other product specific illnesses of the respiratory tract were not observed in association with the product.

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

**Information on likely routes of exposure**

**Inhalation:** Information on effects are given below.

**Skin Contact:** Information on effects are given below.

**Eye contact:** Information on effects are given below.

**Ingestion:** Information on effects are given below.

**Acute toxicity (list all possible routes of exposure)**

**Oral**

**Product:** LD 50, Rat, Female, Male, > 5,000 mg/kg, OECD 401, Based on available data, the classification criteria are not met.

**Components:**

| | |
|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | LD 50, Rat, Female, Male, > 5,000 mg/kg, OECD 401 |

**Dermal**

**Product:** LD 50, Rabbit, > 5,000 mg/kg, Based on available data, the classification criteria are not met.

**Components:**

| | |
|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | LD 50, Rabbit, > 5,000 mg/kg |

**Inhalation**

**Product:** LC 50, Rat, Female, Male, 4 h, > 5.01 mg/l, OECD 436, Dust and mist, Based on available data, the classification criteria are not met.

**Components:**

| | |
|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | LC 50, Rat, Female, Male, 4 h, > 5.01 mg/l, Dust and mist, OECD 436<br>Vapour, Not toxic after single exposure, Not applicable |

**Repeated dose toxicity**

| | |
|---|---|
| **Product:** | NOAEL Rat, Male, Oral, 28 day, 7 days a week, >= 1,000 mg/kg, No negative effects. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | NOAEL Rat, Male, Oral, 28 day, 7 days a week, >= 1,000 mg/kg, No negative effects. |

**Skin Corrosion/Irritation**

| | |
|---|---|
| **Product:** | OECD 404, (Rabbit), Not irritating, Based on available data, the classification criteria are not met. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | Not irritating, OECD 404, Rabbit |

**Serious Eye Damage/Eye Irritation**

| | |
|---|---|
| **Product:** | analogous OECD method, Rabbit, Not irritating, Based on available data, the classification criteria are not met. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | Not irritating, analogous OECD method, Rabbit |

**Respiratory or Skin Sensitization**

| | |
|---|---|
| **Product:** | Local Lymph Node Assay (LLNA), OECD 429, Mouse, Not a skin sensitizer.<br>Maximization Test, OECD 406, Guinea Pig, Not a skin sensitizer. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | Local Lymph Node Assay (LLNA), OECD 429, Mouse, Not a skin sensitizer.<br>Maximization Test, OECD 406, Guinea Pig, Not a skin sensitizer. |

**Carcinogenicity**

| | |
|---|---|
| **Product:** | No evidence that cancer may be caused. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | No evidence that cancer may be caused. |

**Germ Cell Mutagenicity**

no evidence of mutagenic effects

**In vitro**

| | |
|---|---|
| **Product:** | gene mutation test, OECD 471: , negative<br>gene mutation test, OECD 490: , negative<br>Chromosomal aberration, OECD 473: , negative |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | gene mutation test, OECD 471: , negative<br>gene mutation test, OECD 490: , negative<br>Chromosomal aberration, OECD 473: , negative |

**In vivo**

| | |
|---|---|
| **Product:** | Chromosomal aberration, OECD 475, Oral, Rat, Male, negative |
| **Components:** | |

| | |
|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | Chromosomal aberration, OECD 475, Oral, Rat, Male, negative |

**Reproductive toxicity**

**Product:** no evidence of reproductiontoxic properties

**Components:**

| | |
|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | no evidence of reproductiontoxic properties |

**Specific Target Organ Toxicity - Single Exposure**

**Product:** no evidence for hazardous properties

**Components:**

| | |
|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | no evidence for hazardous properties |

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** no evidence for hazardous properties

**Components:**

| | |
|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | no evidence for hazardous properties |

**Aspiration Hazard**

**Product:** Not applicable

**Components:**

| | |
|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | Not applicable |

### 11.2 Information on other hazards

**Other information**

**Product:** Based on available data, the classification criteria are not met.;

## SECTION 12: Ecological information

### 12.1 Toxicity:

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** LC 50, (Brachydanio rerio), 96 h, > 10,000 mg/l OECD 203, The reported toxic effects relate to the nominal concentration.

**Components:**

| | |
|---|---|
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | LC 50, (Brachydanio rerio), 96 h, > 10,000 mg/l OECD 203, The reported toxic effects relate to the nominal concentration. |

**Aquatic Invertebrates**

**Product:** EC 50, Daphnia magna, 24 h, > 1,000 mg/l OECD 202, The reported toxic effects relate to the nominal concentration.

