

## 640Z19 - Sterillium, Hand Disinfectant

Material number 640Z19

Page: 1 of 13

### 1. Product and company identification

#### Product identifier

Trade name: 640Z19 - Sterillium, Hand Disinfectant

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

General use: Disinfectant cleaner  
Hand disinfectant

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

Company name: Otto Bock Health Care  
Street/POB-No.: 3820 W. Great Lakes Drive  
Postal Code, city: Salt Lake City, UT 84120  
USA  
WWW: [www.ottobockus.com](http://www.ottobockus.com)  
Telephone: +1 (801) 956-2400  
Telefax: +1 (801) 956-2401  
Department responsible for information: Quality Department,  
Telephone: +1 (801) 954-2304 (7 AM – 3 PM, Mountain Time),  
Email: [USRegulatory@ottobock.com](mailto:USRegulatory@ottobock.com)  
Additional information: Corporate headquarters:  
Ottobock SE & Co. KGaA  
Max-Näder-Straße 15  
Duderstadt  
Germany

#### Emergency phone number

**CHEMTREC, Telephone: +1 (800) 424-9300**  
**Transport:**  
**CONSULTANK Lutz Harder GmbH (Contract QUALI003)**  
**Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)**

### 2. Hazards identification

#### Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid  
Color: light blue  
Odor: pleasant odor  
Classification: Flammable Liquid - Category 3. Eye Irritation - Category 2A.  
Specific Target Organ Toxicity (Single Exposure) - Category 3.

Hazard symbols:



Signal word:

**Warning**

**640Z19 - Sterillium, Hand  
Disinfectant**

Material number 640Z19

Page: 2 of 13

Hazard statements: Flammable liquid and vapor.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.

Precautionary statements: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Avoid breathing mist/vapors/spray.  
Wash hands and face thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Call a POISON CENTER/doctor if you feel unwell.  
If eye irritation persists: Get medical advice/attention.  
In case of fire: Use ... to extinguish.  
Store in a well-ventilated place. Keep container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point.

**Regulatory status**

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Hazards not otherwise classified**

Potentially explosive mixtures may form if adequate ventilation is not provided.  
Inhaling can lead to irritations of the respiratory tract and mucous membrane.  
Higher doses may have a narcotic effect.  
see section 11: Toxicological information

## 640Z19 - Sterillium, Hand Disinfectant

Material number 640Z19

Page: 3 of 13

### 3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 67-63-0	Isopropyl alcohol	30 - 50 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 71-23-8	Propan-1-ol	30 - 50 %	Flammable Liquid - Category 2. Eye Damage - Category 1. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 112-72-1	Tetradecanol	< 1 %	Eye Irritation - Category 2A. Aquatic toxicity - chronic - Category 1.
CAS 3006-10-8	Mecetronium etilsulfate	< 0.25 %	Skin Corrosion - Category 1B. Eye Damage - Category 1. Aquatic toxicity - acute - Category 1 (M-factor = 100). Aquatic toxicity - chronic - Category 1 (M-factor = 1000).

### 4. First aid measures

General information:	If medical advice is needed, have product container or label at hand. Take off contaminated clothing and wash it before reuse.
In case of inhalation:	Provide fresh air. Seek medical attention.
Following skin contact:	After contact with skin, wash immediately with plenty of water. In case of skin reactions, consult a physician.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Seek the attention of an ophthalmologist immediately.
After swallowing:	Do not induce vomiting. Immediately get medical attention. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person.

#### Most important symptoms/effects, acute and delayed

Inhaling can lead to irritations of the respiratory tract and mucous membrane. Higher doses may have a narcotic effect. Causes serious eye irritation. May cause drowsiness or dizziness.

#### Information to physician

Treat symptomatically.

### 5. Fire fighting measures

Flash point/flash point range:

73.4 °F (DIN 51755)

Auto-ignition temperature: 806 °F

## 640Z19 - Sterillium, Hand Disinfectant

Material number 640Z19

Page: 4 of 13

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, dry chemical powder, carbon dioxide

Extinguishing media which must not be used for safety reasons:

full water jet

### Specific hazards arising from the chemical

Flammable liquid and vapor.

Air combined with vapors may form potentially explosive mixtures that are heavier than air. Vapors may proceed on the ground over great distances and cause fire and backflashes.

