

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

Dept. 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

2. Hazards identification

Emergency overview

Appearance: Form: liquid

Color: colorless, clear

Odor: characteristic

Classification: Eye Damage - Category 1;

Hazard symbols:



Signal word: **Danger**

Hazard statements: Causes serious eye damage.

Precautionary statements:

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Wash hands thoroughly after handling.

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.

Regulatory status

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

Hazards not otherwise classified

Inhalation causes narcotic effects/intoxication.
Special danger of slipping by leaking/spilling product.
see section 11: Toxicological information

3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Content	Classification
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 112-34-5	2-(2-Butoxyethoxy)ethanol	1 - 5 %	Eye Irritation - Category 2A.
CAS 1569-01-3	1-Propoxypropan-2-ol	1 - 5 %	Flammable Liquid - Category 3. Eye Irritation - Category 2A.
CAS 68411-31-4	Benzenesulfonic acid, C10-13-alkyl derivs., compds. with triethanolamine	1 - 5 %	Skin Irritation - Category 2. Eye Damage - Category 1.
CAS 7397-62-8	Butyl glycollate	< 3 %	Eye Damage - Category 1. Reproductive toxicant - Category 2.
CAS 9002-92-0	Dodecan-1-ol, ethoxylated (2-5 EO)	0.1 - 1 %	Eye Damage - Category 1. Aquatic toxicity - acute - Category 1.

Additional information: Contains (2-Methoxymethylethoxy)propanol

4. First aid measures

General information:	Change contaminated clothing. In case of vomiting, position victim on their side. Immediately get medical attention.
In case of inhalation:	Provide fresh air. Seek medical treatment in case of troubles. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen.
Following skin contact:	Thoroughly wash skin with soap and water. Seek medical treatment in case of troubles.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Immediately get medical attention.
After swallowing:	Rinse mouth with water. Do NOT induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Causes serious eye damage. Eye irritations, conjunctivitis.
Risk of foam aspiration when vomiting.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

The product does not support combustion in any way. 122 - 140 °F

Auto-ignition temperature: No data available

Suitable extinguishing media:

Dry chemical powder, foam, water spray jet, 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 (NO_x), sulphur oxides, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

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

Additional information:

Cool exposed containers with water spray.

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

6. Accidental release measures

Personal precautions:

Wear appropriate protective equipment.

Do not breathe vapors. Provide adequate ventilation.

Avoid contact with the substance.

Environmental precautions:

Do not allow to penetrate into soil, waterbodies or drains.

Methods for clean-up:

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Wash spill area with plenty of water.

Additional information:

Remove all sources of ignition.

Special danger of slipping by leaking/spilling product.

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.

Wear appropriate protective equipment. Do not breathe vapors. Avoid contact with skin and eyes.

Use only outdoors or in a well-ventilated area.

Do not allow containers to stand open.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

Storage

Requirements for storerooms and containers:

- Keep container tightly closed. Keep only in the original container.
- Keep in a cool, well-ventilated place.
- Store in well-filled containers, protected from light. Keep container dry.
- Provide solvent resistant flooring.
- Handle empty containers with care. Incineration may cause explosion.

Hints on joint storage: keep away from strong oxidizing agents.

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: STEL	909 mg/m ³ ; 150 ppm
		USA: ACGIH: TWA	606 mg/m ³ ; 100 ppm
		USA: NIOSH: STEL	900 mg/m ³ ; 150 ppm
		USA: NIOSH: TWA	600 mg/m ³ ; 100 ppm
		USA: OSHA: TWA	600 mg/m ³ ; 100 ppm
107-98-2	1-Methoxy-2-propanol	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
		USA: NIOSH: TWA	360 mg/m ³ ; 100 ppm
64-17-5	Ethanol	USA: ACGIH: STEL	1000 ppm
		USA: NIOSH: TWA	1900 mg/m ³ ; 1000 ppm
		USA: OSHA: TWA	1900 mg/m ³ ; 1000 ppm
112-34-5	2-(2-Butoxyethoxy)ethanol	USA: ACGIH: TWA	67.5 mg/m ³ ; 10 ppm

