

1 Identification

Product identifier

Trade name: 1Exx - Carbon/Epoxy Laminat

Other means of identification

This safety data sheet pertains to the following products:

1E42, 1E43 - LuXon Max DP

1E50, 1E51 - Advantage DP2

1E61, 1E62, 1E63, 1E64, 1E65, - Springlite II

1E66 - Springlite II Pediatric Foot

1E80, 1E81, 1E82 - Chopart

1E90 - Sprinter Foot

Recommended use and restrictions on use

General use: Article for orthopedic procedures

Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.

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Canada

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Telephone: (800) 665-3327

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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

2 Hazard identification

Classification

Article not subject to hazard labelling or classification.

Information elements

not applicable

Other hazards known to the supplier with respect to the product

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

Material/substance

Chemical name: Article: mixture with Carbon fibers, Epoxy resin - Laminate, Polyurethane (cured)

4 First-aid measures

Description of necessary first-aid measures

In case of inhalation: In case of troubles after inhalation of dust: Provide fresh air. Seek medical treatment in case of troubles.

In case of swallowing: Ingestion is not considered a possible route of exposure.

In case of dust: Rinse mouth with water. Seek medical treatment in case of troubles.

In case of skin contact: In case of dust: Remove residues with soap and water. In case of skin irritation, consult a physician.

In case of eye contact: In case of dust: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. In case of troubles or persistent symptoms, consult an ophthalmologist.

Most important symptoms and effects, whether acute or delayed

In case of inhalation:
For mechanical processing: dust formation. Can irritate the mucous membrane.

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

After eye contact:
In case of dust: Upon direct contact with eyes may cause burning, tearing, redness.

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, foam, extinguishing powder, carbon dioxide.

Unsuitable extinguishing media:
Full water jet.

Specific hazards arising from the product

In case of fire may be liberated: nitrogen oxides (NO_x), carbon monoxide and carbon dioxide.

Special protective equipment and precautions for fire-fighters

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 vapours. Do not breathe fumes. Do not allow fire water to penetrate into surface or ground water. For that reason, provide adequate installations to retain fire water. Disposal of contaminated water and earth must take place according to local regulations.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid generation of dust.
In case of dust: Do not breathe dust. Wear appropriate protective equipment.

Environmental precautions:

Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

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

7 Handling and storage

Precautions for safe handling

Advices on safe handling: For mechanical processing:
Provide adequate ventilation. Avoid generation of dust.
Wear appropriate protective equipment. The use of local exhaust ventilation is recommended. 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:

Store at room temperature. Keep away from heat.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

8 Exposure controls/Personal protection

Control parameters

Occupational exposure limit values:

Type	Limit value
Canada: Alberta, OEL 8 hour	10 mg/m ³ (Dust limit value, inhalable fraction)
Canada: Alberta, OEL 8 hour	3 mg/m ³ (Dust limit value, respirable fraction)
Canada: BC, OEL TWA	10 mg/m ³ (Dust limit value, inhalable fraction)
Canada: BC, OEL TWA	3 mg/m ³ (Dust limit value, respirable fraction)
Canada: Québec, VEMP	10 mg/m ³ (total dust)
Canada: Québec, VEMP	3 mg/m ³ (total dust, respirable fraction)

Appropriate engineering controls

For mechanical processing:

Provide adequate ventilation. The use of local exhaust ventilation is recommended.

Individual protection measures, such as personal protective equipment

Respiratory protection:	For mechanical processing: Dust mask. Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2
Hand protection:	For mechanical processing: Protective gloves according to OSHA Standard - 29 CFR: 1910.138 Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Eye protection:	For mechanical processing: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010
Body protection:	For mechanical processing: Wear suitable protective clothing.
General hygiene considerations:	Avoid generation of dust. Wash hands before breaks and after work.

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	Form: solid
Colour:	black
Odour:	odourless
Odour threshold:	No data available
Melting point and freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flammability:	No data available

Lower and upper explosion limit or lower and upper flammability limit:

No data available

Flash point/flash point range:

No data available

Evaporation rate:

No data available

Auto-ignition temperature:

No data available

Decomposition temperature:

No data available

pH:

No data available

Water solubility:

insoluble

Partition coefficient — n-octanol/water:

No data available

Vapour pressure:

No data available

Density and/or relative density

No data available

Vapour density:

No data available

Particle characteristics:

Not applicable

Additional information

Additional information:

No data available

10 Stability and reactivity

Reactivity:

No data available.

Chemical stability:

Stable under recommended storage conditions.

Possibility of hazardous reactions:

No hazardous reaction when handled and stored according to provisions.

Conditions to avoid:

Carbon Fiber is electrically conductive. It can cause short circuits within electrical equipment, if material dusts penetrate into the ambient air.
Keep away from heat. Avoid generation of dust.

Incompatible materials:

No data available

Hazardous decomposition products:

In case of fire may be liberated: nitrogen oxides (NO_x), carbon monoxide and carbon dioxide.

11 Toxicological information

Information on the likely routes of exposure

No data available

Health hazard information

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:

For mechanical processing:

Dust: mild irritant.

Possible in traces: Formation of WHO-fibers. classification WHO-fibers: Causes concern for man owing to possible carcinogenic effects.

Symptoms

In case of inhalation:

For mechanical processing: dust formation. Can irritate the mucous membrane.

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

After eye contact:

In case of dust: Upon direct contact with eyes may cause burning, tearing, redness.

12 Ecological information

Ecotoxicity

Further details:

No data available

Persistence and degradability

Further details:

No data available

Bioaccumulative potential

Partition coefficient — n-octanol/water:

No data available

Mobility in soil

No data available

Other adverse effects

General information: Discharge into the environment must be avoided.

13 Disposal considerations

Waste treatment methods

Product

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

Package

Recommendation: Dispose of waste according to applicable legislation.
Non-contaminated packages may be recycled.

14 Transport information

UN number

TDG, IMDG, IATA-DGR: not applicable

UN proper shipping name

TDG, IMDG, IATA-DGR: Not restricted

Transport hazard class

TDG, IMDG, IATA-DGR: not applicable

Packing group

TDG, IMDG, IATA-DGR: not applicable

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)

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

Further regulations, limitations and legal requirements

No data available

16 Other information

Revision date: 17/12/2025
Date of first version: 12/11/2008
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)

Abbreviations and acronyms:

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
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
OEL: Occupational Exposure Limit Value
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
TDG: Transportation of Dangerous Goods Regulation in Canada
TLV: Threshold Limit Value
TRGS: Technical Rules for Hazardous Substances
TSCA: Toxic Substance Control Act
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.