

1 Identification

Product identifier

Trade name: 636K17 - OTTO BOCK Light Putty

Recommended use and restrictions on use

General use: Filling compound 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

Email: 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 telephone number

COLLECT, Telephone: (613) 996-6666

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)

2 Hazard identification

Classification

Flammable Liquid 2

Skin Irritation 2

Eye Irritation 2A

Respiratory Sensitizer 1

Sensitization - skin 1

Reproductive toxicity 2

Specific Target Organ Toxicity (Single Exposure) 3

Specific Target Organ Toxicity (Repeated Exposure) 1

Aquatic toxicity - chronic 3

Highly flammable liquid and vapour.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of damaging the unborn child.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

Information elements

Symbols:



Signal word:

Danger

Hazard statements:

Highly flammable liquid and vapour.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
Suspected of damaging the unborn child.
Causes damage to organs through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.

Precautionary statements:

Obtain special instructions before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe vapours.
Wash hands and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of inadequate ventilation wear respiratory protection.

IF ON SKIN: Wash with plenty of water/soap.
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.
IF exposed or concerned: Get medical advice/attention.
Call a POISON CENTER/doctor if you feel unwell.
Specific treatment (see 'First aid' on this label).
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use sand, extinguishing powder, carbon dioxide 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.

Other hazards known to the supplier with respect to the product

The vapours are heavier than air and can accumulate in high concentrations on the ground, in cavities, channels and cellars.

Potentially explosive vapour/air mixtures may form. Can damage your health.

Special danger of slipping by leaking/spilling product.

3 Composition/Information on ingredients

Mixture

Chemical name: Filling compound based on unsaturated polyester resins dissolved in styrene.

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 100-42-5	Styrene	25 - 50 %	Flammable Liquid 3. Acute Toxicity 4 (inhalative). Skin Irritation 2. Eye Irritation 2A. Reproductive toxicity 2. Specific Target Organ Toxicity (Single Exposure) 3. Specific Target Organ Toxicity (Repeated Exposure) 1. Aspiration Toxicity 1. Aquatic toxicity - chronic 3.
CAS 13463-67-7	Titanium dioxide	1 - 5 %	Carcinogenicity 2.
CAS 38668-48-3	1,1'-(p-Tolylimino) dipropan-2-ol	< 1 %	Acute Toxicity 2 (oral). Eye Irritation 2A. Aquatic toxicity - acute 3. Aquatic toxicity - chronic 3.
CAS 75-28-5	Isobutane	< 1 %	Flammable Gas 1A. Compressed Gas.
CAS 108-88-3	Toluene	< 1 %	Flammable Liquid 2. Skin Irritation 2. Eye Irritation 2A. Reproductive toxicity 2. Specific Target Organ Toxicity (Single Exposure) 3. Specific Target Organ Toxicity (Repeated Exposure) 2. Aspiration Toxicity 1. Aquatic toxicity - chronic 3.
CAS 67-56-1	Methanol	< 1 %	Flammable Liquid 2. Acute Toxicity 3 (oral). Acute Toxicity 3 (dermal). Acute Toxicity 3 (inhalative). Specific Target Organ Toxicity (Single Exposure) 1.
CAS 108-31-6	Maleic anhydride	< 1 %	Acute Toxicity 4 (oral). Skin Corrosion 1B. Eye Damage 1. Respiratory Sensitizer 1. Sensitization - skin 1. Specific Target Organ Toxicity (Repeated Exposure) 1.

The actual concentration or concentration range is withheld as a trade secret.

4 First-aid measures

Description of necessary first-aid measures

General information:	Take off contaminated clothing and wash it before reuse. First aider: Pay attention to self-protection! If medical advice is needed, have product container or label at hand.
In case of inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention.
In case of swallowing:	Rinse mouth immediately and drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.
In case of skin contact:	Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.
In case of 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 consult an ophthalmologist.

Most important symptoms and effects, whether acute or delayed

Sweating, shortage of breath, drowsiness, headache, dizziness, nausea.

Indication of immediate medical attention and special treatment needed, if necessary

Symptoms of poisoning can only emerge after several hours; medical supervision is therefore essential for at least 48 hours.

In case of swallowing, gastric irrigation with activated carbon as an additive.

5 Fire-fighting measures

Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Sand, extinguishing powder, carbon dioxide.

Unsuitable extinguishing media:

Water, full water jet

Specific hazards arising from the product

Highly flammable liquid and vapour.

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

May form dangerous gases and vapours in case of fire.

Furthermore, there may develop: Nitrogen oxides (NOx), hydrogen cyanide, carbon monoxide and carbon dioxide.

Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Do not inhale explosion and combustion gases. Heating will lead to pressure increase: danger of bursting and explosion. Keep containers cool with water spray.
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, protective equipment and emergency procedures

Avoid exposure. Do not breathe vapours. Avoid contact with the substance.
Eliminate all ignition sources if safe to do so. If possible, eliminate leakage. Provide adequate ventilation.
Wear appropriate protective equipment. Keep unprotected people away.
Cordon off downwind area at risk and warn inhabitants. Take off contaminated clothing and wash it before reuse.

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 and material for containment and cleaning 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. Do not remove residual product with water and detergent.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).
Never return spills in original containers for re-use.

Additional information:

Use explosion-proof equipment and non-sparking tools/utensils.
Special danger of slipping by leaking/spilling product.

7 Handling and storage

Precautions for safe handling

Advices on safe handling: Obtain special instructions before use.

Provide adequate ventilation, and local exhaust as needed. Do not breathe vapours. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Work place should be equipped with a shower and an eye rinsing apparatus.

Precautions against fire and explosion:

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

Conditions for safe storage, including any incompatibilities

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. Protect from frost.

Hints on joint storage:

Keep away from peroxides, radical formers, alcohols, acids, alkalis, amines and oxidizing agents.
Keep away from food, drink and animal feedingstuffs.

8 Exposure controls/Personal protection

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
100-42-5	Styrene	Canada: Alberta, OEL 15 min	170 mg/m ³ ; 40 ppm
		Canada: Alberta, OEL 8 hour	85 mg/m ³ ; 20 ppm
		Canada: BC, OEL STEL	20 ppm
		Canada: BC, OEL TWA	10 ppm
		Canada: Ontario, OEL STEL	100 ppm
		Canada: Ontario, OEL TWA	35 ppm
		Canada: Québec, VECD	75 ppm
		Canada: Québec, VEMP	50 mg/m ³
13463-67-7	Titanium dioxide	Canada: Alberta, OEL 8 hour	10 mg/m ³
		Canada: BC, OEL TWA	10 mg/m ³ (inhalable fraction)
		Canada: BC, OEL TWA	3 mg/m ³ (respirable fraction)
		Canada: Québec, VEMP	10 mg/m ³ (total dust)
75-28-5	Isobutane	Canada: BC, OEL STEL	1,000 ppm
		Canada: Québec, VECD	1,000 ppm
108-88-3	Toluene	Canada: Alberta, OEL 8 hour	188 mg/m ³ ; 50 ppm (may be absorbed through the skin)
		Canada: BC, OEL TWA	20 ppm
		Canada: Québec, VEMP	20 ppm
67-56-1	Methanol	Canada: Alberta, OEL 15 min	328 mg/m ³ ; 250 ppm (may be absorbed through the skin)
		Canada: Alberta, OEL 8 hour	262 mg/m ³ ; 200 ppm (may be absorbed through the skin)
		Canada: BC, OEL STEL	250 ppm (may be absorbed through the skin)
		Canada: BC, OEL TWA	200 ppm (may be absorbed through the skin)
		Canada: Québec, VECD	328 mg/m ³ ; 250 ppm (may be absorbed through the skin)
		Canada: Québec, VEMP	262 mg/m ³ ; 200 ppm (may be absorbed through the skin)
108-31-6	Maleic anhydride	Canada: Alberta, OEL 8 hour	0.4 mg/m ³ ; 0.1 ppm
		Canada: BC, OEL TWA	0.1 ppm
		Canada: Québec, VEMP	0.01 mg/m ³

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
100-42-5	Styrene	USA: ACGIH-BEI, urine	150 mg/g creatinine	Mandelic acid + Phenylglyoxylic acid	end of exposure or end of shift
		USA: ACGIH-BEI, urine	20 µg/L	Styrene in urine	end of exposure or end of shift
108-88-3	Toluene	USA: ACGIH-BEI, blood	0.02 mg/L	Toluene in blood	Prior to last shift of workweek
		USA: ACGIH-BEI, urine	0.03 mg/L	Toluene in urine	end of exposure or end of shift
		USA: ACGIH-BEI, urine	0.3 mg/g creatinine	o-Cresol in urine	end of exposure or end of shift
67-56-1	Methanol	USA: ACGIH-BEI, urine	15 mg/L	Methanol	end of exposure or end of shift

Appropriate engineering controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment. Explosion protection required.

Individual protection measures, such as personal protective equipment

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. Short-term: Use filter apparatus type A/P2. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection: Protective gloves according to OSHA Standard - 29 CFR: 1910.138. Breakthrough time: 480 min. Permanent contact - Glove material: Fluororubber (Viton). Splash guard - Glove material: Fluororubber (Viton), nitrile rubber, butyl caoutchouc (butyl rubber). Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

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

Body protection: Flame retardant, antistatic and chemical resistant protective clothing.

