

1 Identification

- **Product identifier**
- **Trade name: SYLOID® ED 30**
- **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:**
GRACE
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 2015.
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.
- **Classification system:**

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



Health = 1
Fire = 1
Reactivity = 0

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



Health = 1
Fire = 1
Reactivity = 0

- **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.
WARNING: Product dust together with air may develop ignitable and explosive mixtures

USA

(Contd. on page 2)

Trade name: SYLOID® ED 30

(Contd. of page 1)

3 Composition/information on ingredients

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

- **CAS No. and description:**

7631-86-9	amorphous silicon dioxide, chemically prepared	90-95%
8002-74-2	Paraffin waxes and hydrocarbon waxes	2.5-7.5%
64742-60-5	Hydrocarbon waxes (petroleum), hydrotreated microcryst.	≤2.5%

- **List of Dangerous Components** None

4 First-aid measures

- **Description of first aid measures**
- **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:**
Foam
CO₂
- **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

USA

(Contd. on page 3)

Printing date 01/03/2018

Version: 6.1

Reviewed on 01/03/2018

Trade name: SYLOID® ED 30

(Contd. of page 2)

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.

· 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:

7631-86-9	amorphous silicon dioxide, chemically prepared	18 mg/m3
-----------	--	----------

· PAC-2:

7631-86-9	amorphous silicon dioxide, chemically prepared	740 mg/m3
-----------	--	-----------

· PAC-3:

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.

· 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

(Contd. on page 4)

Trade name: SYLOID® ED 30

(Contd. of page 3)

only appropriately classified electrical equipment and powered industrial trucks.

· **Control parameters**· **Components with limit values that require monitoring at the workplace:****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: 80/%SiO ₂ mg/m ³ OSHA TWA for amorphous silica
-----	--

REL	Long-term value: 6 mg/m ³ NIOSH TWA
-----	---

TLV	Long-term value: 10* 5** mg/m ³ ACGIH TWA *Total dust **Respirable fraction
-----	---

8002-74-2 Paraffin waxes and hydrocarbon waxes

REL	Long-term value: 2 mg/m ³
-----	--------------------------------------

TLV	Long-term value: 2 mg/m ³
-----	--------------------------------------

· **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.

· **Protection of hands:**

Protective gloves

Wear gloves for the protection against mechanical hazards.

Use gloves of stable material (e.g. Nitrile)

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· **Eye protection:**

Safety glasses

(Contd. on page 5)

Printing date 01/03/2018

Version: 6.1

Reviewed on 01/03/2018

Trade name: SYLOID® ED 30

(Contd. of page 4)

- **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:** Odorless

- **Odor threshold:** Not available.

- **pH-value at 20 °C (68 °F):** 6.0-8.5

- **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.

- **Ignition temperature:** Not available.

- **Decomposition temperature:** Not available.

- **Auto igniting:** 208°C (EU A.16)

- **Danger of explosion:** Danger of dust explosion.

- **Minimum ignition energy:** 100 J < Emin < 500 J

- **Explosion limits:**

Lower:	125 g/m ³
Upper:	Not determined.

- **Vapor pressure at 20 °C (68 °F):** -- hPa

- **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:	Insoluble.
--------	------------

- **Coefficient of water/oil distribution:** Not available.

- **Viscosity:**

Dynamic at 20 °C (68 °F):	-- mPas
---------------------------	---------

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

10 Stability and reactivity

- **Reactivity** No further relevant information available.

- **Chemical stability** No decomposition if used according to specifications.

- **Possibility of hazardous reactions**

WARNING: Product dust together with air may develop ignitable and explosive mixtures

(Contd. on page 6)

Trade name: **SYLOID® ED 30**

(Contd. of page 5)

- **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 the likely routes of exposure**
- **Delayed and immediate effects and chronic effects from short or long term exposure**
- **Information on toxicological effects**
- **Acute toxicity:**

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

7631-86-9 amorphous silicon dioxide, chemically prepared

Oral	LD50	>5,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>5,000 mg/kg (rabbit) (no guidance available)
Inhalative	LC0	>140->2,000 mg/m ³ /4h (rat) (OCED 403) Maximum attainable concentration, mortality does not appear.

8002-74-2 Paraffin waxes and hydrocarbon waxes

Oral	LD50	>5,000 mg/kg (rat) (OECD guideline 420) ECHA 2013
------	------	--

64742-60-5 Hydrocarbon waxes (petroleum), hydrotreated microcryst.

