

1. Identification

Product identifier

Trade name: SL-1 - ADP, SP II, GM, Footplates

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

General use: Reserved for industrial and professional use.
For orthopedic procedures.
Article: Carbon epoxy prepreg

Details of the supplier of the safety data sheet

Company name: Otto Bock Health Care
Street/POB-No.: 3820 W. Great Lakes Drive
Zip 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 telephone number

CHEMTREC, Telephone: +1 (800) 424-9300

2. Hazard identification

Classification of the substance or mixture

Article not subject to hazard labelling or classification.

Label elements

not applicable

Other hazards

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.

3. Composition/information on ingredients

Mixtures

Chemical characterization: Article Formulated epoxy resin impregnated material with Carbon Fiber (PAN based)

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
	Formulated Epoxy Resin	25 - 40 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 2.

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

4. First aid measures

In case of inhalation:	Provide fresh air. 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 vapors form: Rinse mouth with water. Do not induce vomiting without medical assistance. Seek medical attention.

Most important symptoms/effects, acute and delayed

Fibers and dust:
Skin irritation, mucous membrane irritation, eye irritations.

In case of inhalation:
When dust and vapors form: May cause sensitization by inhalation. 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

Suitable (and unsuitable) extinguishing media

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

In case of fire may be liberated: Carbon monoxide and carbon dioxide. May form toxic materials.

Protective equipment and precautions for firefighters

Additional information:

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

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, protective equipment and emergency procedures

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.

Methods and material for containment and cleaning up

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

Precautions for safe 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.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place. Keep container dry.

Keep at temperature not exceeding 37 °F = ca. 3°C °C.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
65997-17-3	SL-1 - ADP, SP II, GM, Footplates	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)
	Fiber (Carbon Fiber or Glass Fiber)	USA: ACGIH: TWA	1 fibers/cm ³ (Synthetic vitreous fibres, Continuous filament glass fibres)
		USA: ACGIH: TWA	5 mg/m ³ (Synthetic vitreous fibres, Continuous filament glass fibres, inhalable fraction)
		USA: NIOSH: TWA	3 fibers/cm ³
		USA: NIOSH: TWA	5 mg/m ³ (glass wool, fiberglass, glass fibers)

Appropriate engineering controls

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

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

Personal protection equipment (PPE)

Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection is required when product is heated to 120°F = 48°C or above. At dust: Respiratory protection mask with filter for particulates
Hand protection:	protective gloves according to OSHA Standard - 29 CFR: 1910.138. 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:	Recommended: Wear suitable protective clothing.
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

Physical state at 68 °F and 101.3 kPa	Form: solid, resin impregnated material
Color:	black
Odor:	nearly odorless
Odor threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flammability:	No data available
Explosion limits:	LEL (Lower Explosion Limit): n.a. UEL (Upper Explosive Limit): n.a.
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Auto-ignition temperature:	not self-igniting
Decomposition temperature:	No data available
pH:	No data available
Viscosity:	No data available
Water solubility:	at 68 °F: insoluble
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Density:	No data available
Vapor density:	No data available
Particle characteristics:	Not applicable

Additional information

Explosive properties:	Product is not explosive.
Solvent content:	<= 2 %

10. Stability and reactivity

Reactivity:	No data available
Chemical stability:	Stable under recommended storage conditions., but has reactivity.
Possibility of hazardous reactions:	No hazardous reactions known.
Conditions to avoid:	Keep away from heat.
Incompatible materials:	Avoid contact with strong acids, strong bases and oxidizing agents.
Hazardous decomposition products:	In case of fire may be liberated: Carbon monoxide and carbon dioxide. May form toxic materials.

11. Toxicological information

Information on toxicological effects

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.
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 vapors form: May cause sensitization by inhalation. 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

Persistence and degradability

Further details: Product is partially biodegradable.

Bioaccumulative potential

Partition coefficient: n-octanol/water:
 No data available

Mobility in soil

No data available

Other adverse effects

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

13. Disposal considerations

Waste treatment methods

Product

Recommendation: Special waste. Dispose of waste according to applicable legislation.

Package

Recommendation: Dispose of waste according to applicable legislation.

14. Transport information

UN number

DOT, IMDG, IATA-DGR: not applicable

UN proper shipping name

DOT, IMDG, IATA-DGR: Not restricted

Transport hazard class(es)

DOT, IMDG, IATA-DGR: not applicable

Packing group

DOT, IMDG, IATA-DGR: not applicable

Environmental hazards

Marine pollutant: no

Transport in bulk according to IMO instruments

No data available

Special precautions for user

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

No dangerous good in sense of these transport regulations.

15. Regulatory information

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

Further regulations, limitations and legal requirements

No data available

16. Other information

Text for labeling: Contains epoxy containing compounds: May produce an allergic reaction.
See information supplied by the manufacturer.

Revision date: 12/17/2025

Date of first version: 2/3/2002

Reason of change: General revision: Safety Data Sheet according to Hazardous Products Regulations (HPR) 2022

General revision: Safety Data Sheet according to HCS 2024 (29 CFR 1910.1200)

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:

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
 DOT: Department of Transportation's Safety Regulations (USA)
 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
 LEL: Lower Explosion Limit
 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
 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

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.