General hygiene considerations:

Obtain special instructions before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapours. Do not get in eyes, on skin, or on clothing. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. 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

Physical state at 20 °C and 101.3 kPa	liquid
Form:	viscous liquid
Colour:	Light gray
Odour:	Characteristic
Odour threshold:	No data available
Melting point and freezing point:	No data available
Boiling point or initial boiling point and boiling range:	145 °C
Flammability:	Highly flammable liquid and vapour.
Lower and upper explosion limit or lower and upper flammability limit:	LEL (Lower Explosion Limit): 1.20 Vol-% UEL (Upper Explosive Limit): 8.90 Vol-%
Flash point/flash point range:	10 °C
Evaporation rate:	No data available
Auto-ignition temperature:	Not self-igniting
Decomposition temperature:	No data available
pH:	No data available
Water solubility:	Immiscible resp. slightly miscible
Partition coefficient — n-octanol/water:	No data available
Vapour pressure:	at 20 °C: 6 hPa
Density and/or relative density	at 20 °C: 0.71 g/mL
Vapour density:	No data available
Particle characteristics:	Not applicable

Additional information

Explosive properties:	Product is not explosive. vapours may form explosive mixtures with air.
Ignition temperature:	480 °C
Solvent content:	27.1 %
Solid content:	71.6 %

10 Stability and reactivity

Reactivity:	Highly flammable liquid and vapour. vapours 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. Polymerization along with heat production. Reacts with peroxides, radical formers, alcohols, acids, alkalis, amines.
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect from direct sunlight. Protect from frost.
Incompatible materials:	Peroxides, radical former, alcohols, acids, alkalis, amines and oxidizing agents.

Hazardous decomposition products:

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

11 Toxicological information

Information on the likely routes of exposure

No data available

Health hazard information

Acute toxicity (oral): Based on available data, the classification criteria are not met.

ATEmix (calculated): > 3,500 mg/kg

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

ATEmix (calculated): > 5,000 mg/kg

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

ATE: 44.2 mg/L/4h

Skin corrosion/irritation: Skin Irritation 2 = Causes skin irritation.

Serious eye damage/irritation: Eye Irritation 2A = Causes serious eye irritation.

Sensitisation to the respiratory tract: Respiratory Sensitizer 1 = May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Reproductive toxicity 2 = Suspected of damaging the unborn child.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) 3 = May cause respiratory irritation.

Specific target organ toxicity (repeated exposure): Specific Target Organ Toxicity (Repeated Exposure) 1 = Causes damage to organs through prolonged or repeated exposure. (Auditory organs)

Aspiration hazard: Based on available data, the classification criteria are not met.

Other information: Information about Styrene:
LD50 Rat, oral: > 2,000 mg/kg
LD50 Rat, dermal: > 2,000 mg/kg (OECD 402)
LC50 Rat, inhalative (vapour): 11.8 mg/L/4h
Human experience: Metabolization of styrene in the body via styrene-7,8-oxide to mandelic acid and phenylglyoxyl acid.
Information about 1,1'-(p-Tolylimino)dipropen-2-ol:
LD50 Rat, oral: > 25 - < 200 mg/kg (OECD 423)
LD50 Rat, dermal: > 2,000 mg/kg (OECD 402)
Information about Methanol:
LD50 Rat, oral: 100 mg/kg
LD50 Rabbit, dermal: 15,800 mg/kg
LC50 Rat, inhalative (vapour): 128.2 mg/L/4h
Information about Maleic anhydride:
LD50 Rat, oral: 400 - 480 mg/kg
LD50 Rabbit, dermal: 2,620 mg/kg
LC50 Rat, inhalative: > 4.35 mg/L/1h

Symptoms

In case of inhalation:
Depression of central nervous system, fatigue, nausea, dizziness, lung damages.
Reaction time and coordination may be impaired.
In case of ingestion: If swallowed or in the event of vomiting, risk of entering the lungs.
After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

12 Ecological information

Ecotoxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.
Information about Styrene:
Fish toxicity: Pimephales promelas (fathead minnow)
LC50: 10 mg/L/96h
Daphnia toxicity: Daphnia magna (Big water flea)
EC50: 4.7 mg/L/48h
NOEC: 1.9 mg/L/48h
Algae toxicity: Pseudokirchneriella subcapitata (green algae)
EC50: 4.9 mg/L/72h
Bacteria toxicity: Activated sludge
EC50: 500 mg/L/30min
Information about 1,1'-(p-Tolylimino)dipropen-2-ol:
Fish toxicity: Danio rerio (zebrafish)
LC50: 17 mg/L/96h
Daphnia toxicity: Daphnia magna (Big water flea)
EC50: 28.8 mg/L/48h
Algae toxicity: Desmodesmus subspicatus (green algae)
EC50: 245 mg/L/72h
NOEC: 57.8 mg/L/72h
Bacteria toxicity: Activated sludge

