

1 Identification

- **Product identifier**
- **Trade name: SYLOID® 7000**
- **Application of the substance / the preparation:**
Intermediate product of varied applicability in industry and trade.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
W. R. Grace & Co.-Conn
7500 Grace Drive
Columbia MD 21044
U. S. A.
- **Information department:**
Health and Safety (9 AM to 5 PM-EST) 1-410-531-4000
MSDS.Davison@grace.com
- **Emergency telephone number:**
Chemtrec North America: +1-800-424-9300
Chemtrec International: +1-703-527-3887
Other Emergencies (24hr): +1-410-531-4000

2 Hazard(s) identification

- **Classification of the substance or mixture**
Combustible Dust May form combustible dust concentrations in air.
- **Label elements**
- **GHS label elements**
Classified according to OSHA 2012 HCS 29 CFR 1910.1200 and the Canadian Hazardous Products Act WHMIS 2022.
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** None
- **Signal word** Warning
- **Hazard statements**
May form combustible dust concentrations in air.
- **Hazard not otherwise classified**
The product is very adsorbent and may have a drying effect on skin and eyes.
When exceeding the OEL (Occupational Exposure Limit) a mechanical overburdening of the respiratory system is possible.
Product dust together with air may develop ignitable and explosive mixtures.
Prevent formation of dust.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Preparation of synthetic, amorphous silicon dioxide and organic substances.

- **CAS No. and description:**

CAS: 7631-86-9	amorphous silicon dioxide, chemically prepared	90-97.5%
CAS: 63231-60-7	paraffin waxes and hydrocarbon waxes, microcrystalline	2.5-10%

- **List of Dangerous Components** None
- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 1)

4 First-aid measures

- **Description of first aid measures**
- **General information:** Take note of the following instructions
- **After inhalation:**
Supply fresh air.
Seek medical treatment in case of complaints.
- **After skin contact:**
Immediately flush skin with water for at least 15 minutes.
If skin irritation occur, consult a doctor.
- **After eye contact:**
Flush opened eye with large quantities of running water for at least 30 minutes. If symptoms occur, consult a doctor.
- **After swallowing:** Seek medical attention. Do not induce vomiting.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Hazardous combustion products**
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide
- **Advice for firefighters**
- **Protective equipment:** Wear personal protective equipment.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Prevent formation of dust.
WARNING: Product dust together with air may develop ignitable and explosive mixtures

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Keep away from ignition sources
WARNING: Product dust together with air may develop ignitable and explosive mixtures
Prevent formation of dust.
- **Environmental precautions:**
Damp down dust with water spray.
Do not allow to enter sewers, surface or ground water.
- **Methods and material for containment and cleaning up:**
Vacuuming or wet sweeping may be used to avoid dust dispersal.

(Contd. on page 3)

—USA—

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 2)

Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

Protective Action Criteria for Chemicals**PAC-1:**

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

18 mg/m³**PAC-2:**

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

740 mg/m³**PAC-3:**

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

4,500 mg/m³**7 Handling and storage****Handling:****Precautions for safe handling**

Prevent formation of dust.
Control equipment is recommended if dust is formed
Keep receptacles tightly sealed.
Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.
Take precautionary measures against static discharges.

Information about protection against explosions and fires:

When transferring this material into flammable solvents, use proper grounding to avoid static electric sparks.
Air turbulences of product dust particles will cause an explosive atmosphere.
Keep ignition sources away. Do not smoke.

Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:** No special requirements.**Information about storage in one common storage facility:** Store away from foodstuffs.**Further information about storage conditions:**

Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
Store in dry conditions.

8 Exposure controls/personal protection**Additional information about design of technical systems:**

Dust control and material handling systems should contain explosion relief vents, an explosion suppression system or other explosion suppression or prevention controls. Ensure that dust-handling systems are designed in a manner to prevent the escape of dust into the work area. Use only appropriately classified electrical equipment and powered industrial trucks.

Control parameters**Components with limit values that require monitoring at the workplace:****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

IDLH	Short-term value: 3000 mg/m ³ IDLH: Immediately Dangerous to Life or Health
PEL	Long-term value: 80mg/m ³ /%SiO ₂ mg/m ³ OSHA TWA for amorphous silica

(Contd. on page 4)

USA

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 3)

REL	Long-term value: 6 mg/m ³ NIOSH TWA
TLV	Long-term value: 10* 5** mg/m ³ OSHA TWA *Total dust **Respirable fraction

Additional Occupational Exposure Limit Values for possible hazards during processing:**Dust inhalable**

PEL	Long-term value: 15 mg/m ³ TWA
REL	Long-term value: 15 mg/m ³ TWA

Dust respirable

PEL	Long-term value: 5 mg/m ³ TWA
REL	Long-term value: 5 mg/m ³ TWA

• **Additional information:** Valid lists at time of creation were used as basis.