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: 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.
Use filter type A (= against vapors of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.
Formation of aerosol: Use filter apparatus type ABEK-P2.
- General hygiene considerations:
Change contaminated clothing.
When using do not eat, drink or smoke.
Wash hands before breaks and after work.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Form: liquid Color: colorless, clear
Odor:	characteristic
Odor threshold:	No data available
pH value:	6 - 9.9
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	Ethanol: 172.94 °F
Flash point/flash point range:	The product does not support combustion in any way. 122 - 140 °F
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	LEL (Lower Explosion Limit): (Ethanol) 3.30 Vol-% UEL (Upper Explosive Limit): (Ethanol) 19.00 Vol-%
Vapor pressure:	No data available
Vapor density:	No data available
Density:	at 68 °F: 0.98 - 1.01 g/mL
Water solubility:	at 68 °F: miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Additional information:	Ethanol: Relative vapor density at 68 °F (air=1): 1,6

10. Stability and reactivity

Reactivity:	The product does not support combustion in any way
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	Reacts with oxidizing agents.
Conditions to avoid:	Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	On heating or in case of fire toxic gases may form. In case of fire may be liberated: nitrogen oxides (NOx), carbon monoxide and carbon dioxide.
Thermal decomposition:	No data available

11. Toxicological information

Toxicological tests

Acute toxicity:	LD50 oral: > 2000 mg/kg (calculated)
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Toxicological effects:	<p>Acute toxicity (oral): Based on available data, the classification criteria are not met.</p> <p>Acute toxicity (dermal): Lack of data.</p> <p>Acute toxicity (inhalative): Lack of data.</p> <p>Skin corrosion/irritation: Lack of data.</p> <p>Information about 1-Methoxy-2-propanol: Rabbit: Not an irritant</p> <p>Information about Ethanol: Rabbit: Not an irritant (OECD 404)</p> <p>Information about 2-(2-Butoxyethoxy)ethanol: Rabbit: Not an irritant</p> <p>Information about Butyl glycollate: Rabbit: Not an irritant (OECD 404)</p> <p>Serious eye damage/irritation: Eye Damage - Category 1 = Causes serious eye damage.</p> <p>Information about 1-Methoxy-2-propanol: Rabbit: slightly irritant</p> <p>Information about Ethanol: Rabbit: Causes serious eye irritation. (OECD 405)</p> <p>Information about 2-(2-Butoxyethoxy)ethanol: Rabbit: slightly irritant</p> <p>Information about 1-Propoxypropan-2-ol: Causes serious eye irritation. (OECD 405)</p> <p>Information about Butyl glycollate: Causes serious eye damage. (OECD 405)</p> <p>Sensitisation to the respiratory tract: Lack of data.</p> <p>Skin sensitisation: Lack of data.</p> <p>Information about Ethanol: Guinea pig: not sensitising</p> <p>Information about 2-(2-Butoxyethoxy)ethanol: Guinea pig: not sensitising</p> <p>Germ cell mutagenicity/Genotoxicity: Lack of data.</p> <p>Information about 1-Methoxy-2-propanol: Ames test: negative (OECD 471)</p> <p>Information about Ethanol: Ames test: negative (OECD 471)</p> <p>Information about 2-(2-Butoxyethoxy)ethanol: Ames test: negative (OECD 471)</p> <p>Information about (2-Methoxymethylethoxy)propanol: Ames test: negative</p> <p>Information about Butyl glycollate: Ames test, with metabolic activation: negative (OECD 471) - Ames test, without metabolic activation: positive (OECD 471)</p> <p>Carcinogenicity: Lack of data.</p> <p>Reproductive toxicity: Lack of data.</p> <p>Effects on or via lactation: Lack of data.</p> <p>Specific target organ toxicity (single exposure): Lack of data.</p> <p>Specific target organ toxicity (repeated exposure): Lack of data.</p> <p>Aspiration hazard: Lack of data.</p> <p>Risk of foam aspiration when vomiting.</p>
Other information:	<p>Information about (2-Methoxymethylethoxy)propanol:</p> <p>LD50 Rat, oral: 8740 mg/kg</p> <p>Information about 1-Methoxy-2-propanol:</p> <p>LD50 Rat, oral: 5900 mg/kg</p> <p>LD50 Rabbit, dermal: 13000 mg/kg</p> <p>LC50 Rat, inhalative: 54.6 mg/L/4h</p> <p>Information about Ethanol:</p> <p>LD50 Rat, oral: 13700 mg/kg</p> <p>LDLo Rabbit, dermal: 20000 mg/kg</p> <p>LC50 Rat, inhalative: 124.7 mg/L/4h</p> <p>Information about 2-(2-Butoxyethoxy)ethanol:</p> <p>LD50 Rat, oral: >2000 mg/kg</p> <p>LD50 Rabbit, dermal: 2800 mg/kg</p> <p>Information about Butyl glycollate:</p> <p>LD50 Rat, oral: 4240 mg/kg</p> <p>LC50 Rat, inhalative: > 6.2 mg/L/4h</p>