EC10: > 1,995 mg/L/30min

Information about Toluene:

Fish toxicity: Oncorhynchus mykiss

LC50: 5.8 - 17 mg/L/96h

Daphnia toxicity: Daphnia magna (Big water flea)

EC50: 5.46 - 11.5 mg/L/48h

Algae toxicity: Pseudokirchneriella subcapitata (green algae)

EC50: 12.5 mg/L/72h

Bacteria toxicity: Activated sludge

EC50: 84 mg/L/24h

Persistence and degradability

Further details: No data available

Bioaccumulative potential

Partition coefficient — n-octanol/water:

No data available

Mobility in soil

No data available

Other adverse effects

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

13 Disposal considerations

Waste treatment methods

Product

Recommendation: Dispose of waste according to applicable legislation.
Do not dispose of with household waste.

Package

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.

14 Transport information

UN number

TDG: UN1993

IMDG, IATA-DGR: UN 1993

UN proper shipping name

TDG: UN 1993, Flammable liquid, n.o.s. (Styrene and Isobutane)

IMDG, IATA-DGR: UN 1993, FLAMMABLE LIQUID, N.O.S. (Styrene and Isobutane)

Transport hazard class

TDG: 3
IMDG: Class 3, Subrisk -
IATA-DGR: Class 3



Packing group

TDG, IMDG, IATA-DGR: II



Environmental hazards

Marine pollutant: no

Special precautions in connection with transport or conveyance either within or outside the premises

Canada: Transportation of Dangerous Goods (TDG)

Special Provisions: 16, 150
Explosive limit and limited quantity index: 1 L
Passenger carrying road or rail index: 5 L
Marine pollutant: P

Sea transport (IMDG)

EmS: F-E, S-E
Special Provisions: 274
Limited quantities: 1 L
Excepted quantities: E2
Package - Instructions: P001
Package - Provisions: -
IBC - Instructions: IBC02
IBC - Provisions: -
Tank instructions - IMO: -
Tank instructions - UN: T7
Tank instructions - Provisions: TP1, TP8, TP28
Stowage and handling: Category B.
Properties and observations: -
Marine pollutant: no
Segregation group: none

Air transport (IATA)

Proper shipping name: UN 1993, FLAMMABLE LIQUID, N.O.S. (Styrene and Isobutane)
Hazard label: Flamm. liquid
Excepted Quantity Code: E2
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y341 - Max. Net Qty/Pkg. 1 L
Passenger and Cargo Aircraft: Pack.Instr. 353 - Max. Net Qty/Pkg. 5 L
Cargo Aircraft only: Pack.Instr. 364 - Max. Net Qty/Pkg. 60 L
Special Provisions: A3
Emergency Response Guide-Code (ERG): 3H

15 Regulatory information

National regulations - Canada

Styrene: Priority Substances List: listed (PSL 1)

Titanium dioxide: DSL: listed

1,1'-(p-Tolylimino)dipropen-2-ol: DSL: listed

Isobutane: DSL: listed

Toluene: DSL: listed

Priority Substances List: listed (PSL 1)

Methanol: DSL: listed

Maleic anhydride: DSL: listed

Further regulations, limitations and legal requirements

No data available

16 Other information

Text for labelling: Contains Styrene and Maleic anhydride.

Revision date: 17/12/2025

Date of first version: 26/10/1994

Reason of change: General revision: Safety Data Sheet according to Hazardous Products Regulations (HPR) 2022

Abbreviations and acronyms:

Acute Toxicity: Acute toxicity
 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
 Aspiration Toxicity: Aspiration toxicity
 ATE: Acute toxicity estimate
 ATEmix: Acute Toxicity Estimate of mixture
 Carcinogenicity: Carcinogenicity
 CAS: Chemical Abstracts Service
 CFR: Code of Federal Regulations
 CLP: Classification, Labelling and Packaging
 DMEL: Derived minimal effect level
 DNEL: Derived no-effect level
 DSL: Domestic Substances List
 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 Gas: Flammable gases
 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
 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
 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
 PSL: Priority Substances List
 Reproductive toxicity: Reproductive toxicity
 Respiratory Sensitizer: Sensitisation to the respiratory tract
 Sensitization - skin: Skin sensitisation
 Skin Corrosion: Skin corrosion
 Skin Irritation: Skin irritation
 STOT RE: Specific target organ toxicity - repeated exposure
 STOT SE: Specific target organ toxicity - single exposure
 TDG: Transportation of Dangerous Goods Regulation in Canada
 TLV: Threshold Limit Value
 TRGS: Technical Rules for Hazardous Substances
 UN: United Nations
 vPvB: Very persistent and very bioaccumulative
 WEL: Workplace Exposure Limit

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.