



# SAFETY DATA SHEET

according to WHMIS 2015 and ANSI Z400.1-2010

## 636W28 - O.B. Special Glue Cartridge A & B

Material number 636W28

Revision date: 23/3/2025  
Version: 11.3  
Replaces version: 11.2  
Language: en-CA, US  
Date of print: 2/9/2025

Page: 1 of 13

## 1. Product and company identification

### Product identifier

Trade name: 636W28 - O.B. Special Glue Cartridge A & B

Two-component glue: 636W28=A and 636W28=B

This safety data sheet pertains to the following products:  
636W28=0.050 = O.B. Spezial Klebstoff A und B 50ml

### Recommended use and restrictions on use

General use: Adhesive for orthopedic procedures.  
Reserved for industrial and professional use.

### Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.  
Street/POB-No.: 5470 Harvester Road  
Postal Code, city: Burlington, ON L7L 5N5, CA  
Canada

WWW: [www.ottobock.ca](http://www.ottobock.ca)  
E-mail: [info.canada@ottobock.com](mailto:info.canada@ottobock.com)  
Telephone: (800) 665-3327  
Telefax: (800) 463-3659

Department responsible for information:  
Mark Agro, Telephone: (800) 665-3327 (9 am - 5 pm)

Additional information: Corporate headquarters:  
Ottobock SE & Co. KGaA  
Max-Näder-Straße 15  
Duderstadt  
Germany

### Emergency phone number

**COLLECT, Telephone: (613) 996-6666**

**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 20 °C and 101.3 kPa: liquid  
Form: pasty  
Color: beige, gray

Odor: amine odor, weakly aromatic

Classification: Skin Irritation 2. Eye Damage 1. Sensitization - skin 1. Aquatic toxicity - chronic 2.

**636W28 - O.B. Special Glue  
Cartridge A & B**

Material number 636W28

Page: 2 of 13

Hazard symbols:



Signal word:

**Danger**

Hazard statements:

Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
Toxic to aquatic life with long lasting effects.

Precautionary statements:

Avoid breathing mist/vapors/spray.  
Avoid release to the environment.  
Wear protective gloves and eye protection.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER/doctor.  
Collect spillage.

**Regulatory status**

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

**Hazards not otherwise classified**

Damages of health may occur with delay.  
Special danger of slipping by leaking/spilling product.  
see section 11: Toxicological information

### 3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 25068-38-6	Bisphenol A epoxy resin (molecular-weight < 700)	50 - 70 %	Skin Irritation 2. Eye Irritation 2A. Sensitization - skin 1. Aquatic toxicity - chronic 2.
CAS 68154-62-1	Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction	< 60 %	Skin Irritation 2. Eye Damage 1. Sensitization - skin 1. Aquatic toxicity - chronic 2.
CAS 68154-62-1	Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction (polymerized)	< 30 %	Skin Irritation 2. Eye Damage 1. Sensitization - skin 1. Aquatic toxicity - chronic 3.
CAS 90640-67-8	Amines, polyethylenepoly-, triethylenetetramine fraction	< 15 %	Acute Toxicity 4 (oral). Acute Toxicity 4 (dermal). Skin Corrosion 1B. Eye Damage 1. Sensitization - skin 1. Aquatic toxicity - chronic 3.

### 4. First aid measures

General information:	If medical advice is needed, have product container or label at hand. First aider: Pay attention to self-protection!
In case of inhalation:	Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Consult doctor afterwards.
Following skin contact:	Take off immediately all contaminated clothing and wash it before reuse. After contact with skin, wash immediately with soap and plenty of water. Immediately get medical attention.
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. Subsequently seek the immediate attention of an ophthalmologist.
After swallowing:	Rinse mouth with water. Have victim drink large quantities of water, with active charcoal if possible. Do not induce vomiting. In case of vomiting, position victim on their side. Never give anything by mouth to an unconscious person. Immediately get medical attention.

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

Causes serious eye damage. Causes skin irritation.  
May cause an allergic skin reaction.  
In case of inhalation: Mucous membrane irritation, cough, shortage of breath.  
Other symptoms: Reddening, causes tears.  
Damages of health may occur with delay.

### Information to physician

Treat symptomatically.  
Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

## 5. Fire fighting measures

Flash point/flash point range:

Curing agent > 100 °C (c.c.)