Protective equipment and precautions for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.

Move undamaged containers from immediate hazard area if it can be done safely.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Do not allow fire water to penetrate into surface or ground water.

Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

## 6. Accidental release measures

Personal precautions:

Avoid contact with the substance. Eliminate all ignition sources if safe to do so. Provide adequate ventilation.

Wear appropriate protective equipment. Keep unprotected people away.

Take off contaminated clothing and wash it before reuse. Avoid breathing mist/vapors/spray.

Cordon off downwind area at risk and warn inhabitants.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains. Danger of explosion!

In case of release, notify competent authorities.

Methods for clean-up:

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

Beware of reignition. Thoroughly clean surrounding area.

In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information:

Use explosion-proof equipment and non-sparking tools/utensils.

Special danger of slipping by leaking/spilling product.

## 7. Handling and storage

### Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.  
Avoid contact with skin and eyes. Wear appropriate protective equipment.  
Guarantee sufficient ventilation during and after use, in order to prevent vapor accumulation.  
Take off contaminated clothing and wash it before reuse. Avoid breathing mist/vapors/spray. Do not eat, drink or smoke when using this product.  
Have eye wash bottle or eye rinse ready at work place. When handling large quantities, supply emergency spray.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.  
Take precautionary measures against static discharges.  
Use only explosion-protected equipment/instruments. Do not weld.  
In partially filled containers explosive mixtures may form.

### Storage

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.  
Keep container dry. Keep only in the original container.  
Protect from heat and direct sunlight.  
Store containers in upright position. Explosion protection required.

Hints on joint storage:

Do not store together with combustible or self-igniting materials or any highly flammable solids. Keep away from food, drink and animal feedingstuffs.

## 8. Exposure controls / personal protection

### Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
67-63-0	Isopropyl alcohol	USA: ACGIH: STEL	984 mg/m <sup>3</sup> ; 400 ppm
		USA: ACGIH: TWA	492 mg/m <sup>3</sup> ; 200 ppm
		USA: IDLH: TWA	2,000 ppm [10% LEL]
		USA: NIOSH: STEL	1,225 mg/m <sup>3</sup> ; 500 ppm
		USA: NIOSH: TWA	980 mg/m <sup>3</sup> ; 400 ppm
		USA: OSHA: TWA	980 mg/m <sup>3</sup> ; 400 ppm
71-23-8	Propan-1-ol	USA: ACGIH: TWA	246 mg/m <sup>3</sup> ; 100 ppm
		USA: IDLH: TWA	800 ppm
		USA: NIOSH: STEL	625 mg/m <sup>3</sup> ; 250 ppm (may be absorbed through the skin)
		USA: NIOSH: TWA	500 mg/m <sup>3</sup> ; 200 ppm (may be absorbed through the skin)
		USA: OSHA: TWA	500 mg/m <sup>3</sup> ; 200 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
67-63-0	Isopropyl alcohol	USA: ACGIH-BEI, urine	40 mg/L	Acetone in urine	end of shift at end of work week

### Engineering controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment. Explosion protection required.  
See also information in chapter 7, section storage.

### Personal protection equipment (PPE)

**Eye/face protection:** When decanting: tightly sealed safety glasses according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2003.

**Skin protection:** Flame retardant, antistatic and chemical resistant protective clothing.  
normally not required.  
In case of prolonged exposure: Protective gloves according to OSHA Standard - 29 CFR: 1910.138.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

**Respiratory protection:** Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

**General hygiene considerations:**  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take off contaminated clothing and wash it before reuse. Avoid breathing mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.  
Have eye wash bottle or eye rinse ready at work place. When handling large quantities, supply emergency spray.

### Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

**Appearance:** Physical state at 68 °F and 101.3 kPa: liquid  
Color: light blue

**Odor:** pleasant odor

**Odor threshold:** No data available

**pH:** No data available

**Melting point/freezing point:** No data available

**Initial boiling point and boiling range:** 181.4 °F

**Flash point/flash point range:** 73.4 °F (DIN 51755)

**Evaporation rate:** No data available

**Flammability:** No data available

**Explosion limits:** LEL (Lower Explosion Limit) at 68 °F: (70 g/m<sup>3</sup>)

## 640Z19 - Sterillium, Hand Disinfectant

Material number 640Z19

Page: 7 of 13

Vapor pressure:	at 122 °F: 6 kPa
Vapor density:	No data available
Density:	at 68 °F: 0.85 g/mL
Water solubility:	completely miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	806 °F
Thermal decomposition:	No data available
Explosive properties:	Vapors may form explosive mixtures with air.

