

1. Product and company identification

Product identifier

Trade name: SL-2 - ComfortWalk Prepreg

Recommended use and restrictions on use

General use: Prepreg material for orthopedic procedures
Reserved for industrial and professional use.

Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.

Street/POB-No.: 5470 Harvester Road

Postal Code, city: Burlington, ON L7L 5N5, CA
Canada

WWW: www.ottobock.ca

E-mail: 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 phone number

COLLECT, Telephone: (613) 996-6666

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

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

2. Hazards identification

Emergency overview

Appearance: Form: solid

Color: black, yellow or beige

Odor: nearly odorless

Classification: Article not subject to hazard labeling or classification.

Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and WHMIS in Canada.

Hazards not otherwise classified

Following information applies to the component bisphenol epoxy resins:
 Irritating to eyes and respiratory system. May cause sensitization by skin contact.
 Processing by heating can produce vapors.
 Processing, e.g. by cutting, sawing or grinding, can produce particles and dust.
 For risks which have to be observed thereby, see section 7: Handling, section 8:
 Exposure controls / personal protection and section 11: Toxicology.
 see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterisation: Article: Epoxy resin, cured; Carbonfibers on the basis of polyacrylonitrile

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
	Formulated Epoxy Resin	< 20 %	Skin Irritation 2. Eye Irritation 2A. Sensitization - skin 1. Aquatic toxicity - chronic 2.

Additional information: The chemical identities of this composition are being withheld as trade secrets in accordance with 29 CFR 1910.1200.(1) and 29 CFR 1910.1200 Appendix D. The chemical identities will be disclosed to health professionals in a medical emergency in accordance with 29 CFR 1910.1200(1)(2). Non-emergency requests will be considered in accordance with 29 CFR 1910.1200 paragraph (1).
 Prepreg material can be in the following forms: Tow, Roving, 0-90 Degree Woven Cloth, and Unidirectional Cloth, and other broadgoods.

4. First aid measures

General information: For mechanical processing: dust formation

In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Seek medical treatment in case of troubles.

Following skin contact: After contact with skin, wash with soap and plenty of water. Seek medical attention if irritation persists.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult doctor afterwards.

After swallowing: Ingestion is not considered a possible route of exposure.
 When dust and vapours form: Rinse mouth with water. Do not induce vomiting without medical assistance. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Fibers and dust:

Skin irritation, mucous membrane irritation, eye irritations.

In case of inhalation:

When dust and vapours form: May cause sensitization by inhalation. May also induce asthmatic or allergic reaction from prior exposure sensitization. Can irritate the mucous membrane.

In case of ingestion: In case of dust: Can damage your health.

Other symptoms: Abdominal pain, nausea, pain, vomiting.

After contact with skin: Irritant.

May cause sensitization by skin contact.

After eye contact: Mild irritant.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

> 93 °C

Auto-ignition temperature: not self-igniting

Suitable extinguishing media:

Water spray jet, extinguishing powder, foam

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

May form toxic materials. In case of fire may be liberated: phosphines, nitrogen oxides (NOx), 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:

Cool endangered containers with water spray and, if possible, remove from danger zone. Use water spray jet to knock down vapors. Do not breathe fumes. Do not allow fire water to penetrate into surface or ground water. Carbon Fiber is electrically conductive. It can cause short circuits within electrical equipment, if material dusts penetrate into the ambient air.

6. Accidental release measures

Personal precautions:

Eliminate all ignition sources if safe to do so. Avoid generation of dust. Avoid contact with skin, eyes, and clothing. Wear appropriate protective equipment. Keep unprotected people away. Provide adequate ventilation.

Environmental precautions:

Do not allow to penetrate into soil, waterbodies or drains.
In case of release, notify competent authorities.

Methods for clean-up:

Take up mechanically, placing in appropriate containers for disposal. Final cleaning. Dispose of waste according to applicable legislation.

7. Handling and storage

Handling

Advices on safe handling: Provide good ventilation in the work area. Avoid generation of dust. Avoid contact with skin, eyes, and clothing. Wear appropriate protective equipment. When using do not eat, drink or smoke.

Precautions against fire and explosion:

Carbon Fiber is electrically conductive. It can cause short circuits within electrical equipment, if material dusts penetrate into the ambient air.

Take standard precautions to prevent fire.