Auto-ignition temperature: No data available

Suitable extinguishing media:

Water spray jet, foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

### Specific hazards arising from the chemical

May form dangerous gases and vapors in case of fire.  
Furthermore, there may develop: halogenated compounds, nitrogen oxides (NO<sub>x</sub>), nitrous fumes, carbon monoxide and carbon dioxide

Special protective equipment and precautions for fire-fighters:

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

Additional information:

Use fine water spray to cool endangered containers.  
Do not allow water used to extinguish fire to enter drains, ground or waterways.  
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:

Eliminate all ignition sources if safe to do so.  
Avoid contact with skin, eyes, and clothing.  
Do not breathe mist/vapors/spray. Provide adequate ventilation.  
Keep unprotected people away. Wear appropriate protective equipment. Take off immediately all contaminated clothing and wash it before reuse.

Environmental precautions:

Do not allow to enter drains, surface waters, basements or pits. If necessary, notify appropriate authorities.

Methods for clean-up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Provide good ventilation. Dispose of waste according to applicable legislation.

Additional information:

Special danger of slipping by leaking/spilling product.

# 636W28 - O.B. Special Glue Cartridge A & B

Material number 636W28

Page:

5 of 13

## 7. Handling and storage

### Handling

Advices on safe handling: Obtain special instructions before use.  
 Provide good ventilation and/or an exhaust system in the work area.  
 Avoid contact with skin, eyes, and clothing.  
 Do not breathe mist/vapors/spray. Wear appropriate protective equipment.  
 Take off immediately all contaminated clothing and wash it before reuse.  
 Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. When handling large quantities, supply emergency spray.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.

### Storage

Requirements for storerooms and containers:

Keep only in the original container.  
 Keep container tightly closed and dry.  
 Keep in a cool place.  
 storage temperature 2 - 40 °C. Protect from direct sunlight.

Hints on joint storage:

Avoid contact with strong acids, strong bases and strong oxidizing agents.  
 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
90640-67-8	Amines, polyethylenepoly -, triethylenetetram ine fraction	Canada: OEL 8 hour	4.2 mg/m <sup>3</sup> ; 1 ppm (may be absorbed through the skin)
		Canada: OEL TWA	1 ppm (may be absorbed through the skin)
		Canada: OEL TWA	3 mg/m <sup>3</sup> ; 0.5 ppm (may be absorbed through the skin)
		Canada: VEMP	4.2 mg/m <sup>3</sup> ; 1 ppm (may be absorbed through the skin)
		USA: ACGIH: TWA	4.2 mg/m <sup>3</sup> ; 1 ppm (may be absorbed through the skin)
		USA: NIOSH: TWA	4 mg/m <sup>3</sup> ; 1 ppm (may be absorbed through the skin)
112945-52-5	Silicon dioxide	USA: IDLH: TWA	3,000 mg/m <sup>3</sup>
		USA: NIOSH: TWA	6 mg/m <sup>3</sup>
		USA: OSHA: TWA	20 mppcf
		USA: OSHA: TWA	80 mg/m <sup>3</sup> (total dust)

### Engineering controls

Provide adequate ventilation.  
See also information in chapter 7, section storage.

### Personal protection equipment (PPE)

**Eye/face protection:** Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

**Skin protection:** Wear closed work clothing.  
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.  
Glove material: Butyl caoutchouc (butyl rubber), ethylene vinyl alcohol laminate (EVAL), Nitrile rubber  
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. In case of inadequate ventilation wear respiratory protection. Use filter type A-P2 according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

**General hygiene considerations:**  
Avoid contact with skin and eyes. Wash hands before breaks and after work. Do not breathe mist/vapors/spray.  
Keep away from food, drink and animal feedingstuffs.  
Take off immediately all contaminated clothing and wash it before reuse. Work place should be equipped with a shower and an eye rinsing apparatus.

### 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 20 °C and 101.3 kPa: liquid  
Form: pasty  
Color: beige, gray

**Odor:** amine odor, weakly aromatic

**Odor threshold:** No data available

**pH:** No data available

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

**Initial boiling point and boiling range:** No data available

**Flash point/flash point range:** Curing agent > 100 °C (c.c.)

**Evaporation rate:** No data available

**Flammability:** No data available

**Explosion limits:** No data available

**Vapor pressure:** No data available

**Vapor density:** No data available

**Density:** No data available

**Water solubility:** at 20 °C: insoluble

**Partition coefficient: n-octanol/water:** No data available

**Auto-ignition temperature:** No data available

**Thermal decomposition:** >200°C

Additional information: No data available

## 10. Stability and reactivity

Reactivity: refer to section 10.3

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions:  
 Reacts with: strong acids strong bases.