• **Exposure controls**

• **Personal protective equipment:**

• **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not eat, drink, smoke or sniff while working.

• **Breathing equipment:**

Required if the Occupational Exposure Limit (OEL) value is exceeded. As appropriate for the employee exposure, use a NIOSH approved respirator and cartridge.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

• **Protection of hands:**



Protective gloves

Wear gloves for the protection against mechanical hazards.

Use gloves of stable material

Check protective gloves prior to each use for their proper condition.

Check the permeability prior to each new use of the glove.

• **Material of gloves**

Butyl rubber, BR

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

• **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**

Butyl rubber, BR

Nitrile rubber, NBR

• **For the permanent contact gloves made of the following materials are suitable:**

Butyl rubber, BR

Nitrile rubber, NBR

• **Not suitable are gloves made of the following materials:** Strong fabric gloves

(Contd. on page 5)

-USA-

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 4)

· Eye protection:



Safety glasses

· Skin and Body protection: Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Powder
Color:	White

· Odor:	Characteristic
---------	----------------

· pH-value at 20 °C (68 °F):	2.0 - 4.0
------------------------------	-----------

· Change in condition

Melting point/Melting range:	80-130 °C (176-266 °F) (wax)
------------------------------	---------------------------------

· Boiling point/Boiling range:	Not determined.
· Conditions of flammability	

Flash point:	>180 °C (>356 °F) (wax)
--------------	----------------------------

· Flammability (solid, gaseous):	Product is not flammable.
· Auto igniting:	Not applicable.
· Decomposition temperature:	Not applicable.

· Auto ignition temperature:	208 °C (406.4 °F) (EU A.16)
------------------------------	-----------------------------

· Danger of explosion:	Danger of dust explosion.
· Minimum ignition energy:	100 J < Emin < 500 J
· Explosion limits:	
Lower:	125 g/m³
Upper:	Not determined.

· Vapor pressure:	Not applicable.
-------------------	-----------------

· Density at 20 °C (68 °F):	1.91 g/cm³ (15.93895 lbs/gal)
-----------------------------	-------------------------------

· Bulk density at 20 °C (68 °F):	200 - 600 kg/m³
----------------------------------	-----------------

· Vapor density	Not applicable.
-----------------	-----------------

· Evaporation rate	Not applicable.
--------------------	-----------------

· Solubility in / Miscibility with Water at 20 °C (68 °F):	≥100 mg/l (OECD 105) (amorphous silicon dioxide, chemically prepared)
---	--

· Coefficient of water/oil distribution:	Not determined.
--	-----------------

· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.

· Other information	No further relevant information available.
---------------------	--

(Contd. on page 6)

USA

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 5)

· **Particle characteristics** Not determined.**10 Stability and reactivity**

- **Reactivity** No further relevant information available.
- **Chemical stability** No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
WARNING: Product dust together with air may develop ignitable and explosive mixtures
- **Conditions to avoid**
In case of thermal decomposition caused by smouldering and incomplete combustion toxic fumes may be developed.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Carbon dioxide
Carbon monoxide

11 Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Oral	LD50	>5,000 mg/kg (ATE)
Dermal	LD50	>5,000 mg/kg (ATE)
Inhalative	LC50 (4h)	>5,000 mg/l (ATE)

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

Oral	LD50	>5,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC0	>140->2,000 mg/m³/4h (rat) (OCED 403) Maximum attainable concentration, mortality does not appear.

CAS: 63231-60-7 paraffin waxes and hydrocarbon waxes, microcrystalline

Oral	LD50	>5,000 mg/kg (rat) (OECD 401) ECHA 2011
Dermal	NOAEL	≥150 mg/kg bw/day (mouse) (OECD 453) 24 months ECHA 2012

- **Primary irritant effect:**

- **on the skin:**

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

Irritation of skin	IS	0 (rabbit) (OECD 404)
--------------------	----	-----------------------

CAS: 63231-60-7 paraffin waxes and hydrocarbon waxes, microcrystalline

Irritation of skin	IS	(rabbit) (OECD 404) ECHA 2011
--------------------	----	----------------------------------

- **on the eye:**

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

Irritation of eyes	IS	0 (rabbit) (OECD 405)
--------------------	----	-----------------------

CAS: 63231-60-7 paraffin waxes and hydrocarbon waxes, microcrystalline

Irritation of eyes	IS	(rabbit) (OECD 405) ECHA 2011
--------------------	----	----------------------------------

(Contd. on page 7)

USA

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 6)

- **Sensitization:** No sensitizing effects known.
- **Respiratory sensitization** No further relevant information available.

