

1. Product and company identification

Product identifier

Trade name: 640F12 - Special Cleaner

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

General use: Cleaning agent

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

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

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: colorless

clear

Odor:

Essential

Classification:

Flammable Liquid - Category 3. Skin Irritation - Category 2. Eye Damage - Category 1.

Reproductive toxicant - Category 2. Aquatic toxicity - acute - Category 3.

Hazard symbols:



Signal word:

Danger

Hazard statements:

- Flammable liquid and vapor.
- Causes skin irritation.
- Causes serious eye damage.
- Suspected of damaging fertility or the unborn child.
- Harmful to aquatic life.

Precautionary statements:

- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- 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.
- Wash hands and face thoroughly after handling.
- Avoid release to the environment.
- Wear protective gloves and eye 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 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.
- Immediately call a POISON CENTER/doctor.
- Specific treatment (see 'First aid' on this label).
- If skin irritation occurs: Get medical advice/attention.
- Take off contaminated clothing and wash it before reuse.
- In case of fire: Use dry powder, foam or water spray for extinction.
- 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

Special danger of slipping by leaking/spilling product.
see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Emulsion in water

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 34590-94-8	(2-Methoxymethylethoxy)propanol	5 - 10 %	Flammable Liquid - Category 4.
CAS 107-98-2	1-Methoxy-2-propanol	1 - 5 %	Flammable Liquid - Category 3. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 64-17-5	Ethanol	1 - 5 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A.
CAS 1569-01-3	1-Propoxypropan-2-ol	1 - 5 %	Flammable Liquid - Category 3. Eye Irritation - Category 2A.
CAS 112-34-5	2-(2-Butoxyethoxy) ethanol	1 - 5 %	Eye Irritation - Category 2A.
CAS 121617-08-1	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine	1 - 5 %	Skin Corrosion - Category 1C. Eye Damage - Category 1. Aquatic toxicity - acute - Category 2. Aquatic toxicity - chronic - Category 3.
CAS 7397-62-8	Butyl glycolate	1 - 3 %	Flammable Liquid - Category 4. Eye Damage - Category 1. Reproductive toxicant - Category 2. Aquatic toxicity - acute - Category 3.
CAS 9002-92-0	Dodecan-1-ol, ethoxylated	0.1 - 1 %	Acute Toxicity - oral - Category 4. Eye Damage - Category 1. Aquatic toxicity - acute - Category 1. Aquatic toxicity - chronic - 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.
In case of inhalation:	Provide fresh air. Seek medical treatment in case of troubles.
Following skin contact:	Thoroughly wash skin with soap and 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:	Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.

Most important symptoms/effects, acute and delayed

Causes skin irritation.
Causes serious eye damage.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

122 - 140 °F (c.c.)

Auto-ignition temperature: Not self-igniting

Suitable extinguishing media:

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

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

On heating or in case of fire toxic gases may form.

In case of fire may be liberated: Nitrogen oxides (NOx), sulphur oxides, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

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

Additional information:

Do not breathe fumes. Use fine water spray to cool endangered containers. Do not allow fire water to penetrate into surface or ground water. Contaminated fire-fighting water must be collected separately.

6. Accidental release measures

Personal precautions:

Avoid exposure. Avoid breathing 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.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains. If necessary, notify appropriate authorities.

Methods for clean-up:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal. 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. Avoid breathing mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Avoid contact during pregnancy/while nursing. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. 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 heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. When handling larger quantities, take precautionary measures against electrostatic charging.