### 10. Stability and reactivity

Reactivity:	Flammable liquid and vapor. Vapors may form explosive mixtures with air.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Heating will lead to pressure increase: Danger of bursting and explosion.
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect from direct sunlight.
Incompatible materials:	Do not store together with combustible or self-igniting materials or any highly flammable solids.
Thermal decomposition:	No data available

## 11. Toxicological information

### Toxicological tests

**Toxicological effects:**

- Acute toxicity (oral): Based on available data, the classification criteria are not met.  
ATEmix: 13,300 mg/kg
- Acute toxicity (dermal): Based on available data, the classification criteria are not met.  
ATEmix: > 8,500 mg/kg
- Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.
- Specific symptoms in animal studies (Rabbit): irritant (OECD 404)
- Sensitisation to the respiratory tract: Lack of data.
- Skin sensitisation: Based on available data, the classification criteria are not met.
- Germ cell mutagenicity/Genotoxicity: Lack of data.
- Carcinogenicity: Lack of data.
- Reproductive toxicity: Lack of data.
- Effects on or via lactation: Lack of data.
- Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) - Category 3 = May cause drowsiness or dizziness.
- Specific target organ toxicity (repeated exposure): Lack of data.
- Aspiration hazard: Lack of data.

**Other information:**

- Information about Isopropyl alcohol:  
LD50 Rat, oral: > 5,000 mg/kg  
LD50 Rabbit, dermal: > 5,000 mg/kg
- Information about Propan-1-ol:  
LD50 Rat, oral: 8,000 mg/kg (OECD 401)  
LD50 Rabbit, dermal: 4,032 mg/kg (OECD 402)  
LC50 Rat, inhalative (vapor): > 33.8 mg/L/4h (OECD 403)
- Information about Tetradecanol:  
LD50 Rat, oral: > 2,000 mg/kg  
LD50 Rabbit, dermal: > 2,000 mg/kg

### General remarks

- For carcinogenic effects:
- Information about CAS No. 67-63-0
- IARC Rating: Group 3
- OSHA Carcinogen: not listed
- NTP Rating: not listed



## 12. Ecological information

### Ecotoxicity

#### Aquatic toxicity:

##### Information about product:

##### Fish toxicity:

LC50 *Leuciscus idus*: 2,300 mg/L/96h (OECD 203)

##### Algae toxicity:

EC50 *Desmodesmus subspicatus* (green algae): 22 mg/L/72h (OECD 201)

NOEC *Desmodesmus subspicatus* (green algae): 7.8 mg/L/72h (OECD 201)

##### Bacterial toxicity:

IC50 bacteria: > 10,000 mg/L (DIN 38 412 Bart 8)

##### Information about Isopropyl alcohol:

##### Fish toxicity:

LC50 *Pimephales promelas* (fathead minnow): 8,692 mg/L/96h

##### Daphnia toxicity:

EC50 *Daphnia magna* (Big water flea): 2,285 mg/L/48h

NOEC *Daphnia magna* (Big water flea): 141 mg/L/16d

##### Algae toxicity:

EC50 *Pseudokirchneriella subcapitata* (green algae): 10,500 mg/L/72h

##### Information about Propan-1-ol:

##### Fish toxicity:

LC50 *Pimephales promelas* (fathead minnow): 4,554 mg/L/96h (OECD 203)

##### Daphnia toxicity:

EC50 *Daphnia magna* (Big water flea): 2,300 mg/L/48h (OECD 202)

##### Algae toxicity:

EC50 *Pseudokirchneriella subcapitata* (green algae), growth rate: 9,170 mg/L/72h

NOEC *Chlorella pyrenoidosa*, growth rate: 1.150 mg/L/48h

##### Information about Tetradecanol:

##### Fish toxicity:

LC50 *Oncorhynchus mykiss*: > 1 mg/L/96h

##### Daphnia toxicity:

EC50 *Daphnia magna* (Big water flea): 3.2 mg/L/48h (OECD 202)

NOEC *Daphnia magna* (Big water flea): 0.0016 mg/L/21d (OECD 211)

