1. Product and company identification

Product identifier

Trade name: WP002 - Wooden parts with polyurethane-foam

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

General use: Article: Wooden parts with polyurethane-foam for orthopedic procedures

Details of the supplier of the safety data sheet

Company name: Otto Bock Health Care
Street/POB-No.: 3820 W. Great Lakes Drive
Postal Code, city: Salt Lake City, UT 84120 USA
WWW: www.ottobockus.com
Telephone: +1 (801) 956-2400
Telefax: +1 (801) 956-2401

Dept. responsible for information:
Quality Department,
Telephone: +1 (801) 954-2304 (7 AM – 3 PM, Mountain Time), Email: USRegulatory@ottobock.com

Additional information: This safety data sheet pertains to the following products:
Article No. 1A*: Greissinger plus foot
Article No. 1H*: Single Axis Foot
Article No. 1P*: Pirogoff Foot
Article No. 1S*: SACH Foot

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

2. Hazards identification

Appearance
Form: solid
Color: light up to dark

Odor
like wood, characteristic

Classification
This substance is classified as not hazardous.

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

Hazards not otherwise classified
Processing, e.g. by cutting, sawing or grinding, can produce particles and dust. For risks which have to be observed thereby, see chapter 7: Handling, chapter 8: Exposure controls / personal protection and chapter 11: Toxicology.
see section 11: Toxicological information

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3. Composition / Information on ingredients

Chemical characterization: Poplar-wooden parts with polyurethane-foam
Additional information: Article: Product does not require special labeling according to US / Canadian legislation.

4. First aid measures

General information: For mechanical processing: dust formation.
In case of inhalation: Move victim to fresh air. Seek medical attention if irritation persists.
Following skin contact: Immediately clean with water and soap followed by thorough rinsing. 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. In case of troubles or persistent symptoms, consult an ophthalmologist.
After swallowing: Do not induce vomiting. Seek medical attention.

Most important symptoms/effects, acute and delayed
no data available

Information to physician
Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range: no data available
Auto-ignition temperature: Wood-dust: 399.2 - 500 °F
Suitable extinguishing media: Water fog

Specific hazards arising from the chemical
In case of fire may be liberated:
Aldehydes, aromatic hydrocarbons, nitrous fumes, carbon monoxide and carbon dioxide.
Wood-dust: On contact with air, potentially explosive mixtures may develop.

Protective equipment and precautions for firefighters:
Wear self-contained breathing apparatus. Wear suitable protective clothing.

6. Accidental release measures

Personal precautions: Avoid generation of dust.
If necessary: Use appropriate respiratory protection.

Environmental precautions:
Discharge into the environment must be avoided.

Methods for clean-up:
Take up carefully when dry. Dispose of in accordance with the regulations.
7. Handling and storage

Handling

Advices on safe handling: For mechanical processing:
- Provide adequate ventilation, and local exhaust as needed.
- Use local exhaust in the field of the processing equipment.
- Avoid contact with skin and eyes. Do not breathe dust.
- Wear suitable protective clothing. Explosion protection required.

Precautions against fire and explosion:
- Keep away from sources of ignition. - No smoking.
- Avoid open flames. Protect from excessive heat.

Storage

Requirements for storerooms and containers:
- Store in a well-ventilated and dry room at temperatures between 41 °F and 86 °F.

Hints on joint storage:
- Do not store together with oxidizing agents.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

<table>
<thead>
<tr>
<th>Type</th>
<th>Limit value</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA: ACGIH: TWA</td>
<td>1 mg/m³</td>
</tr>
<tr>
<td>USA: NIOSH: TWA</td>
<td>1 mg/m³</td>
</tr>
</tbody>
</table>

Additional information: (definition Inhalable fraction of dust (wood-dust) according to EN 481: diameter < 100 µm)

Engineering controls

For mechanical processing:
- Use local exhaust in the field of the processing equipment.
  See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection
- For mechanical processing: Tightly sealed safety glasses
  If necessary: face protection shield.