• **Skin sensitization****CAS: 63231-60-7 paraffin waxes and hydrocarbon waxes, microcrystalline**

Sensitization	SI	(guinea pig) (OECD 406) ECHA 2011
---------------	----	--------------------------------------

• **Additional toxicological information:**• **Carcinogenic categories**• **IARC (International Agency for Research on Cancer)**

CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared

3

• **NTP (National Toxicology Program)**

None of the ingredients is listed.

• **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

• **Repeated dose toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

Oral NOAEL (90 d) 9,000 mg/kg bw/day (rat) (OECD 408)

Inhalative NOAEL (90d) 31 mg/m³ (rat) (OECD 413)• **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**• **Carcinogenicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

Oral	NOAEL (carcinogenicity)	3,950-5,530 mg/kg bw/day (mouse) Literature 1,830 mg/kg bw/day (rat) Literature
------	-------------------------	--

• **Mutagenicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

AMES Test	>5 mg/plate (in-vitro) (OECD 471) negative, with and without metabolic activation ECHA 2012
-----------	---

CAS: 63231-60-7 paraffin waxes and hydrocarbon waxes, microcrystalline

Oral	NOAEL (2y)	5,700 mg/kg bw/day (rat) (conducted prior to implementation of guideline) ECHA 2012
	AMES Test	≤5 mg/plate (Salmonella typhimurium) (OECD 471) negative, with and without metabolic activation ECHA 2011
	Chromosome Aberration	0.5 % (mouse) (OECD 474) Negative ECHA 2012

• **Reproductive toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

Oral	NOAEL (maternal toxicity)	1,350 mg/kg bw/day (rat) (OECD 414)
	NOAEL (teratogenicity)	1,350 mg/kg bw/day (rat) (OECD 414)

• **Specific target organ toxicity (single exposure)** No further relevant information available.• **Specific target organ toxicity (repeated exposure)** No further relevant information available.

— USA —

(Contd. on page 8)

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 7)

12 Ecological information· **Toxicity**· **Aquatic toxicity:**· **Fish toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

LC0 (96 h) (static) | 10,000 mg/l (zebra fish) (OECD 203)

CAS: 63231-60-7 paraffin waxes and hydrocarbon waxes, microcrystallineLL50 (96 h) | >100 mg/l (Pimephales promelas) (OECD 203)
ECHA 2012NOEC (96 h) | ≥1,000 mg/l (trout) (no guideline followed)
ECHA 2012· **Water flea toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**

EC50 (24 h) | >1,000 mg/l (Daphnia magna) (OECD 202)

CAS: 63231-60-7 paraffin waxes and hydrocarbon waxes, microcrystallineEL50 (48 h) | ≥10,000 mg/l (Daphnia magna) (OECD 202)
ECHA 2012· **Algae toxicity****CAS: 7631-86-9 amorphous silicon dioxide, chemically prepared**EC50 (72 h) | >10,000 mg/l (Scenedesmus subspicatus) (OECD 201)
comparable substance· **Persistence and degradability** No further relevant information available.· **Other information:**

The product is chemically and biologically inert.

By the insolubility in water there is a separation at every filtration and sedimentation process.

· **Behavior in environmental systems:**· **Bioaccumulative potential** No further relevant information available.· **Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**· **PBT:** Not determined.· **vPvB:** Not determined.· **Other adverse effects** No further relevant information available.**13 Disposal considerations**· **Precautions for disposal:**· **Recommendation:**

Disposal must be made according to official regulations.

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State/provincial and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state/provincial and local requirements.

— USA —

(Contd. on page 9)

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 8)

14 Transport information

· UN-Number	
· DOT, ADR, ADN, IMDG, IATA	Not applicable.
· UN proper shipping name	
· DOT, ADR, ADN, IMDG, IATA	Not applicable.
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Not applicable.
· Packing group	
· DOT, ADR, IMDG, IATA	Not applicable.
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Segregation groups	-
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications. GRACE recommendation for air transport: Cargo aircraft.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA

· SARA 302/304

None of the ingredients is listed.

· SARA 313

None of the ingredients is listed.

· SARA 311/312 Combustible Dust.

· TSCA (Toxic Substances Control Act):

CAS: 7631-86-9	amorphous silicon dioxide, chemically prepared	ACTIVE
CAS: 63231-60-7	paraffin waxes and hydrocarbon waxes, microcrystalline	ACTIVE

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

(Contd. on page 10)

USA

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 9)

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

CAS: 63231-60-7 | paraffin waxes and hydrocarbon waxes, microcrystalline

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **Canadian DSL**

CAS: 7631-86-9 | amorphous silicon dioxide, chemically prepared

CAS: 63231-60-7 | paraffin waxes and hydrocarbon waxes, microcrystalline

· **Canadian NDSL**

None of the ingredients is listed.