Storage

Requirements for storerooms and containers:

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

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.
Keep away from strong acids.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
34590-94-8	(2-Methoxymethylethoxy)propanol	USA: ACGIH: TWA	50 ppm
		USA: IDLH: TWA	600 ppm
		USA: NIOSH: STEL	900 mg/m ³ ; 150 ppm (may be absorbed through the skin)
		USA: NIOSH: TWA	600 mg/m ³ ; 100 ppm (may be absorbed through the skin)
107-98-2	1-Methoxy-2-propanol	USA: OSHA: TWA	600 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		USA: ACGIH: STEL	369 mg/m ³ ; 100 ppm
		USA: ACGIH: TWA	184 mg/m ³ ; 50 ppm
		USA: NIOSH: STEL	540 mg/m ³ ; 150 ppm
64-17-5	Ethanol	USA: NIOSH: TWA	360 mg/m ³ ; 100 ppm
		USA: ACGIH: STEL	1,000 ppm
		USA: IDLH: TWA	3,300 ppm [10% LEL]
		USA: NIOSH: TWA	1,900 mg/m ³ ; 1,000 ppm
112-34-5	2-(2-Butoxyethoxy)ethanol	USA: OSHA: TWA	1,900 mg/m ³ ; 1,000 ppm
		USA: ACGIH: TWA	67.5 mg/m ³ ; 10 ppm (inhalable fraction and vapor)

Engineering controls

Make sure there is sufficient air exchange and / or that working rooms are air suctioned.
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: In case of handling larger quantities: Wear suitable protective clothing.
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: Butyl caoutchouc (butyl rubber) - Layer thickness: ≥ 0.7 mm
Breakthrough time: > 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 combination filter type ABEK-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.

General hygiene considerations:
 Obtain special instructions before use. Avoid breathing mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
 Avoid contact during pregnancy/while nursing. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
 Take off contaminated clothing and wash it before reuse. 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: colorless
 clear

Odor: Essential

Odor threshold: No data available

pH: at 68 °F: 7.9 - 9.9

Melting point/freezing point: < 32 °F

Initial boiling point and boiling range: 185 - 212 °F

Flash point/flash point range: 122 - 140 °F (c.c.)

Evaporation rate: No data available

Flammability: Flammable liquid and vapor. Not sustaining combustion.

Explosion limits: LEL (Lower Explosion Limit): 3.50 Vol-%
 UEL (Upper Explosive Limit): 15.00 Vol-%

Vapor pressure: at 68 °F: 23 hPa (water)
 at 122 °F: 123 hPa (water)

Vapor density: at 68 °F: < 1

Density: at 68 °F: 0.98 - 1.01 g/mL

Water solubility: at 68 °F: Miscible

Partition coefficient: n-octanol/water: at 73.4 °F: 1.5 log K(o/w) (Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine)
 Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.
 at 77 °F: 0.38 log K(o/w) (Butyl glycolate)
 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 104 °F: 1 - 10 mm²/s

Ignition temperature: 485.6 °F

10. Stability and reactivity

Reactivity: Flammable liquid and vapor. Not sustaining combustion.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions:
No hazardous reaction when handled and stored according to provisions.

Conditions to avoid: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. When handling larger quantities, take precautionary measures against electrostatic charging.

Incompatible materials: Strong acids

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: 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.
ATEmix (calculated) > 5,000 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.

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

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

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Reproductive toxicant -
Category 2 = Suspected of damaging fertility or the unborn child.

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

Other information:

Information about 1-Methoxy-2-propanol (CAS 107-98-2):

LD50 Rat, oral: 4,016 mg/kg (EU B.2)

LD50 Rat, dermal: > 2,000 mg/kg (EU B.3), no mortality occurred

LC50 Rat, inhalative (vapor): > 22.48 mg/L/6h (OECD 403), no mortality occurred

Information about 1-Propoxypropan-2-ol (CAS 1569-01-3):

LD50 Rat, oral: 2,490 mg/kg (OECD 401)

LD50 Rabbit, dermal: 3,775 mg/kg (OECD 402)

LC50 Rat, inhalative (vapor): > 8.34 mg/L/4h (OECD 403), maximum achievable concentration, no mortality occurred

Information about 2-(2-Butoxyethoxy)ethanol (CAS 112-34-5):

LD50 Mouse, oral: 2,410 mg/kg (OECD 401)

LD50 Rabbit, dermal: 2,764 mg/kg (OECD 402)