##### Algae toxicity:

EC50 *Desmodesmus subspicatus* (green algae): > 1 mg/L/72h (OECD 201)

##### Information about Mecetronium etilsulfate:

##### Fish toxicity:

LC50 *Leuciscus idus*: 0.2 mg/L/96h (OECD 203)

NOEC *Danio rerio* (zebrafish): 0.00056 mg/L/35d (OECD 210)

##### Daphnia toxicity:

EC50 *Daphnia magna* (Big water flea): 0.016 mg/L/48h (OECD 202)

EC10 *Daphnia magna* (Big water flea): 0.00006 mg/L/21d (OECD 211)

##### Algae toxicity:

EC50 *Desmodesmus subspicatus* (green algae): 0.0039 mg/L/72h (OECD 201)

NOEC *Desmodesmus subspicatus* (green algae): 0.00014 mg/L/72h (OECD 201)

##### Bacterial toxicity:

IC50 bacteria: 22 mg/L (OECD 209)

### Mobility in soil

No data available

### Persistence and degradability

Further details: Product is readily biodegradable. (OECD 301D - EEC 84/449 C6)

### Additional ecological information

Volatile organic compounds (VOC):

75 % by weight

General information: Do not allow to enter into ground-water, surface water or drains.

## 13. Disposal considerations

### Product

Recommendation: Incinerate as hazardous waste according to applicable local, state, and federal regulations.

### Package

Recommendation: Incinerate as hazardous waste according to applicable local, state, and federal regulations. Handle empty containers with care. Incineration may cause explosion.

## 14. Transport information

### UN number

ADR/RID, IMDG, IATA-DGR:

UN 1987

### UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 1987, ALCOHOLS, N.O.S. (Isopropyl alcohol, Propan-1-ol)

### Transport hazard class(es)

ADR/RID:

Class 3, Code: F1

IMDG:

Class 3, Subrisk -

IATA-DGR:

Class 3



### Packing group

ADR/RID, IMDG, IATA-DGR:

III

### Environmental hazards

Marine pollutant:

no

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

## 640Z19 - Sterillium, Hand Disinfectant

Material number 640Z19

Page: 11 of 13

### USA: Department of Transportation (DOT)

Identification number: UN1987  
Proper shipping name: UN 1987, ALCOHOLS, N.O.S.  
Hazard class or Division: 3  
Packing Group: III  
Labels: 3  
Special Provisions: 172, B1, IB3, T4, TP1, TP29  
Packaging – Exceptions: 4b, 150  
Packaging – Non-bulk: 203  
Packaging – Bulk: 242  
Quantity limitations – Passenger aircraft / rail: 60 L  
Quantity limitations – Cargo only: 220 L  
Vessel stowage – Location: A



### Sea transport (IMDG)

UN number: UN 1987  
Proper shipping name: UN 1987, ALCOHOLS, N.O.S. (Isopropyl alcohol, Propan-1-ol)  
Class or division, Subsidiary risk: Class 3, Subrisk -  
Packing Group: III  
EmS: F-E, S-D  
Special Provisions: 223 274  
Limited quantities: 5 L  
Excepted quantities: E1  
Package - Instructions: P001, LP01  
Package - Provisions: -  
IBC - Instructions: IBC03  
IBC - Provisions: -  
Tank instructions - IMO: -  
Tank instructions - UN: T4  
Tank instructions - Provisions: TP1, TP29  
Stowage and handling: Category A.  
Properties and observations: -  
Marine pollutant: no  
Segregation group: none

### Air transport (IATA)

UN/ID number: UN 1987  
Proper shipping name: UN 1987, ALCOHOLS, N.O.S. (Isopropyl alcohol, Propan-1-ol)  
Class or division, Subsidiary risk: Class 3  
Packing Group: III  
Hazard label: Flamm. liquid  
Excepted Quantity Code: E1  
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y344 - Max. Net Qty/Pkg. 10 L  
Passenger and Cargo Aircraft: Pack.Instr. 355 - Max. Net Qty/Pkg. 60 L  
Cargo Aircraft only: Pack.Instr. 366 - Max. Net Qty/Pkg. 220 L  
Special Provisions: A3 A180  
Emergency Response Guide-Code (ERG): 3L

