SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: 1Exx - Carbon/Epoxy Laminat

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

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

General use: Article for orthopaedic procedures

1.3 Details of the supplier of the safety data sheet

Company name: Ottobock SE & Co. KGaA
Street/POB-No.: Max-Näder-Straße 15
Postal Code, city: 37115 Duderstadt
Germany
E-mail: export@ottobock.de
Telephone: +49 (0)5527 848-0
Telefax: +49 (0)5527 72330

Department responsible for information:
Arbeitssicherheit, Telephone: 05527-848-0, e-mail: Arbeitssicherheit@ottobock.de
Only available during office hours.

1.4 Emergency telephone number

Telephone: +49 (0)5527 848-0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

This substance is classified as not hazardous.

2.2 Label elements

Labelling (CLP)

Hazard statements: not applicable

Precautionary statements: not applicable

2.3 Other hazards

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.

Endocrine disrupting properties, Results of PBT and vPvB assessment:
No data available

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterisation: Article: mixture with Carbon fibres, Epoxy resin - Laminate, Polyurethane (cured)

SECTION 4: First aid measures

4.1 Description of 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.

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

After 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 opthalmologist.

After swallowing: Swallowing is not regarded as a possible way of exposition.

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

4.2 Most important symptoms and effects, both acute and 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.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray jet, foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:
Full water jet.

5.2 Special hazards arising from the substance or mixture

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

5.3 Advice for firefighters

Special protective equipment for firefighters:
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 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid generation of dust.

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

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 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.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 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.

7.2 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.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information: Contains no substances with occupational exposure limit values.

8.2 Exposure controls

For mechanical processing:
Provide adequate ventilation. The use of local exhaust ventilation is recommended.

Personal protection equipment

Occupational exposure controls

Respiratory protection: For mechanical processing:
Dust mask.
Respiratory protection must be worn whenever the WEL levels have been exceeded. (filter P according to EN 143)

Hand protection: For mechanical processing:
Protective gloves according to EN 388
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: For mechanical processing:
Tightly sealed goggles according to BS EN ISO 16321-1:2022

Body protection: For mechanical processing: Wear suitable protective clothing.

General protection and hygiene measures:
Avoid generation of dust.
Wash hands before breaks and after work.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 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/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Flash point/flash point range:	No data available
Decomposition temperature:	No data available
pH:	No data available
Viscosity, kinematic:	No data available
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	No data available
Vapour density:	No data available
Particle characteristics:	Not applicable

9.2 Other information

Explosive properties:	No data available
Oxidizing characteristics:	No data available
Auto-ignition temperature:	No data available
Evaporation rate:	No data available
Additional information:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 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.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

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

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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.

11.2 Information on other hazards

Endocrine disrupting properties: No data available

Other information:

For mechanical processing:
Dust: mild irritant.
Possible in traces: Formation of WHO-fibres. classification WHO-fibres: 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.

SECTION 12: Ecological information

12.1 Toxicity

Further details: No data available

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

General information: Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 07 02 99 = Wastes from the MFSU of plastics, synthetic rubber and man-made fibres.
MFSU = manufacture, formulation, supply and use

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.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID, ADN, IMDG, IATA-DGR:
not applicable

14.2 UN proper shipping name

ADR/RID, ADN, IMDG, IATA-DGR:
Not restricted

14.3 Transport hazard class(es)

ADR/RID, ADN, IMDG, IATA-DGR:
not applicable

14.4 Packing group

ADR/RID, ADN, IMDG, IATA-DGR:
not applicable

14.5 Environmental hazards

Dangerous for the environment: Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant - IMDG: no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations - EC member states

Volatile organic compounds (VOC):

0 % by weight

Further regulations, limitations and legal requirements:

No data available

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other information

Reason of change: General revision

Date of first version: 12/11/2008

Department issuing data sheet: see section 1: Department responsible for information

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
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
EN: European Standard
EQ: Excepted quantities
EU: European Union
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
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
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
TLV: Threshold Limit Value
TRGS: Technical Rules for Hazardous Substances
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit

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.