

1 Identification

Product identifier

Trade name: 635C1 - SuperSkin for PUR products

Recommended use and restrictions on use

General use: Fluid, polyurethane based thermoplastic film with quickly volatile organic solvent additives (THF) and coloured with physiological innocuous pigments.
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

Acute Toxicity 4 (oral)

Acute Toxicity 4 (inhalative)

Eye Irritation 2A

Carcinogenicity 2

Reproductive toxicity 1B

Specific Target Organ Toxicity (Single Exposure) 3

Highly flammable liquid and vapour.

Harmful if swallowed.

Harmful if inhaled.

Causes serious eye irritation.

Suspected of causing cancer.

May damage the unborn child.

May cause respiratory irritation. May cause drowsiness or dizziness.

Information elements

Symbols:



Signal word:

Danger

Hazard statements:

Highly flammable liquid and vapour.
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/vapours/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.

Other hazards known to the supplier with respect to the product

Potentially explosive mixtures may form if adequate ventilation is not provided. May form explosive peroxides.
Special danger of slipping by leaking/spilling product.

3 Composition/Information on ingredients

Mixture

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 109-99-9	Tetrahydrofuran	33 - 60 %	Flammable Liquid 2. Acute Toxicity 4 (oral). Eye Irritation 2A. Carcinogenicity 2. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 107-98-2	1-Methoxy-2-propanol	20 - 35 %	Flammable Liquid 3. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 1589-47-5	2-Methoxypropanol	< 0.11 %	Flammable Liquid 3. Skin Irritation 2. Eye Damage 1. Reproductive toxicity 1B. Specific Target Organ Toxicity (Single Exposure) 3.

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

4 First-aid measures

Description of necessary 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.
In case of 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.
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

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

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

Treat symptomatically.

5 Fire-fighting measures

Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, extinguishing powder, carbon dioxide

Unsuitable extinguishing media:

Full water jet

Specific hazards arising from the product

May form explosive peroxides.

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: 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. 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, protective equipment and emergency procedures

Avoid exposure. Do not breathe mist/vapours/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 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.

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

Precautions for safe handling

Advices on safe handling: Obtain special instructions before use. Provide adequate ventilation, and local exhaust as needed. Do not breathe mist/vapours/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.

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 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

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
109-99-9	Tetrahydrofuran	Canada: Alberta, OEL 15 min	295 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		Canada: Alberta, OEL 8 hour	147 mg/m ³ ; 50 ppm (may be absorbed through the skin)
		Canada: BC, OEL STEL	100 ppm (may be absorbed through the skin)
		Canada: BC, OEL TWA	50 ppm (may be absorbed through the skin)
		Canada: Québec, VECD	100 ppm (may be absorbed through the skin)
		Canada: Québec, VEMP	50 ppm (may be absorbed through the skin)
107-98-2	1-Methoxy-2-propanol	Canada: Alberta, OEL 15 min	553 mg/m ³ ; 150 ppm
		Canada: Alberta, OEL 8 hour	369 mg/m ³ ; 100 ppm
		Canada: BC, OEL STEL	100 ppm
		Canada: BC, OEL TWA	50 ppm
		Canada: Québec, VECD	100 mg/m ³
		Canada: Québec, VEMP	50 mg/m ³
1589-47-5	2-Methoxypropanol	Canada: BC, OEL STEL	40 ppm
		Canada: BC, OEL TWA	20 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

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

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 vapours 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/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. 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.
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 mist/vapours/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

Physical state at 20 °C and 101.3 kPa	liquid
Colour:	Transparent
Odour:	Ether
Odour threshold:	No data available
Melting point and freezing point:	-108 °C
Boiling point or initial boiling point and boiling range:	56 °C
Flammability:	Highly flammable liquid and vapour.
Lower and upper explosion limit or lower and upper flammability limit:	LEL (Lower Explosion Limit): 1.50 Vol-% UEL (Upper Explosive Limit): 12.00 Vol-%
Flash point/flash point range:	-21.5 °C
Evaporation rate:	No data available
Auto-ignition temperature:	Not self-igniting
Decomposition temperature:	No data available
pH:	approx. 6.9 (-)
Kinematic viscosity:	at 20 °C: 200 mm ² /s (-)
Water solubility:	Partially soluble (-)
Partition coefficient — n-octanol/water:	at 20 °C: 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 25 °C: 0.45 log K(o/w) (Tetrahydrofuran) Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
Vapour pressure:	at 20 °C: 200 hPa (-)
Density and/or relative density	at 20 °C: 1.19 g/mL (-)