## 640Z19 - Sterillium, Hand Disinfectant

Material number 640Z19

Page: 12 of 13

### 15. Regulatory information

#### National regulations - U.S. Federal Regulations

Isopropyl alcohol: TSCA Inventory: listed  
Carcinogen Status:  
IARC Rating: Group 3  
OSHA Carcinogen: not listed  
NTP Rating: not listed  
NIOSH Recommendations:  
Occupational Health Guideline: 0359  
Propan-1-ol: TSCA Inventory: listed  
NIOSH Recommendations:  
Occupational Health Guideline: 0533  
Tetradecanol: TSCA Inventory: listed  
Mecetronium etilsulfate: TSCA Inventory: listed

#### National regulations - U.S. State Regulations

Isopropyl alcohol: Idaho Air Pollutant List:  
Title 585: AAC: 49 -- EL: 65.3 -- WEL: 980 -Title 586: -  
Massachusetts Haz. Substance codes: 2,4,5,6 F9  
Minnesota Haz. Substance:  
Codes: ANO -- Ratings: 7.84 -- Status: Title III. TRI.  
New Jersey RTK Hazardous Substance:  
DOT: 1219 - Sub No.: 1076 - TPQ: -  
Pennsylvania Haz. Substance code: E  
Washington Air Contaminant:  
TWA: 400 ppm - 980 mg -- STEL: 500 ppm - 1225 mg  
Propan-1-ol: Idaho Air Pollutant List:  
Title 585: AAC: 25 - EL: 33.3 - OEL: 500 - Title 586: -  
Massachusetts Haz. Substance codes: 2,4,6  
Minnesota Haz. Substance:  
Codes: AO - Ratings: -  
Pennsylvania Haz. Substance code: -  
Washington Air Contaminant:  
TWA: 200 ppm - 500 mg - STEL: 250 ppm - 625 mg  
Skin: Protective measures should be taken to prevent or reduce skin absorption.

### 16. Other information

Text for labeling: Contains 30 - 50 % Isopropyl alcohol, 30 - 50 % Propan-1-ol, < 1 % Tetradecanol, < 0.25 % Mecetronium etilsulfate. Safety data sheet available on request.

## 640Z19 - Sterillium, Hand Disinfectant

Material number 640Z19

Revision date: 12/30/2022  
Version: 5.1  
Replaces version: 5.0  
Language: en-US  
Date of print: 9/2/2025

Page: 13 of 13

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 3 (Serious)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 3 (Serious)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	3
PHYSICAL HAZARD	0
	X

Abbreviations and acronyms:

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  
Aquatic toxicity - acute: Hazardous to the aquatic environment - acute  
Aquatic toxicity - chronic: Hazardous to the aquatic environment - chronic  
AS/NZS: Australian Standards/New Zealand Standards  
ATEmix: Acute Toxicity Estimate of mixture  
CAS: Chemical Abstracts Service  
CFR: Code of Federal Regulations  
CLP: Classification, Labelling and Packaging  
DMEL: Derived minimal effect level  
DNEL: Derived no-effect level  
EC: European Community  
EC50: Effective Concentration 50%  
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods  
EN: European Standard  
EQ: Excepted quantities  
Eye Damage: Eye damage  
Eye Irritation: Eye irritation  
Flammable Liquid: Flammable liquid  
IATA: International Air Transport Association  
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations  
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
IC50: Inhibition Concentration 50%  
IMDG Code: International Maritime Dangerous Goods Code  
IMO: International Maritime Organization  
LC50: Median lethal concentration  
LD50: Lethal dose 50%  
LEL: Lower Explosion Limit  
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships  
M-factor: Multiplication factor  
NOEC: No Observed Effect Concentration  
OECD: Organisation for Economic Co-operation and Development  
OEL: Occupational Exposure Limit Value  
OSHA: Occupational Safety and Health Administration  
PBT: Persistent, bioaccumulative and toxic  
PNEC: Predicted no-effect concentration  
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail  
Skin Corrosion: Skin corrosion  
STOT SE: Specific target organ toxicity - single exposure  
TLV: Threshold Limit Value  
TRGS: Technical Rules for Hazardous Substances  
UN: United Nations  
vPvB: Very persistent and very bioaccumulative  
WEL: Workplace Exposure Limit

Reason of change: General revision

Date of first version: 4/7/2016

### Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.