

1. Identification

Product identifier

Trade name: SLx/xRx - Aluminium - Articles

This safety data sheet pertains to the following products:

13R*: Tube

17B*: Covered Lock Knee Joints, Side bar set, Upper side bar, Lower side bar

17M10-A: Posterior Free Joints (Aluminium)

17M21: Aluminium Ring Lock

2R41=1/2: Tube Adaptor

2R48: Tube Adaptor, angled

2R49, 2R50: Tube Adaptor

2R104, 2R105, 2R106: Modular Transtibial Kit

2R226, 2R229: SACH Shin Kit

3R106: Tube Adapter

4R121=30, 4R121=34: Delta Twist Shock absorber

7E5: Manual Lock Single Axis Hip Joint

7E7: Modular Single Axis Hip Joint With Stride Control (Aluminium)

17M10: Posterior Free Joints (Aluminium)

SL=AK-32, SL=AK-34, SL=AK-35, SL=AK-36, SL=AK-37: TF Fitting

SL=LPA-30-XL: TF Fitting, Oval

SL=LPA-335-XL: Pylon Extension Fitting/Distance Sleeve

SL=LPA-35: Distance Sleeve

SL=LPA-35: Pylon Extension Fitting/Distance Sleeve

SL=LPA-35-L: Pylon Extension Fitting/Distance Sleeve

SL=LPA-B-30, SL=LPA-B-34: TF Fitting

SL=RPA-400-30-XL: TF Fitting

SL=RPA-400-34: Distance Sleeve

SL=RPA-400-35, SL=RPA-400-35-L, SL=RPA-400-35-XL: Pylon Extension Fitting/Distance Sleeve

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

General use: Aluminium-Article for orthopedic procedures.

Reserved for industrial and professional use.

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

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.

Aluminium-dust:

Combustible. Danger of dust explosion. Danger of spontaneous combustion.

3. Composition/information on ingredients

Mixtures

Chemical characterization: Article of Aluminium-Alloy

4. First aid measures

In case of inhalation: In case of troubles after inhalation of dust:
Move victim to fresh air. Seek medical attention.

Following skin contact: Aluminium-dust: Remove residues with water.
Change contaminated clothing.

After eye contact: Aluminium-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.

After swallowing: Metal parts: Ingestion is not considered a possible route of exposure.
Aluminium-dust: If person is clearly conscious, have them drink two glasses of water to dilute ingested material. Seek medical attention.

Most important symptoms/effects, acute and delayed

Aluminium-dust: May cause irritations.

After inhalation of high quantities metallic fume fever may appear.

Lung damage is possible in a chronic situation.

Information to physician

Treat symptomatically.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Aluminium-dust: Special extinguishing powder for metals.

In case of fire, use dry sand or fire extinguisher of fire class D. Never use water.

Extinguishing media which must not be used for safety reasons:

Aluminium-dust: Never extinguish with a halon or carbon dioxide extinguisher or water.

Specific hazards arising from the chemical

Aluminium-dust:

Combustible. Danger of dust explosion. Danger of spontaneous combustion.

Aluminium, molten:

After contact with water: Danger of explosion!

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid generation of dust.

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

Environmental precautions:

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

Aluminium-dust: Do not empty into drains. (Danger of explosion)

Methods and material for containment and cleaning up

Methods for clean-up:

Metal parts/dust:

Take up mechanically, placing in appropriate containers for disposal.

Final cleaning. Avoid generation of dust.

Additional information:

Aluminium-dust: Eliminate all ignition sources if safe to do so.

7. Handling and storage

Precautions for safe handling

Advices on safe handling: For mechanical processing:

Avoid respiration of swarf. Wear appropriate protective equipment.

Provide adequate ventilation. Keep workplace dry.

If necessary: Use local exhaust.

Precautions against fire and explosion:

For mechanical processing: Avoid generation of dust.

Take precautionary measures against static discharges. Keep away from sources of ignition.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container dry. Store at room temperature.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
7429-90-5	Aluminium - Articles	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)
	Aluminium	USA: ACGIH: TWA	1 mg/m ³
		USA: NIOSH: Ceiling	5 mg/m ³ (inhalable fraction)
		USA: NIOSH: TWA	10 mg/m ³ (inhalable fraction)
		USA: NIOSH: TWA	5 mg/m ³ (inhalable fraction)
		USA: OSHA: TWA	15 mg/m ³ (inhalable fraction)
		USA: OSHA: TWA	5 mg/m ³ (respirable fraction)

Appropriate engineering controls

Provide adequate ventilation.
If necessary: Use local exhaust.

Personal protection equipment (PPE)

Respiratory protection: For mechanical processing:
Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. Particulates filter P2 according to 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 or ANSI Z87.1-2003. or face protection shield.

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

General hygiene considerations:
For mechanical processing:
Do not breathe dust.
Wash hands before breaks and after work.
Provide a conveniently located eye rinse station.

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, metal parts
Color: silver gray

Odor: odorless
Odor threshold: No data available

Melting point/freezing point: > 899.6 °F
Initial boiling point and boiling range: No data available
Flammability: No data available
Explosion limits: 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
Viscosity: No data available
Solubility: at 68 °F: soluble in mineral acids
Water solubility: at 68 °F: insoluble
Partition coefficient: n-octanol/water: No data available
Vapor pressure: No data available
Density: at 68 °F: $\geq 2.7 \text{ g/cm}^3$
Vapor density: No data available
Particle characteristics: Not applicable

Additional information

Ignition temperature: Aluminium-dust: approx. 752 °F

10. Stability and reactivity

Reactivity: No data available

Chemical stability: Product is stable under normal storage conditions.

Possibility of hazardous reactions:

Aluminium-dust:
Combustible. Danger of dust explosion. Danger of spontaneous combustion.
Aluminium, molten:
After contact with water: Danger of explosion!
Aluminium-dust/water: Danger of bursting of closed cans.

Conditions to avoid: For mechanical processing:
Keep away from sources of ignition. Protect from moisture contamination.
Take precautionary measures against static discharges.

Incompatible materials: For mechanical processing:
alcohols, alkali hydroxide, alkali salts, ammonium compounds, halogens, halogenated hydrocarbons, alkalis, nitrates, oxidizing agents, acids, sulfates, sulfides, water.
Aluminium-dust: Reacts with water or steam liberating hydrogen and heat.

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.

Symptoms

In case of inhalation: Aluminium-dust: May cause irritations.
 After inhalation of high quantities metallic fume fever may appear.
 Lung damage is possible in a chronic situation.
 After eye contact: Aluminium-dust: mild irritant

12. Ecological information

Ecotoxicity

Further details: No data available

Persistence and degradability

Further details: Methods for the determination of biodegradability are not applicable to inorganic substances.

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: Recycling. Refer to manufacturer/supplier for information on recovery/recycling.

Package

Recommendation: Dispose of waste according to applicable legislation.
Completely emptied packages can be recycled.

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

Revision date: 12/17/2025

Date of first version: 9/10/2008

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)

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 0 (Minimal)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 0 (Minimal)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
	X

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

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

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

OEL: Occupational Exposure Limit Value

OSHA: Occupational Safety and Health Administration

PBT: Persistent, bioaccumulative and toxic

PNEC: Predicted no-effect concentration

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

Literature: 29 CFR Part 1910 subpart q - Welding, Cutting, Brazing 1910.252

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.