Oral	LD50	>5,000 mg/kg (rat) (OECD Guideline 420) ECHA 2013
Dermal	LD50	>5,000 mg/kg (rabbit) ECHA 2014

- **Primary irritant effect:**

- **on the skin:**

7631-86-9 amorphous silicon dioxide, chemically prepared

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

8002-74-2 Paraffin waxes and hydrocarbon waxes

Irritation of skin	IS	0 (rabbit) (OECD 404) ECHA 2011
--------------------	----	------------------------------------

64742-60-5 Hydrocarbon waxes (petroleum), hydrotreated microcryst.

Irritation of skin	IS	0 (rabbit) (OECD Guideline 404) not irritating ECHA 2013
--------------------	----	--

- **on the eye:**

7631-86-9 amorphous silicon dioxide, chemically prepared

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

8002-74-2 Paraffin waxes and hydrocarbon waxes

Irritation of eyes	IS	0 (rabbit) (OECD 405) ECHA 2011
--------------------	----	------------------------------------

64742-60-5 Hydrocarbon waxes (petroleum), hydrotreated microcryst.

Irritation of eyes	IS	0 (rabbit) (OECD Guideline 405) not irritating ECHA 2013
--------------------	----	--

(Contd. on page 7)

Printing date 01/03/2018

Version: 6.1

Reviewed on 01/03/2018

Trade name: SYLOID® ED 30

(Contd. of page 6)

- **Respiratory sensitization** No further relevant information available.

- **Skin sensitization**

8002-74-2 Paraffin waxes and hydrocarbon waxes

Sensitization	SI	0 (guinea pig) (OECD 406) ECHA 2011
---------------	----	--

64742-60-5 Hydrocarbon waxes (petroleum), hydrotreated microcryst.

Sensitization	SI	0 (guinea pig) (OECD Guideline 406) not sensitising ECHA 2013
---------------	----	---

- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

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**

7631-86-9 amorphous silicon dioxide, chemically prepared

Oral	NOAEL (90 d)	9,000 mg/kg bw/day (rat) (OECD 408)
Inhalative	NOAEC (90 d)	1 mg/m ³ (rat) (OECD 413)

8002-74-2 Paraffin waxes and hydrocarbon waxes

Oral	NOAEL (90 d)	1,500 mg/kg bw/day (rat) (OECD Guideline 408) ECHA 2013
------	--------------	--

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

- **Carcinogenicity**

8002-74-2 Paraffin waxes and hydrocarbon waxes

Oral	NOAEL (carcinogenicity)	~5,700 mg/kg bw (rat) (method did not strictly follow the guideline) The five waxes tested did not demonstrate any carcinogenic potential via oral exposure with 10% wax in the diet in either sex of rat. ECHA 2013
------	-------------------------	--

- **Mutagenicity**

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
-----------	---

8002-74-2 Paraffin waxes and hydrocarbon waxes

AMES Test	5 mg/plate (Salmonella typhimurium) (OECD Guideline 471) negative, with and without metabolic activation ECHA 2012
CHO	3.6 mg/l (Chinese Hamster Ovary) (OECD Guideline 473) None of the extract concentrations analysed induced a statistically significant increase in the number of aberrant cells with or without metabolic activation. ECHA 2013

(Contd. on page 8)

USA

Printing date 01/03/2018

Version: 6.1

Reviewed on 01/03/2018

Trade name: SYLOID® ED 30

(Contd. of page 7)

64742-60-5 Hydrocarbon waxes (petroleum), hydrotreated microcryst.

Oral	NOAEL (2y)	5,700 mg/kg/day (rat) (publication1962) The authors concluded that the five paraffin waxes were devoid of carcinogenic or other toxic action when fed at a level of 10% in the diet (Shubik et al., 1962). Based on the body weights, this equates to a daily dose of approximately 5700 mg/kg/day. ECHA 2013
	AMES Test	5 mg/plate (Salmonella typhimurium) (OECD Guideline 471) negative with and without metabolic activation ECHA 2013
	CHO	3.6 mg/l (Chinese Hamster Ovary) (OECD Guideline 473) None of the extract concentrations analysed induced a statistically significant increase in the number of aberrant cells with or without metabolic activation ECHA 2013

· **Reproductive toxicity****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.
- **Aspiration hazard** No further relevant information available.