Conditions to avoid: Protect from direct sunlight. Keep away from heat.

Incompatible materials: Avoid contact with strong acids, strong bases and strong oxidizing agents.

Hazardous decomposition products:  
 No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: >200°C

## 11. Toxicological information

### Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.  
 Curing agent  
 ATEmix calculated: > 2,000 mg/kg.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.  
 Curing agent  
 ATEmix calculated: > 2,000 mg/kg.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Irritation 2 = Causes skin irritation.  
 Curing agent  
 Not corrosive in human skin model test. (OECD 435)

Serious eye damage/irritation: Eye Damage 1 = Causes serious eye damage.

Sensitisation to the respiratory tract: Data technically impossible to obtain.

Skin sensitisation: Sensitization - skin 1 = May cause an allergic skin reaction.

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): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

Other information: Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ ):  
LD50 Rat, dermal > 2,000 mg/kg  
LD50 Rat, oral > 2,000 mg/kg

### Symptoms

In case of inhalation:  
Information about Triethylenetetramine: Mucous membrane irritation, cough, shortage of breath.  
In case of ingestion: Risk of perforation in the oesophagus and stomach.  
After contact with skin: Reddening. Danger of cutaneous absorption.  
After eye contact: Reddening, causes tears.

## 12. Ecological information

### Ecotoxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.

Information about Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction:

Fish toxicity:

LC50 Danio rerio (zebrafish): 7.07 mg/L/96h (OECD 203)

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 5.18 mg/L/48h (OECD 202)

Algae toxicity:

ErC50 Selenastrum capricornutum: 2.43 mg/L/72h (OECD 201)

Bacterial toxicity:

EC50 activated sludge: 421 mg/L/3h (OECD 209)

Information about Triethylenetetramine:

Fish toxicity: LC50 Pimephales promelas (fathead minnow): 330 mg/L /96 h.

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 31.1 mg/L/48h (EG, C.2)

EC10 1.9 mg/L/21d (OECD 202)

Algae toxicity:

ErC50 Selenastrum capricornutum: 20 mg/L/72h (OECD 201)

Bacterial toxicity:

EC50 activated sludge: 800 mg/L/0,5h (OECD 209)

Reaction product with Bisphenol-A-(epichlorhydrin) epoxy resin (molecular weight  $\leq 700$ ):

Algae toxicity:

EC50 algae: 9.4 mg/L/72h. (EPA CFR)

Daphnia toxicity:

EC50 Daphnia magna: 1.7 mg/L/48h. (OECD 202)

NOEC Daphnia magna: 0.3 mg/L/21dh. (OECD 211)

Fish toxicity:

LC50: 1.5 mg/L/96h. (OECD 203)



### Mobility in soil

Information about Diethylenetriamine:

Koc 19,111

Information about triethylenetetramine:

Koc 1589.4 - 19,111 (OECD 106)

### Persistence and degradability

Further details:

Information about Triethylenetetramine:

Biodegradation: 0 % / 162d (OECD 301D) Product is not readily biodegradable.

Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ ):

Biodegradation: 5% (OECD 301 F).

Product is not readily biodegradable.

### Additional ecological information

Volatile organic compounds (VOC):

0 % 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:

Dispose of waste according to applicable legislation.

Non-contaminated packages may be recycled.

## 14. Transport information

### UN number

ADR/RID, IMDG, IATA-DGR:

UN 3082

### UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 3082,

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Diethylenetriamine

### Transport hazard class(es)

ADR/RID: Class 9, Code: M6  
IMDG: Class 9, Subrisk -  
IATA-DGR: Class 9

### Packing group

ADR/RID, IMDG, IATA-DGR:  
III

### Environmental hazards

Marine pollutant: yes

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

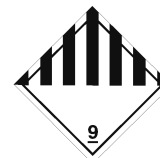
No data available

### USA: Department of Transportation (DOT)

Identification number: UN3082  
Proper shipping name: UN 3082,  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. Diethylenetriamine  
Hazard class or Division: 9  
Packing Group: III  
Labels: 9  
Symbols: G  
Special Provisions: 8, 146, 173, 335, 441, IB3, T4, TP1, TP29  
Packaging – Exceptions: 155  
Packaging – Non-bulk: 203  
Packaging – Bulk: 241  
Quantity limitations – Passenger aircraft / rail:  
No limit  
Quantity limitations – Cargo only: No limit  
Vessel stowage – Location: A

