

## 1. Product and company identification

### Product identifier

Trade name: 635C1 - SuperSkin for PUR products

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

General use: Fluid, polyurethane based thermoplastic film with quickly volatile organic solvent additives (THF) and colored with physiological innocuous pigments.  
Reserved for industrial and professional use.

### 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: Transparent

Odor: Ether

Classification: Flammable Liquid - Category 2. Acute Toxicity - oral - Category 4. Acute Toxicity - inhalative - Category 4. Eye Irritation - Category 2A. Carcinogenicity - Category 2. Reproductive toxicant - Category 1B. Specific Target Organ Toxicity (Single Exposure) - Category 3.

Hazard symbols:



Signal word: **Danger**

### Hazard statements:

Highly flammable liquid and vapor.  
Harmful if swallowed.  
Causes serious eye irritation.  
Harmful if inhaled.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.  
May damage the unborn child.

### Precautionary statements:

Obtain special instructions before use.  
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.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection.  
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
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.  
Rinse mouth.  
If eye irritation persists: Get medical advice/attention.  
In case of fire: Use dry powder, foam or water spray for extinction.  
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. May form explosive peroxides.

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 109-99-9	Tetrahydrofuran	33 - 60 %	Flammable Liquid - Category 2. Acute Toxicity - oral - Category 4. Eye Irritation - Category 2. Carcinogenicity - Category 2. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 107-98-2	1-Methoxy-2-propanol	20 - 35 %	Flammable Liquid - Category 3. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 1589-47-5	2-Methoxypropanol	< 0.11 %	Flammable Liquid - Category 3. Skin Irritation - Category 2. Eye Damage - Category 1. Reproductive toxicant - Category 1B. Specific Target Organ Toxicity (Single Exposure) - Category 3.

### 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. First aider: Pay attention to self-protection!
In case of inhalation:	Remove person to fresh air and keep comfortable for breathing. In case of irregular breathing or respiratory arrest provide artificial respiration. Call a doctor immediately.
Following skin contact:	Immediately clean with water and soap followed by thorough rinsing. 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. Subsequently consult an ophthalmologist.
After swallowing:	Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Seek medical attention. Do not induce vomiting without medical advice.

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

Harmful if swallowed or if inhaled.  
Causes serious eye irritation.  
May cause respiratory irritation. May cause drowsiness or dizziness.

#### Information to physician

Treat symptomatically.

### 5. Fire fighting measures

Flash point/flash point range:

-6.7 °F

Auto-ignition temperature: Not self-igniting

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

May form explosive peroxides.

Highly 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.

May form dangerous gases and vapors in case of fire. Furthermore, there may develop: carbon monoxide and carbon dioxide

Protective equipment and precautions for firefighters:

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

Additional information:

Do not inhale explosion and combustion gases. Use fine water spray to cool endangered containers.

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 exposure. Do not breathe mist/vapors/spray. Avoid contact with the substance. If possible, eliminate leakage. Provide adequate ventilation. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away. Cordon off downwind area at risk and warn inhabitants.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains. In case of release, notify competent authorities. Danger of explosion!

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). Never return spills in original containers for re-use.

Additional information:

Special danger of slipping by leaking/spilling product.

## 7. Handling and storage

### Handling

Advices on safe handling:

Obtain special instructions before use. Provide adequate ventilation, and local exhaust as needed. Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

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.

### Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharge. Provide earthing of containers, equipment, pumps and ventilation facilities.

Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.

## 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 sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Store containers in upright position. Only trained personnel may be allowed to enter storage area.

Provide for retaining containers, e.g. floor pan without outflow.

storage stability: 2 years

### Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

Do not store together with: reducing agents, oxidizing agents, halogenic hydrocarbons, alkali metals, Ethanolamine.