Information about Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine (comparable to CAS 121617-08-1):

LD50 Rat, oral: 2,925 mg/kg (OECD 401)

LD50 Rat, dermal: > 2,000 mg/kg (OECD 402), no mortality occurred

Information about Butyl glycolate (CAS 7397-62-8):

LD50 Rat, oral: 4,595 mg/kg (OECD 401)

LC50 Rat, inhalative (dust/mist): > 8.34 mg/L/4h, no mortality occurred

Symptoms

After eye contact:

Upon direct contact with eyes may cause burning, tearing, redness. Prolonged eye contact may damage the cornea.

12. Ecological information

Ecotoxicity

Aquatic toxicity:

Harmful to aquatic life.

Information about Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine (comparable to CAS 121617-08-1):

Fish toxicity:

LC50 Lepomis macrochirus: 1.67 mg/L/96h (EPA OPPTS 850.1075)

NOEC Lepomis macrochirus: 1 mg/L/28d (OECD 204)

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 2.9 mg/L/48h (OECD 202)

NOEC Daphnia magna (Big water flea): 1.18 mg/L/21d (OECD 211)

Algae toxicity:

ErC50 Desmodesmus subspicatus (green algae): 127.9 mg/L/72h (OECD 201)

NOEC Desmodesmus subspicatus (green algae): 2.4 mg/L/72h (OECD 201)

Information about Butyl glycolate (CAS 7397-62-8):

Fish toxicity:

LC50 Danio rerio (zebrafish): 23.1 mg/L/96h (OECD 203)

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): > 100 mg/L/48h (OECD 202)

Information about Dodecan-1-ol, ethoxylated (CAS 9002-92-0):

Fish toxicity:

LC50 Danio rerio (zebrafish): 0.1 - 1 mg/L/96h (OECD 203)

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 0.1 - 1 mg/L/48h (OECD 202)

Algae toxicity:

ErC10 algae: 0.1 - 1 mg/L/72h (OECD 201)

Effects in sewage plants:

Information about Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine (comparable to CAS 121617-08-1):

EC10 Pseudomonas putida: 50 mg/L/18 (DIN 38412)

Mobility in soil

No data available

Persistence and degradability

Further details:

Biodegradability:

Information about Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine (comparable to CAS 121617-08-1):

Formation of carbon dioxide: 100%/28d (OECD 301 B), easily bio-degradable

Information about Butyl glycolate (CAS 7397-62-8):

Formation of carbon dioxide: 81%/28d (OECD 301 B), easily bio-degradable

Information about Dodecan-1-ol, ethoxylated (CAS 9002-92-0):

Formation of carbon dioxide: > 60%/28d (OECD 301 B), easily bio-degradable

The surfactants contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Additional ecological information

Volatile organic compounds (VOC):

22 % 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 allow to enter drains.

Package

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

14. Transport information

UN number

ADR/RID, IMDG, IATA-DGR:

not applicable

UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

Not restricted

Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:

not applicable

Packing group

ADR/RID, IMDG, IATA-DGR:

not applicable

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)

Proper shipping name:

Not restricted

Sea transport (IMDG)

Proper shipping name::

Not restricted

Marine pollutant:

no

Air transport (IATA)

Proper shipping name::

Not restricted

Further information

Product does not facilitate self-sustaining combustion and meets the criteria listed in ADR/RID chapter 2.2.3.1.1, IMDG-Code chapter 2.3.1.3, and IATA chapter 3.3.1.3.