Storage

Requirements for storerooms and containers:

Store at room temperature in a dry and well ventilated area.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

Type	Limit value
Canada: OEL 8 hour	10 mg/m ³ (Dust limit value, inhalable fraction)
Canada: OEL 8 hour	3 mg/m ³ (Dust limit value, respirable fraction)
Canada: OEL TWA	10 mg/m ³ (Dust limit value, inhalable fraction)
Canada: OEL TWA	3 mg/m ³ (Dust limit value, respirable fraction)
Canada: VEMP	10 mg/m ³ (total dust)
Canada: VEMP	3 mg/m ³ (total dust, respirable fraction)
USA: ACGIH: TWA	10 mg/m ³ (Dust limit value, inhalable fraction)
USA: ACGIH: TWA	3 mg/m ³ (Dust limit value, respirable fraction)
USA: OSHA: TWA	15 mg/m ³ (Dust limit value, total dust)
USA: OSHA: TWA	5 mg/m ³ (Dust limit value, respirable fraction)

Engineering controls

Provide good ventilation and/or an exhaust system in the work area.

In case of warming (Processing): receptor hood for fumes/vapors.

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.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

In case of warming: Use filter type A (= against vapors of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

At dust: Respiratory protection mask with filter for particulates

General hygiene considerations:

Avoid contact with skin, eyes, and clothing. Wash hands before breaks and after work.
When using do not eat, drink or smoke.

In case of warming: Do not breathe vapors. Have eye wash bottle or eye rinse ready at work place.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Form: solid Color: black, yellow or beige
Odor:	nearly odorless
Odor threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	> 93 °C
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Density:	at 20 °C: 1.3 - 2.2 g/cm ³
Water solubility:	at 20 °C: slightly soluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	not self-igniting
Thermal decomposition:	No data available
Explosive properties:	Product is not explosive.

10. Stability and reactivity

Reactivity:	No data available
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Carbon Fiber is electrically conductive. It can cause short circuits within electrical equipment, if material dusts penetrate into the ambient air.
Conditions to avoid:	Keep away from heat.
Incompatible materials:	Avoid contact with strong acids, strong bases and oxidizing agents. Avoid contact with amines.

Hazardous decomposition products:

May form toxic materials. In case of fire may be liberated: phosphines, nitrogen oxides (NO_x), Carbon monoxide and carbon dioxide.

Thermal decomposition:

No data available

11. Toxicological information

Toxicological tests

Toxicological effects:

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data.

Serious eye damage/irritation: Lack of data.

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: Lack of data.

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: Lack of data.

In case of inhalation:

(May also induce asthmatic or allergic reaction from prior exposure sensitization.)

Other information:

May cause sensitization by skin contact.

For mechanical processing: dust formation.

Symptoms

Fibers and dust:

Skin irritation, mucous membrane irritation, eye irritations.

In case of inhalation:

When dust and vapours form: May cause sensitization by inhalation. May also induce asthmatic or allergic reaction from prior exposure sensitization. Can irritate the mucous membrane.

In case of ingestion: In case of dust: Can damage your health.

Other symptoms: Abdominal pain, nausea, pain, vomiting.

After contact with skin: Irritant.

May cause sensitization by skin contact.

After eye contact: Mild irritant.

12. Ecological information

Ecotoxicity

Further details:

No data available

Mobility in soil

No data available

Persistence and degradability

Further details: Product is partially biodegradable.

Additional ecological information

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

13. Disposal considerations

Product

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

Package

Recommendation: Dispose of waste according to applicable legislation.

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

Canada: Transportation of Dangerous Goods (TDG)

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

No dangerous good in sense of these transport regulations.

15. Regulatory information

National regulations - Canada

No data available

National regulations - U.S. Federal Regulations

This product is an article as defined by TSCA regulations, and is exempt from TSCA inventory listing requirements.

National regulations - U.S. State Regulations

No data available

16. Other information

Text for labeling:

Contains epoxy containing compounds: May produce an allergic reaction.

See information supplied by the manufacturer.

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

Abbreviations and acronyms:

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 - chronic: Hazardous to the aquatic environment - chronic
 AS/NZS: Australian Standards/New Zealand Standards
 CAS: Chemical Abstracts Service
 CFR: Code of Federal Regulations
 CLP: Classification, Labelling and Packaging
 DMEL: Derived minimal effect level
 DNEL: Derived no-effect level
 EC: European Community
 EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
 EN: European Standard
 EQ: Excepted quantities
 Eye Irritation: Eye irritation
 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
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
 MFSU: Manufacture, formulation, supply and use
 OSHA: Occupational Safety and Health Administration
 PBT: Persistent, bioaccumulative and toxic
 PNEC: Predicted no-effect concentration
 RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
 Sensitization - skin: Skin sensitisation
 Skin Irritation: Skin irritation
 TRGS: Technical Rules for Hazardous Substances
 TSCA: Toxic Substance Control Act
 vPvB: Very persistent and very bioaccumulative
 WHMIS: Workplace Hazardous Materials Information System

Reason of change: Changes in section 8: Occupational exposure limit values

Date of first version: 3/2/2002

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.