### Canada: Transportation of Dangerous Goods (TDG)

UN Number: UN3265  
Shipping name: UN 3265,  
CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. Diethylenetriamine  
TDG class: 8  
Packing group: II  
Special provisions: 16  
Explosive limit and limited quantity index: 1 L  
Passenger carrying road or rail index: 1 L



### Sea transport (IMDG)

UN number: UN 3082  
Proper shipping name:: UN 3082,  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Diethylenetriamine  
Class or division, Subsidiary risk: Class 9, Subrisk -  
Packing Group: III  
EmS: F-A, S-F  
Special Provisions: 274 335 375 969  
Limited quantities: 5 L  
Excepted quantities: E1  
Package - Instructions: P001, LP01  
Package - Provisions: PP1  
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: yes  
Segregation group: none

### Air transport (IATA)

UN/ID number: UN 3082  
Proper shipping name:: UN 3082,  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Diethylenetriamine  
Class or division, Subsidiary risk: Class 9  
Packing Group: III  
Hazard label: Miscellaneous & Environmentally hazardous  
Excepted Quantity Code: E1  
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y964 - Max. Net Qty/Pkg. 30 kg G  
Passenger and Cargo Aircraft: Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L  
Cargo Aircraft only: Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L  
Special Provisions: A97 A158 A197 A215  
Emergency Response Guide-Code (ERG): 9L

## 15. Regulatory information

### National regulations - Canada

Bisphenol A epoxy resin (molecular-weight < 700): DSL: listed  
Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction: DSL: listed  
Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction (polymerized): DSL: listed  
Silicon dioxide: DSL: listed

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

Product:

SARA Title III - Section  
313 Supplier Notification:  
See chapter 2

Bisphenol A epoxy resin (molecular-weight < 700):

TSCA Inventory: listed

Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction:

TSCA Inventory: listed;  
UVCB

Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction (polymerized):

TSCA Inventory: listed;  
UVCB

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

No data available

### National regulations - EC member states

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: E2.

## 16. Other information

Text for labeling:

Contains 50 - 70 % Bisphenol A epoxy resin (molecular-weight < 700), < 60 % Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction, < 30 % Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction (polymerized), < 15 % Amines, polyethylenepoly-, triethylenetetramine fraction.

Contains:

Reaction products of fatty acid dimers and trimers, C18 (unsaturated) alkyl and fatty acids, C18 (unsaturated) alkyl with amines, polyethylenepoly-, triethylenetetramine fraction; Amines, polyethylenepoly-, triethylenetetramine fraction

Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 3 (Serious) - Chronic effects

Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	*	3
FLAMMABILITY		1
PHYSICAL HAZARD		0
X		



# SAFETY DATA SHEET

according to WHMIS 2015 and ANSI Z400.1-2010

## 636W28 - O.B. Special Glue Cartridge A & B

Material number 636W28

Revision date: 23/3/2025  
Version: 11.3  
Replaces version: 11.2  
Language: en-CA,US  
Date of print: 2/9/2025

Page: 13 of 13

### Abbreviations and acronyms:

Acute Toxicity: Acute toxicity  
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 - chronic: Hazardous to the aquatic environment - chronic  
AS/NZS: Australian Standards/New Zealand Standards  
ATEmix: Acute Toxicity Estimate of mixture  
BCF: Bioconcentration Factor  
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  
EU: European Union  
Eye Damage: Eye damage  
Eye Irritation: Eye irritation  
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  
IMDG Code: International Maritime Dangerous Goods Code  
IMO: International Maritime Organization  
LC50: Median lethal concentration  
LD50: Lethal dose 50%  
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships  
NOEC: No Observed Effect Concentration  
OEL: Occupational Exposure Limit Value  
OSHA: Occupational Safety and Health Administration  
PBT: Persistent, bioaccumulative and toxic  
PNEC: Predicted no-effect concentration  
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals  
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail  
Sensitization - skin: Skin sensitisation  
Skin Corrosion: Skin corrosion  
Skin Irritation: Skin irritation  
TLV: Threshold Limit Value  
TRGS: Technical Rules for Hazardous Substances  
UN: United Nations  
vPvB: Very persistent and very bioaccumulative  
WEL: Workplace Exposure Limit  
WHMIS: Workplace Hazardous Materials Information System

Reason of change: Changes in section 8: Occupational exposure limit values  
Changes in section 14: IMDG 2025

Date of first version: 26/11/2014

### 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.