635C1 - SuperSkin for PUR products

Material number 635C 1

Page: 8 of 13

Vapour density: No data available
Particle characteristics: Not applicable

Additional information

Explosive properties: Product is not explosive. Potentially explosive vapour/air mixtures may form.
Ignition temperature: 230 °C

10 Stability and reactivity

Reactivity: Highly flammable liquid and vapour.
vapours 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.

11 Toxicological information

Information on the likely routes of exposure

No data available

Health hazard information

Acute toxicity (oral): Acute Toxicity 4 (oral) = Harmful if swallowed.

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

Acute toxicity (inhalative): Acute Toxicity 4 (inhalative) = Harmful if inhaled.

Skin corrosion/irritation: Lack of data.

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

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

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

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

Carcinogenicity: Carcinogenicity 2 = Suspected of causing cancer.

Reproductive toxicity: Reproductive toxicity 1B = May damage 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. May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

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

Other information:

Information about Tetrahydrofuran (CAS 109-99-9):

LD50 Rat, oral: 1,650 mg/kg

LD50 Rat, dermal: > 2,000 mg/kg

LC50 Rat, inhalative (vapour): > 14.7 mg/L/6h

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

LD50 Rat, oral: 4,016 mg/kg

LD50 Rabbit, dermal: > 2,000 mg/kg, no mortality occurred

LC50 Rat, inhalative, (vapour): > 25.8 mg/L/6h

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:
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
Effects in sewage plants: 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)

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

Bioaccumulative potential

Information about Tetrahydrofuran (CAS 109-99-9):
Bioconcentration factor (BCF): 3.16
Information about 1-Methoxy-2-propanol (CAS 107-98-2):
Bioconcentration factor (BCF): < 100
Partition coefficient — n-octanol/water:
at 20 °C: 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 25 °C: 0.45 log K(o/w) (Tetrahydrofuran)
Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

Mobility in soil

No data available

Other adverse effects

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

635C1 - SuperSkin for PUR products

Material number 635C 1

Page: 11 of 13

13 Disposal considerations

Waste treatment methods

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

TDG: UN1993
IMDG, IATA-DGR: UN 1993

UN proper shipping name

TDG: UN 1993, Flammable liquid, n.o.s. (Tetrahydrofuran 1-Methoxy-2-propanol mixture)
IMDG, IATA-DGR: UN 1993, FLAMMABLE LIQUID, N.O.S. (Tetrahydrofuran 1-Methoxy-2-propanol mixture)

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. (Tetrahydrofuran 1-Methoxy-2-propanol mixture)
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

Tetrahydrofuran: DSL: listed
1-Methoxy-2-propanol: DSL: listed
2-Methoxypropanol: DSL: listed
CEPA Schedule 1: listed

Further regulations, limitations and legal requirements

No data available

16 Other information

Text for labelling: Contains:
Tetrahydrofuran
1-Methoxy-2-propanol
Revision date: 17/12/2025
Date of first version: 20/1/1996
Reason of change: General revision: Safety Data Sheet according to Hazardous Products Regulations (HPR) 2022

Classification procedure: Physical hazards: on basis of test data
Health hazards, environmental hazards: calculation method

Abbreviations and acronyms:

Acute Toxicity: Acute toxicity
AS/NZS: Australian Standards/New Zealand Standards
BCF: Bioconcentration Factor
Carcinogenicity: Carcinogenicity
CAS: Chemical Abstracts Service
CEPA: Canadian Environmental Protection Act
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
DOC: Dissolved Organic Carbon
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 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 toxicity: Reproductive toxicity
Skin Irritation: Skin irritation
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.