**Components:**

| | |
|---|---|
| Silicon dioxide, | EC 50, Daphnia magna, 24 h, > 1,000 mg/l OECD 202, The reported |

| | |
|---|---|
| chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | toxic effects relate to the nominal concentration. |

**Toxicity to Aquatic Plants**

| | |
|---|---|
| **Product:** | EC 50 (Desmodesmus subspicatus (green algae), 72 h): > 173 mg/l (OECD 201) |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | EC 50 (Desmodesmus subspicatus (green algae), 72 h): > 173 mg/l (OECD 201) |

**Toxicity to microorganisms**

| | |
|---|---|
| **Product:** | EC 50, local activated sludge, 3 h, > 2,500 mg/l, OECD 209 |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | EC 50, local activated sludge, 3 h, > 2,500 mg/l, OECD 209 |

**Chronic hazards to the aquatic environment:**

**Fish**

| | |
|---|---|
| **Product:** | No data available. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | No data available. |

**Aquatic Invertebrates**

| | |
|---|---|
| **Product:** | No data available. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | No data available. |

**Toxicity to Aquatic Plants**

| | |
|---|---|
| **Product:** | No data available. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | No data available. |

**Toxicity to microorganisms**

| | |
|---|---|
| **Product:** | EC 50, local activated sludge, 3 h, > 2,500 mg/l, OECD 209 |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | EC 50, local activated sludge, 3 h, > 2,500 mg/l, OECD 209 |

**12.2 Persistence and Degradability**

**Biodegradation**

| | |
|---|---|
| **Product:** | The methods for determining biodegradability are not applicable to inorganic substances. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | The methods for determining biodegradability are not applicable to inorganic substances. |

### 12.3 Bioaccumulative potential

**Bioconcentration Factor (BCF)**

| | |
|---|---|
| **Product:** | Not to be expected. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | Not to be expected. |

**Partition Coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| **Product:** | Not applicable |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | , Not applicable |

### 12.4 Mobility in soil:

| | |
|---|---|
| **Product** | No remarkable mobility in soil is to be expected. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | No remarkable mobility in soil is to be expected. |

### 12.5 Results of PBT and vPvB assessment:

| | |
|---|---|
| **Product** | Not a PBT, vPvB substance as per the criteria of the REACH Regulation. |
| **Components:** | |
| Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9) | No data available. |

### 12.6 Other adverse effects:

**Other hazards**

| | |
|---|---|
| **Product:** | The data we have at our disposal do not necessitate identification concerning environmental hazard. |

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**General information:** No data available.

| | |
|---|---|
| **Disposal methods:** | Review all local, state and federal regulations concerning health and pollution for appropriate disposal procedures. No waste key number as per the European Waste Types List can be assigned to this product, since such classification is based on the (as yet undetermined) use to which the product is put by the consumer. The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority. |
| **Contaminated Packaging:** | Offer rinsed packaging material to local recycling facilities. Other countries: observe the national regulations. |

## SECTION 14: Transport information

**14.1 UN/ID No.**

Not regulated as a dangerous good

**14.2 UN proper shipping name**

Not regulated as a dangerous good

**14.3 Transport hazard class(es)**

Not regulated as a dangerous good

**14.4 Packing group**

Not regulated as a dangerous good

**14.5 Environmental hazards**

Not regulated as a dangerous good

**14.6 Special precautions for user**

Not applicable

**14.7 Maritime transport in bulk according to IMO instruments**

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

**EU Regulations**

**EU. REACH Annex XIV, Substances Subject to Authorization:** None present or none present in regulated quantities.

**EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):** None present or none present in regulated quantities.

**EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I:** Not applicable

**15.2 Chemical safety assessment:** No Chemical Safety Assessment has been carried out.

**International regulations**

**Montreal protocol**
Not applicable

**Stockholm convention**
Not applicable

**Rotterdam convention**
Not applicable

**Kyoto protocol**
Not applicable

## SECTION 16: Other information

**Abbreviations and acronyms:**

| | |
|---|---|
| EH40 WEL: | UK. EH40 Workplace Exposure Limits (WELs), as amended |
| EH40 WEL / TWA: | Time Weighted Average (TWA): |

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

**Notes:**

| | |
|---|---|
| Not applicable | Not applicable |

**Key literature references and sources for data:** No data available.

**Training information:** No data available.

| | |
|---|---|
| **Revision Information** | Changes since the last version are highlighted in the margin. This version replaces all previous versions. |
| **Disclaimer:** | This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used. |