12. Ecological information

Ecotoxicity

Aquatic toxicity:

Information about (2-Methoxymethylethoxy)propanol:

Fish toxicity: LC50 Brachydanio rerio (zebra-fish): > 1000 mg/L/96h

Daphnia toxicity: EC50 Daphnia magna (Big water flea): > 1000 mg/L/24h

Information about 1-Methoxy-2-propanol:

Fish toxicity: LC50 Pimephales promelas (fathead minnow): 20800 mg/L/96 h (OECD 203)

Daphnia toxicity: EC50 Daphnia magna (Big water flea): 21000 -25900 mg/L/48h (OECD 202)

Algae toxicity: EC50 Pseudokirchneriella subcapitata (green algae): > 1000 mg/L/7d (OECD 201)

Information about Ethanol:

Fish toxicity: LC50 Pimephales promelas (fathead minnow): 14.2 mg/L/96 h (OECD 203)

Daphnia toxicity: EC50 Daphnia magna (Big water flea): 9268 - 14221 mg/L/48h (OECD 202)

Algae toxicity: EC50 Scenedesmus quadricauda: > 5 000 mg/L/7d (OECD 201)

Information about 2-(2-Butoxyethoxy)ethanol:

Fish toxicity: LC50 Lepomis macrochirus (Bluegill): 1300 mg/L/96 h (OECD 203)

Daphnia toxicity: EC50 Daphnia magna (Big water flea): 3300 mg/L/48h

Algae toxicity: EC50 Desmodesmus subspicatus (green algae): > 100mg/L/96h (OECD 201)

Information about 1-Propoxypropan-2-ol:

Fish toxicity: LC50 Brachydanio rerio (zebra-fish): 1732 mg/L/96h (ISO 7346-1)

Daphnia toxicity: EC50 Daphnia magna (Big water flea): > 600 mg/L/48h

Algae toxicity: EC50 Pseudokirchneriella subcapitata (green algae): 1466 mg/L (OECD 201)

Information about Benzenesulfonic acid, C10-13-alkyl derivs., compds. with triethanolamine:

Fish toxicity: LC50 Leuciscus idus: 7.5 mg/L/48h

Daphnia toxicity: EC50 Daphnia magna (Big water flea): 12.5 mg/L/48h

Algae toxicity: EC50 Desmodesmus subspicatus (green algae): 26.4 mg/L/72h (OECD 201)

Information about Butyl glycollate:

Fish toxicity: LC50 Pimephales sp.: 1730 mg/L/96h (OECD 203)

Daphnia toxicity: EC50 Daphnia magna (Big water flea): 280 mg/L/24h

Mobility in soil

No data available

Persistence and degradability

Further details:

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

Information about (2-Methoxymethylethoxy)propanol: Degradation, aerobic: 75% (OECD 301 F)

Information about 1-Methoxy-2-propanol: Degradation, aerobic: 90% (OECD 301 E)

Information about Ethanol: Degradation, aerobic: 80-85% (OECD 301 D)

Information about 2-(2-Butoxyethoxy)ethanol: Degradation, aerobic: 94% (OECD 301 A)

Information about 1-Propoxypropan-2-ol: Degradation, aerobic: 97% (OECD 301 D)

Information about Benzenesulfonic acid, C10-13-alkyl derivs., compds. with triethanolamine: Degradation, aerobic: 92% (EU Method C.4-B)

Information about Butyl glycollate: Degradation, aerobic: 81% (OECD 301 F)

Additional ecological information

Volatile organic compounds (VOC):

22.2 % by weight

General information:

Do not allow to penetrate into soil, waterbodies or drains.