· **European EINECS**

All ingredients are listed or exempted from listing.

· **Philippines Inventory of Chemicals and Chemical Substances PICCS**

All ingredients are listed or exempted from listing.

· **Inventory of the Existing Chemical Substances manufactured or imported in China IECSC**

CAS: 7631-86-9 | amorphous silicon dioxide, chemically prepared

CAS: 63231-60-7 | paraffin waxes and hydrocarbon waxes, microcrystalline

· **Australian Inventory of Industrial Chemicals (AIIC)**

All ingredients are listed or exempted from listing.

· **Japanese Existing and New Chemical Substance List ENCS**

CAS: 7631-86-9 | amorphous silicon dioxide, chemically prepared

1-548

CAS: 63231-60-7 | paraffin waxes and hydrocarbon waxes, microcrystalline

8-414

· **Korean Existing Chemical Inventory KECI**

CAS: 7631-86-9 | amorphous silicon dioxide, chemically prepared

KE-31032

CAS: 63231-60-7 | paraffin waxes and hydrocarbon waxes, microcrystalline

KE-27787

· **TCSCA (Taiwan)**

CAS: 7631-86-9 | amorphous silicon dioxide, chemically prepared

EPEP4A01648271

CAS: 63231-60-7 | paraffin waxes and hydrocarbon waxes, microcrystalline

EPEP4A01714239

· **Russian Register of Potentially Hazardous Chemical and Biological Substances (RPOHV)**

CAS: 7631-86-9 | amorphous silicon dioxide, chemically prepared

№ AT-000209 от 18.01.1995 г.

CAS: 63231-60-7 | paraffin waxes and hydrocarbon waxes, microcrystalline

№ BT-010927 от 01.02.2019 г.

· **New Zealand Inventory of Chemicals (NZIoC)**

All ingredients are listed or exempted from listing.

· **Existing Chemical Directory of Thailand (DIW)**

All ingredients are listed or exempted from listing.

· **TCSI - Taiwan Chemical Substance Inventory**

All ingredients are listed or exempted from listing.

· **Mexican National Inventory of Chemical Substances (INSQ)**

All ingredients are listed or exempted from listing.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms** None· **Signal word** Warning

(Contd. on page 11)

USA

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: **SYLOID® 7000**

(Contd. of page 10)

- **Hazard statements**
May form combustible dust concentrations in air.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 1
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 1
Fire = 1
Reactivity = 0

- **Other regulations, limitations and prohibitive regulations**
- **please note:**
Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** GRACE Safety & Health Department
- **Other information:**
The applicable regulations and industrial hygiene standards have to be considered.
Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling
- **Contact:**
SALES OFFICES

USA:
GRACE
W. R. Grace & Co.-Conn
7500 Grace DR
Columbia, MD 21044
Tel: +1 410-531 4000

Europe:
Grace GmbH
In der Hollerhecke 1
D-67545 Worms, Germany
Tel: +49 6241 40300

Asia Pacific:
Grace Products (Singapore) Pte. Ltd.,
390 Orchard Road
15-02/03 Palais Renaissance
Singapore 238871
Tel: +65 6331 4188
Fax: +65 6737 5826

Grace Trading (Shanghai) Ltd
19th Floor K.Wah Center
1010 Huai Hai Zhong Road
Shanghai, 200031 China
T (电话): +86 21 3325 8288

(Contd. on page 12)

USA

Printing date 07/24/2024

Version: 20.0

Reviewed on 07/24/2024

Trade name: SYLOID® 7000

(Contd. of page 11)

F (传真): +86 21 3325 8245

W. R. Grace Japan K.K
Kohken New River Bldg 3F
2-21-18, Shinkawa
Chuo-ku, Tokyo 104-0033
JAPAN

Tel: +81 3.3537.6006

Fax: +81 3.3537.6007

· **Other information:**· **Date of preparation / last revision** 07/24/2024 / 19.5· **The first date of preparation** 02/17/2015· **Number of revision times and the latest revision date** 20.0 / 07/24/2024· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ECHA: European Chemical Agency

EPA: Environmental Protection Agency

EC50: Half maximal effective concentration

NOAEL: No Observed Adverse Effect Level

BCF: Bioconcentration Factor

CLH: Harmonised classification and labelling

ADR: Accord relatif au transport international des marchandises dangereuses par route (Agreement Concerning the Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

ATE: Acute toxicity estimate values

· **Others** No further relevant information available.· *** Data compared to the previous version altered.**

—USA—