## 8. Exposure controls / personal protection

### Exposure guidelines

#### Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
109-99-9	Tetrahydrofuran	USA: ACGIH: STEL	295 mg/m <sup>3</sup> ; 100 ppm (may be absorbed through the skin)
		USA: ACGIH: TWA	147 mg/m <sup>3</sup> ; 50 ppm (may be absorbed through the skin)
		USA: IDLH: TWA	2,000 ppm [10% LEL]
		USA: NIOSH: STEL	735 mg/m <sup>3</sup> ; 250 ppm
		USA: NIOSH: TWA	590 mg/m <sup>3</sup> ; 200 ppm
		USA: OSHA: TWA	590 mg/m <sup>3</sup> ; 200 ppm
107-98-2	1-Methoxy-2-propanol	USA: ACGIH: STEL	369 mg/m <sup>3</sup> ; 100 ppm
		USA: ACGIH: TWA	184 mg/m <sup>3</sup> ; 50 ppm
		USA: NIOSH: STEL	540 mg/m <sup>3</sup> ; 150 ppm
		USA: NIOSH: TWA	360 mg/m <sup>3</sup> ; 100 ppm

#### Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
109-99-9	Tetrahydrofuran	USA: ACGIH-BEI, urine	2 mg/L	Tetrahydrofuran	end of exposure or end of shift

## Engineering controls

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

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:	Flame retardant, antistatic and chemical resistant protective clothing. Protective gloves according to OSHA Standard - 29 CFR: 1910.138. Glove material: butyl caoutchouc (butyl rubber) - Layer thickness: $\geq 0.7$ mm. Breakthrough time: $\geq 480$ min. 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. Recommendation: Use filter type A (= against vapors of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2. Or Use combination filter type A-P2 according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
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 mist/vapors/spray. Do not get in eyes, on skin, or on clothing. When using do not eat, drink or smoke. 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.

### 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: Transparent
Odor:	Ether
Odor threshold:	No data available
pH:	approx. 6.9 (-)
Melting point/freezing point:	-162.4 °F
Initial boiling point and boiling range:	132.8 °F
Flash point/flash point range:	-6.7 °F
Evaporation rate:	No data available
Flammability:	Highly flammable liquid and vapor.
Explosion limits:	LEL (Lower Explosion Limit): 1.50 Vol-% UEL (Upper Explosive Limit): 12.00 Vol-%
Vapor pressure:	at 68 °F: 200 hPa (-)
Vapor density:	No data available
Density:	at 68 °F: 1.19 g/mL (-)
Water solubility:	Partially soluble (-)

Partition coefficient: n-octanol/water:	at 68 °F: 0.37 log K(o/w) (1-Methoxy-2-propanol) Based on the n-octanol/water partition coefficient accumulation in organisms is not expected. at 77 °F: 0.45 log K(o/w) (Tetrahydrofuran) Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
Auto-ignition temperature:	Not self-igniting
Thermal decomposition:	No data available
Viscosity, kinematic:	at 68 °F: 200 mm <sup>2</sup> /s (-)
Explosive properties:	Product is not explosive. Potentially explosive vapor/air mixtures may form.
Ignition temperature:	446 °F

## 10. Stability and reactivity

Reactivity:	Highly flammable liquid and vapor. Vapors may form explosive mixtures with air. May form explosive peroxides.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Heating will lead to pressure increase: Danger of bursting and explosion. Peroxide formation possible with air oxygen.
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect from direct sunlight.
Incompatible materials:	Oxidizing agents, reducing agent, halogenated hydrocarbons, alkali metals, ethanolamine.
Hazardous decomposition products:	No hazardous decomposition products when regulations for storage and handling are observed.
Thermal decomposition:	No data available