13. Disposal considerations

Product

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

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.

14. Transport information

USA: Department of Transportation (DOT)

Proper shipping name: No dangerous good in sense of this transport regulation.

Sea transport (IMDG)

Marine pollutant: unknown

Air transport (IATA)

Proper shipping name: No dangerous good in sense of this transport regulation.

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:	<p>TSCA Inventory: listed; EPA flags T</p> <p>TSCA HPVC: not listed</p> <p>NIOSH Recommendations:</p> <p>Occupational Health Guideline:</p> <p>0241*</p>
1-Methoxy-2-propanol:	<p>TSCA Inventory: listed</p> <p>TSCA HPVC: not listed</p> <p>Clean Air Act:</p> <p>SOCMI Chemical: yes</p> <p>NIOSH Recommendations:</p> <p>Occupational Health Guideline: 0536</p>
Ethanol:	<p>TSCA Inventory: listed</p> <p>TSCA HPVC: not listed</p> <p>NIOSH Recommendations:</p> <p>Occupational Health Guideline: 0262</p>
2-(2-Butoxyethoxy)ethanol:	<p>TSCA Inventory: listed</p> <p>TSCA HPVC: not listed</p> <p>Clean Air Act:</p> <p>Hazardous Air Pollutants: yes</p> <p>SOCMI Chemical: yes</p>
Butyl glycollate:	<p>TSCA Inventory: listed</p> <p>TSCA HPVC: not listed</p>
Dodecan-1-ol, ethoxylated (2-5 EO):	<p>TSCA Inventory: listed; EPA flags XU</p> <p>TSCA HPVC: not listed</p>

National regulations - U.S. State Regulations

(2-Methoxymethylethoxy) propanol:	<p>California Proposition 65 code: not listed</p> <p>Idaho Air Pollutant List:</p> <p>Title 585: AAC: 30 - EL: 40 - OEL: 600 - Title 586: -</p> <p>Massachusetts Haz. Substance codes: 2,4 F8</p> <p>Minnesota Haz. Substance:</p> <p>Codes: AO - Ratings: --</p> <p>Pennsylvania Haz. Substance code: -</p> <p>Washington Air Contaminant:</p> <p>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:</p> <p>Title 585: AAC: 18 - EL: 24 - OEL: 360 - Title 586: -</p> <p>Massachusetts Haz. Substance codes: 4,6 F8</p> <p>Minnesota Haz. Substance:</p> <p>Codes: A - Ratings: 8.12 - Status: -</p> <p>Pennsylvania Haz. Substance code: -</p> <p>Washington Air Contaminant:</p> <p>TWA: 100 ppm - 360 mg - STEL: 150 ppm - 540 mg</p>
Ethanol:	<p>California Proposition 65 code: -</p> <p>Idaho Air Pollutant List:</p> <p>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:</p> <p>Codes: AO - Ratings: 7.74</p> <p>Pennsylvania Haz. Substance code: -</p> <p>Washington Air Contaminant:</p> <p>TWA: 1000 ppm - 1900 mg</p>

National regulations - Great Britain

Hazchem-Code: -

16. Other information

Text for labeling: Contains 1 - 5 % 1-Methoxy-2-propanol, 1 - 5 % Ethanol, 1 - 5 % 2-(2-Butoxyethoxy)ethanol, 1 - 5 % 1-Propoxypropan-2-ol, 1 - 5 % Benzenesulfonic acid, C10-13-alkyl derivs., compds. with triethanolamine, < 3 % Butyl glycolate, 0.1 - 1 % Dodecan-1-ol, ethoxylated (2-5 EO). Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X

Reason of change: Changes in section 1.3: Corporate headquarters

Date of first version: 10/30/1994

Department issuing data sheet

Contact person: see section 1: Dept. 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.