Skin protection
- For mechanical processing: Wear suitable protective clothing.
- For mechanical processing:

Respiratory protection:
- When vapors form, use respiratory protection.
  For mechanical processing: Dust mask.
  Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
General hygiene considerations:
Avoid generation of dust. Keep away from sources of ignition. - No smoking.
Wash hands before breaks and after work.
For mechanical processing:
Avoid contact with skin and eyes. Do not breathe dust.
When using do not eat or drink.
Wash hands before breaks and after work.
Keep all containers, equipment and working place clean.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Form: solid
Color: light up to dark
Odor: like wood, characteristic
Odor threshold: no data available
pH value: no data available
Melting point/freezing point: Polyurethane-foam: 446 - 500 °F
Initial boiling point and boiling range: no data available
Flash point/flash point range: no data available
Evaporation rate: no data available
Flammability: combustible
Explosion limits: LEL (Lower Explosion Limit): Wood-dust: 40.0 g/m³
Vapor pressure: no data available
Vapor density: no data available
Density: no data available
Water solubility: insoluble
Partition coefficient: n-octanol/water: no data available
Auto-ignition temperature: Wood-dust: 399.2 - 500 °F
Thermal decomposition: Polyurethane-foam: > 260°C
Additional information: no data available

10. Stability and reactivity

Reactivity: no data available
Chemical stability: Product is stable under normal storage conditions.
Possibility of hazardous reactions none
Conditions to avoid: Keep away from sources of ignition. - No smoking.
Avoid open flames.
Wood-dust: On contact with air, potentially explosive mixtures may develop.
Incompatible materials: Oxidizing agents
Hazardous decomposition products:
In case of fire may be liberated:
Aldehydes, aromatic hydrocarbons, nitrous fumes, carbon monoxide and carbon dioxide.

Thermal decomposition: Polyurethane-foam: > 260°C

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.
- 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:
Wood-dust:
May cause irritations. The following symptoms may occur: throat dryness, dust deposits, sneeze, cough, hoarseness, pain.
In case of prolonged exposure:
May cause cancer by inhalation. (Nasal and paranasal cancer.) May cause chronic bronchitis and permanent allergic reactions.

After swallowing:
Wood-dust:
The following symptoms may occur: Gastrointestinal irritation.

Following skin contact:
mild irritant

Wood-dust:
Frequent or prolonged skin contact may cause irritation and inflammation.
In case of prolonged exposure: May produce an allergic reaction.

After eye contact:
mild irritant

Wood-dust:
May cause irritations. Upon direct contact with eyes may cause burning, tearing, redness.

General remarks
Wood-dust:
May cause sensitisation especially in sensitive humans.

12. Ecological information

Ecotoxicity

Further details: no data available
Mobility in soil

no data available

Persistence and degradability

Further details: no data available

Additional ecological information

Volatile organic compounds (VOC):

0 % by weight

General information: Discharge into the environment must be avoided.

13. Disposal considerations

Product Recommendation: Incinerate as hazardous waste according to applicable local, state, and federal regulations.

Contaminated packaging

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

14. Transport information

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

Following information applies to the component wood-dust:

IARC Monographs: Group 1
NTP Carcinogen: listed
OSHA Carcinogen: listed

National regulations - U.S. State Regulations

California Proposition 65: cancer
Rhode Island HSL: listed

National regulations - Great Britain

Hazchem-Code: -
16. Other information

Hazard rating systems:

NFPA Hazard Rating:
- Health: 0 (Minimal)
- Fire: 1 (Slight)
- Reactivity: 0 (Minimal)

HMIS Version III Rating:
- Health: 0 (Minimal)
- Flammability: 1 (Slight)
- Physical Hazard: 0 (Minimal)
- Personal Protection: X = Consult your supervisor

Literature:

Reason of change:
Changes in section 1: Address

Date of first version:
6/27/2007

Department issuing data sheet:
see section 1: Dept. 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.