15. Regulatory information

National regulations - U.S. Federal Regulations

(2-Methoxymethylethoxy)propanol:	TSCA Inventory: listed NIOSH Recommendations: Occupational Health Guideline: 0241*
1-Methoxy-2-propanol:	TSCA Inventory: listed Clean Air Act: CAA SOCM Chemical: yes NIOSH Recommendations: Occupational Health Guideline: 0536
Ethanol:	TSCA Inventory: listed NIOSH Recommendations: Occupational Health Guideline: 0262
1-Propoxypropan-2-ol:	TSCA Inventory: listed
2-(2-Butoxyethoxy)ethanol:	TSCA Inventory: listed Clean Air Act: CAA Hazardous Air Pollutants: yes CAA SOCM Chemical: yes
Butyl glycolate:	TSCA Inventory: listed
Dodecan-1-ol, ethoxylated:	TSCA Inventory: listed

National regulations - U.S. State Regulations

(2-Methoxymethylethoxy)propanol:	<p>California Proposition 65 code: not listed</p> <p>Idaho Air Pollutant List: Title 585: AAC: 30 - EL: 40 - OEL: 600 - Title 586: -</p> <p>Massachusetts Haz. Substance codes: 2,4 F8</p> <p>Minnesota Haz. Substance: Codes: AO - Ratings: --</p> <p>Pennsylvania Haz. Substance code: -</p> <p>Washington Air Contaminant: TWA: 100 ppm - 600 mg - STEL: 150 ppm - 900 mg</p> <p>Skin: Protective measures should be taken to prevent or reduce skin absorption.</p>
1-Methoxy-2-propanol:	<p>Idaho Air Pollutant List: Title 585: AAC: 18 - EL: 24 - OEL: 360 - Title 586: -</p> <p>Massachusetts Haz. Substance codes: 4,6 F8</p> <p>Minnesota Haz. Substance: Codes: A - Ratings: 8.12 - Status: -</p> <p>Pennsylvania Haz. Substance code: -</p> <p>Washington Air Contaminant: TWA: 100 ppm - 360 mg - STEL: 150 ppm - 540 mg</p>
Ethanol:	<p>California Proposition 65 code: -</p> <p>Idaho Air Pollutant List: Title 585: AAC: 94 - EL: 125 - OEL: 1880 - Title 586: -</p> <p>Massachusetts Haz. Substance codes: 2,4,5,6 *T1*</p> <p>Minnesota Haz. Substance: Codes: AO - Ratings: 7.74</p> <p>Pennsylvania Haz. Substance code: -</p> <p>Washington Air Contaminant: TWA: 1000 ppm - 1900 mg</p>

16. Other information

Text for labeling:	<p>Contains 5 - 10 % (2-Methoxymethylethoxy)propanol, 1 - 5 % 1-Methoxy-2-propanol, 1 - 5 % Ethanol, 1 - 5 % 1-Propoxypropan-2-ol, 1 - 5 % 2-(2-Butoxyethoxy)ethanol, 1 - 5 % Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., compds. with triethanolamine, 1 - 3 % Butyl glycolate, 0.1 - 1 % Dodecan-1-ol, ethoxylated.</p> <p>Labeling for contents according to regulation (EC) No 648/2004, annex VII:</p> <p>Contains less than 5% non-ionic surfactants.</p> <p>Contains perfumes (Limonene).</p>
Hazard rating systems:	<p>NFPA Hazard Rating:</p> <p>Health: 2 (Moderate)</p> <p>Fire: 1 (Slight)</p> <p>Reactivity: 0 (Minimal)</p> <p>HMIS Version III Rating:</p> <p>Health: 2 (Moderate) - Chronic effects</p> <p>Flammability: 1 (Slight)</p> <p>Physical Hazard: 0 (Minimal)</p> <p>Personal Protection: X = Consult your supervisor</p>



HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		0
		X

Classification procedure:	<p>Physical hazards: on basis of test data</p> <p>Health hazards, environmental hazards: calculation method</p>
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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 - 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
DIN: German Institute for Standardization
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
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 Corrosion: Skin corrosion
Skin Irritation: Skin irritation
STOT SE: Specific target organ toxicity - single exposure
TLV: Threshold Limit Value
TRGS: Technical Rules for Hazardous Substances
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit

Reason of change: Changes in section 2: Classification, labeling
Changes in section 3: Composition/information on ingredients
Changes in section 9: Physical and chemical properties
General revision

Date of first version: 10/30/1994

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.