## 11. Toxicological information

### Toxicological tests

Toxicological effects:	<p>The statements are derived from the properties of the single components. No toxicological data is available for the product as such.</p> <p>Acute toxicity (oral): Acute Toxicity - oral - Category 4 = Harmful if swallowed.</p> <p>Acute toxicity (dermal): Based on available data, the classification criteria are not met.</p> <p>Acute toxicity (inhalative): Acute Toxicity - inhalative - Category 4 = Harmful if inhaled.</p> <p>Skin corrosion/irritation: Lack of data.</p> <p>Serious eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.</p> <p>Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.</p> <p>Skin sensitisation: Based on available data, the classification criteria are not met.</p> <p>Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.</p> <p>Carcinogenicity: Carcinogenicity - Category 2 = Suspected of causing cancer.</p> <p>Reproductive toxicity: Reproductive toxicant - Category 1B = May damage the unborn child.</p> <p>Effects on or via lactation: Lack of data.</p> <p>Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) - Category 3 = May cause respiratory irritation. May cause drowsiness or dizziness.</p> <p>Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.</p> <p>Aspiration hazard: Based on available data, the classification criteria are not met.</p>
Other information:	<p>Information about Tetrahydrofuran (CAS 109-99-9):</p> <p>LD50 Rat, oral: 1,650 mg/kg</p> <p>LD50 Rat, dermal: &gt; 2,000 mg/kg</p> <p>LC50 Rat, inhalative (vapor): &gt; 14.7 mg/L/6h</p> <p>Information about 1-Methoxy-2-propanol (CAS 107-98-2):</p> <p>LD50 Rat, oral: 4,016 mg/kg</p> <p>LD50 Rabbit, dermal: &gt; 2,000 mg/kg, no mortality occurred</p> <p>LC50 Rat, inhalative, (vapor): &gt; 25.8 mg/L/6h</p>

### Symptoms

In case of inhalation:

Inhaling can lead to irritations of the respiratory tract and mucous membrane.

Higher doses may lead to a narcotic effect.

After contact with skin:

Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc.

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.



## 12. Ecological information

### Ecotoxicity

Aquatic toxicity:	Information about Tetrahydrofuran (CAS 109-99-9):
	Fish toxicity:
	LC50 Pimephales promelas (fathead minnow): 2,160 mg/L/4h (OECD 203)
	NOEC Pimephales promelas (fathead minnow): 216 mg/L/33d (OECD 210)
	Daphnia toxicity:
	LC50 Daphnia magna (Big water flea): 3,485 mg/L/48h (OECD 202)
	Algae toxicity:
	NOEC Scenedesmus quadricauda: 3,700 mg/L (static)
	Information about 1-Methoxy-2-propanol (CAS 107-98-2):
	Fish toxicity:
Effects in sewage plants:	LC50 Oncorhynchus mykiss: $\geq 1,000$ mg/L/96h (OECD 203)
	Daphnia toxicity:
	LC50 Daphnia magna (Big water flea): 20,100 - 25,900 mg/L
	Algae toxicity:
	EC50 Pseudokirchneriella subcapitata (green algae): $> 1,000$ mg/L/7d
	Information about Tetrahydrofuran (CAS 109-99-9):
	IC50 activated sludge: 460 mg/L/3h (OECD 209)
	Information about 1-Methoxy-2-propanol (CAS 107-98-2):
	IC50 activated sludge: $> 1,000$ mg/L (OECD 209)

### Mobility in soil

No data available

### Persistence and degradability

Further details:	Biodegradability:
	Information about Tetrahydrofuran (CAS 109-99-9):
	Oxygen consumption: 39%/28d (OECD 301 D), inherently biodegradable
	Information about 1-Methoxy-2-propanol (CAS 107-98-2):
	DOC reduction: 96%/28d (OECD 301 E), easily bio-degradable

### Additional ecological information

Volatile organic compounds (VOC):	80 % by weight
	General information: Do not allow to enter into ground-water, surface water or drains.

## 13. Disposal considerations

### Product

Recommendation:	Dispose of waste according to applicable legislation. Do not dispose of with household waste. Send to a hazardous waste incinerator facility under observation of official regulations.
-----------------	---

### Package

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

## 14. Transport information

### UN number

ADR/RID, IMDG, IATA-DGR:

UN 1993

### UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 1993, FLAMMABLE LIQUID, N.O.S. (Tetrahydrofuran  
1-Methoxy-2-propanol mixture)

### 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:

II

### Environmental hazards

Marine pollutant:

no

### 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:

UN1993

Proper shipping name:

UN 1993, FLAMMABLE LIQUIDS, N.O.S. (Tetrahydrofuran  
1-Methoxy-2-propanol mixture)

Hazard class or Division:

3

Packing Group:

II

Labels:

3

Symbols:

G

Special Provisions:

IB2, T7, TP1, TP8, TP28

Packaging – Exceptions:

150

Packaging – Non-bulk:

202

Packaging – Bulk:

242

Quantity limitations – Passenger aircraft / rail:

5 L

Quantity limitations – Cargo only:

60 L

Vessel stowage – Location:

B



### Sea transport (IMDG)

UN number:	UN 1993
Proper shipping name::	UN 1993, FLAMMABLE LIQUID, N.O.S. (Tetrahydrofuran 1-Methoxy-2-propanol mixture)
Class or division, Subsidiary risk:	Class 3, Subrisk -
Packing Group:	II
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)

UN/ID number:	UN 1993
Proper shipping name::	UN 1993, FLAMMABLE LIQUID, N.O.S. (Tetrahydrofuran 1-Methoxy-2-propanol mixture)
Class or division, Subsidiary risk:	Class 3
Packing Group:	II
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 - U.S. Federal Regulations

Tetrahydrofuran: TSCA Inventory: listed  
Clean Air Act:  
CAA SOCM Chemical: yes  
Other Environmental Laws:  
CERCLA: RQ 1000 lbs.  
RCRA Hazardous Wastes: Code U213  
NIOSH Recommendations:  
Occupational Health Guideline: 0602

1-Methoxy-2-propanol: TSCA Inventory: listed  
Clean Air Act:  
CAA SOCM Chemical: yes  
NIOSH Recommendations:  
Occupational Health Guideline: 0536

2-Methoxypropanol: TSCA Inventory: listed

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

Tetrahydrofuran: Delaware Air Quality Management List:  
DRQ: 1000 - RQ State: Federal Regulations Apply  
Idaho Air Pollutant List:  
Title 585 - AAC: 29.5 - EL: 39.3 - WEL: 590 - Title 586 -  
Massachusetts Haz. Substance codes: 2,4,5,6 F8  
Minnesota Haz. Substance:  
Codes: AO, Ratings: -, Status: Title III.  
New York List of Hazardous Substances:  
RQ -- Air: 1000 - RQ -- Land: 100 - Note: No Note Associated with this chemical.  
Pennsylvania Haz. Substance code: E  
Washington Air Contaminant:  
TWA: 200 ppm / 590 mg - STEL: 250 ppm / 735 mg

1-Methoxy-2-propanol: Idaho Air Pollutant List:  
Title 585: AAC: 18 - EL: 24 - OEL: 360 - Title 586: -  
Massachusetts Haz. Substance codes: 4,6 F8  
Minnesota Haz. Substance:  
Codes: A - Ratings: 8.12 - Status: -  
Pennsylvania Haz. Substance code: -  
Washington Air Contaminant:  
TWA: 100 ppm - 360 mg - STEL: 150 ppm - 540 mg

## 16. Other information

Text for labeling: Contains 33 - 60 % Tetrahydrofuran, 20 - 35 % 1-Methoxy-2-propanol, < 0.11 % 2-Methoxypropanol.

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)

Fire: 3 (Serious)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 3 (Serious) - Chronic effects

Flammability: 3 (Serious)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	*	3
FLAMMABILITY		3
PHYSICAL HAZARD		0
		X

Classification procedure:

Physical hazards: on basis of test data

Health hazards, environmental hazards: calculation method

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  
 AS/NZS: Australian Standards/New Zealand Standards  
 BCF: Bioconcentration Factor  
 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  
 DOC: Dissolved Organic Carbon  
 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  
 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  
 Reproductive toxicant: Reproductive toxicity  
 RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail  
 Skin Irritation: Skin irritation  
 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:

Changes in section 1: Material number, Trade name

Changes in section 2: Classification, labeling

Changes in section 12: Ecological information

General revision

Date of first version:

1/20/1996

**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.