12 Ecological information· **Toxicity**· **Aquatic toxicity:**· **Fish toxicity**

7631-86-9 amorphous silicon dioxide, chemically prepared	
LC0 (96 h) (static)	10,000 mg/l (zebra fish) (OECD 203)
8002-74-2 Paraffin waxes and hydrocarbon waxes	
LC50 (96 h)	>1,000 mg/l (Oncorhynchus mykiss) (OECD Guideline 203) Oil-Water Dispersion ECHA 2012
64742-60-5 Hydrocarbon waxes (petroleum), hydrotreated microcryst.	
LC50 (96 h)	>1,000 mg/l (Oncorhynchus mykiss) (OECD Guideline 203) ECHA 2013

· **Water flea toxicity**

7631-86-9 amorphous silicon dioxide, chemically prepared	
EC50 (24 h)	>1,000 mg/l (Daphnia magna) (OECD 202)
8002-74-2 Paraffin waxes and hydrocarbon waxes	
EC50 (48 h)	>10,000 mg/l (Daphnia magna) (OECD Guideline 202) Water Accomodated Fraction ECHA 2012

· **Algae toxicity**

7631-86-9 amorphous silicon dioxide, chemically prepared		
EC50 (72 h)	>10,000 mg/l (Scenedesmus subspicatus) (OECD 201) comparable substance	

(Contd. on page 9)

Trade name: **SYLOID® ED 30**

(Contd. of page 8)

8002-74-2 Paraffin waxes and hydrocarbon waxes

EC50 (72 h)	>1,000 mg/l (Scenedesmus subspicatus) (OECD Guideline 201) Water Accomodated Fraction ECHA 2012
-------------	---

64742-60-5 Hydrocarbon waxes (petroleum), hydrotreated microcryst.

EC10 (72 h)	>1,000 mg/l (Desmodesmus subspicatus) (OECD Guideline 201) ECHA 2013
-------------	---

- **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 product to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **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.

14 Transport information

- | | |
|---------------------------------------|-----------------|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | None |
| · UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | None |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | None |
| · Packing group | |
| · DOT, ADR, IMDG, IATA | None |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |

(Contd. on page 10)

Trade name: **SYLOID® ED 30**

(Contd. of page 9)

- | | |
|---|---|
| · Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. GRACE recommendation for air transport: Cargo aircraft only. |
| · DOT | |
| · Hazardous substance: | - |

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.

· **TSCA (Toxic Substances Control Act):**

- | | |
|------------|---|
| 7631-86-9 | amorphous silicon dioxide, chemically prepared |
| 8002-74-2 | Paraffin waxes and hydrocarbon waxes |
| 64742-60-5 | Hydrocarbon waxes (petroleum), hydrotreated microcryst. |

· **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.

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

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **Canadian DSL**

- | | |
|------------|---|
| 7631-86-9 | amorphous silicon dioxide, chemically prepared |
| 8002-74-2 | Paraffin waxes and hydrocarbon waxes |
| 64742-60-5 | Hydrocarbon waxes (petroleum), hydrotreated microcryst. |

· **Canadian NDSL** Not available.· **European EINECS**

All ingredients are listed or exempted from listing.

(Contd. on page 11)

Trade name: **SYLOID® ED 30**

(Contd. of page 10)

• 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
--

All ingredients are listed.

• Australian Inventory of Chemical Substances AICS

All ingredients are listed or exempted from listing.
--

• Existing and New Chemical Substance List ENCS
--

7631-86-9	amorphous silicon dioxide, chemically prepared	1-548
8002-74-2	Paraffin waxes and hydrocarbon waxes	8-414; 8-430
64742-60-5	Hydrocarbon waxes (petroleum), hydrotreated microcryst.	9-1693

• Korean Existing Chemical Inventory KECI
--

7631-86-9	amorphous silicon dioxide, chemically prepared	KE-31032
8002-74-2	Paraffin waxes and hydrocarbon waxes	KE-27782
64742-60-5	Hydrocarbon waxes (petroleum), hydrotreated microcryst.	KE-20119

• TCSCA (Taiwan)

7631-86-9	amorphous silicon dioxide, chemically prepared	EPEP4A01648271
-----------	--	----------------

• New Zealand Inventory of Chemicals (NZIoC)

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

- **Hazard statements**

May form combustible dust concentrations in air.

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:**

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

- **Tarif number** 3824 9996

- **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 4030

Asia Pacific:

Grace Products (Singapore) Pte Ltd

230 Orchard Road

(Contd. on page 12)

-USA-

Trade name: SYLOID® ED 30

(Contd. of page 11)

09-232, Faber House
Singapore 238854
Tel: +65 6737 3033
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
F (传真): +86 21 5405 1500

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

· **Date of preparation / last revision** 01/03/2018 / 6.0

· **The first date of preparation** 01/27/2015

· **Number of revision times and the latest revision date** 6.1 / 01/03/2018

· **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

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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

· **Others** No further relevant information available.

· *** Data compared to the previous version altered.**