

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

1.1 Product identifier

Trade name: 616Txx - ThermoLyn Polyolefins

This safety data sheet pertains to the following products:

Article No. 616T3: ThermoLyn Trolene (PE-LD)

Article No. 616T19: ThermoLyn Polyethylene 200 (PE-HD 200)

Article No. 616T20: ThermoLyn Polypropylene Homopolymer

Article No. 616T22: ThermoLyn RCH 500 (PE-HD 500)

Article No. 616T43: ThermoLyn RCH 500 (PE-HD 500)

Article No. 616T44: ThermoLyn RCH 500 (PE-HD 500)

Article No. 616T57=: ThermoLyn Co-Poly

Article No. 616T58: ThermoLyn Polyethylene 200 (PE-HD 200)

Article No. 616T60: ThermoLyn Polyethylene 200 (PE-HD 200)

Article No. 616T61: ThermoLyn Polyethylene 200 (PE-HD 200)

Article No. 616T62: ThermoLyn Polyethylene 200 (PE-HD 200)

Article No. 616T95: ThermoLyn Polyethylene 200 (PE-HD 200)

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

General use: Article for orthopaedic procedures
Processing at Processing temperature and Forming temperature
(refer to section 9: Physical and chemical properties)

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

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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

Article not subject to hazard labelling or classification.

2.2 Label elements

Labelling (CLP)

not applicable

2.3 Other hazards

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.

In case of heating: risk of burns.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterisation: Thermoplastic-Polyolefins (PE / PP)

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: For mechanical processing: dust formation.

In case of heating: development of gas/vapour possible.

In case of inhalation: When vapours form:

Provide fresh air. Seek medical treatment in case of troubles.

Following skin contact: Remove residues with water.

If burned by hot product, quench immediately with cold tap water.

Do not peel solidified product off the skin. Immediately get medical attention.

After eye contact: In the case of the formation of dust / When vapours form:

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.

4.2 Most important symptoms and effects, both acute and delayed

In case of heating: risk of burns.

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: carbon black, compounds of low molecular weight (of PE or PP), carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

In case of development of vapours or dust:

Provide fresh air. Do not inhale vapours or dust particles. Wear protective equipment.

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

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:

Make sure that the processing machines are well equipped with suction and ventilation systems.

If necessary: With the formation of dust, use a dust mask.

In case of development of vapours or dust:

Provide fresh air. Do not inhale vapours or dust particles. Wear protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container dry.

Protect from: UV-radiation/sunlight

7.3 Specific end use(s)

Article for orthopaedic procedures

Processing at Processing temperature and Forming temperature

(refer to section 9: Physical and chemical properties)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information:

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Provide adequate ventilation, and local exhaust as needed.

Personal protection equipment

Occupational exposure controls

Respiratory protection:

For mechanical processing: particle filter device (EN 143)-filter P1

Hand protection:

If necessary:

Protective gloves according to EN 407 - Protective gloves against thermic risks.

For machine processing:

Protective gloves according to EN 388 - Protective gloves against mechanical risks.

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.

General protection and hygiene measures:

Avoid generation of dust.
 Wash hands before breaks and after work.
 In case of heating: Do not breathe vapours.
 Work place should be equipped with a shower and an eye rinsing apparatus..

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, plate

Colour:

Article No. 616T3: natural colour

Article No. 616T19: skin-coloured

Article No. 616T20: natural colour

Article No. 616T22: with colour variants natural colour, skin-coloured or graffiti

Article No. 616T43: red

Article No. 616T44: blue

Article No. 616T58: blue

Article No. 616T60: red

Article No. 616T61: yellow

Article No. 616T95: natural colour

Odour:

odourless

Odour threshold:

No data available

Melting point/freezing point:

No data available

Initial boiling point and boiling range:

No data available

Flammability:

350 - 360 °C

Upper/lower flammability or explosive limits:

No data available

Flash point/flash point range:

No data available

Decomposition temperature:

> 300 °C

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:

 0.90 - 0.96 g/cm³

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:

melting range

Article No. 616T3: 108 - 118 °C

Article No. 616T19/22/43/44/58/60/61/95/97: 126 - 138 °C

Article No. 616T20: 160 - 165 °C

Processing temperature

Article No. 616T3: 125 °C

Article No. 616T19/58/60/61/62/95: 180 °C

Article No. 616T20: 215 °C

Article No. 616T22/43/44: 195 °C

Forming temperature

Article No. 616T3: 125 °C

Article No. 616T19/58/60/61/62/95: 165 °C

Article No. 616T20: 185 °C

Article No. 616T22/43/44: 185 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

refer to section 10.3

10.2 Chemical stability

Can be stored in any dry place.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

Avoid temperatures exceeding Processing temperature °C.

(Processing temperature refer to section 9: Physical and chemical properties)

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In case of fire may be liberated: carbon black, compounds of low molecular weight (of PE or PP), carbon monoxide and carbon dioxide.

Thermal decomposition:

> 300 °C

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

Symptoms

In case of inhalation: In case of heating: risk of burns.
 After contact with skin: In case of heating: risk of burns.
 After eye contact: Dust: mild irritant

SECTION 12: Ecological information

12.1 Toxicity

Further details: No data available

12.2 Persistence and degradability

Further details: Product is not biodegradable.

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 13 = Waste plastic
 Recommendation: If recycling is not possible, dispose of according to local waste laws and regulations (information requirements of authorities).

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, IMDG, IATA-DGR: not applicable

14.2 UN proper shipping name

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

14.3 Transport hazard class(es)

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

14.4 Packing group

ADR/RID, 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: 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: 30/5/2008

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
- 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
- TRGS: Technical Rules for Hazardous Substances
- TSCA: Toxic Substance Control Act
- UV: Ultraviolet
- vPvB: Very persistent and very bioaccumulative

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.