

616Txx - ThermoLyn Polyolefins

Material number 616Txx

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1. Product and company identification**Product identifier**

Trade name: 616Txx - ThermoLyn Polyolefins

Relevant identified uses of the substance or mixture and uses advised againstGeneral use: Article for orthopedic procedures
Processing at Processing temperature and Forming temperature
(refer to section 9: Physical and chemical properties)**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
USAWWW: 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.comAdditional information: 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)**Emergency phone number****CHEMTREC, Telephone: +1 (800) 424-9300**

2. Hazards identification

Emergency overview

Appearance: Form: solid, plate
 Color: Article No. 616T3: natural colors
 Article No. 616T19: flesh-colored
 Article No. 616T20: natural colors
 Article No. 616T22: with color variants natural colors, flesh-colored 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 colors

Odor: odorless

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 by heating can produce vapours. 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.

In case of heating: risk of burns.
 see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Thermoplastic-Polyolefine (PE / PP)

4. First aid measures

General information: For mechanical processing: dust formation.
 In case of heating: development of gas/vapor possible.

In case of inhalation: When vapors 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 vapors 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.

Most important symptoms/effects, acute and delayed

In case of heating: risk of burns.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

no data available

Auto-ignition temperature: no data available

Suitable extinguishing media:

Water fog, foam, dry chemical powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

High power water jet

Specific hazards arising from the chemical

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

Protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus.

6. Accidental release measures

Personal precautions: In case of development of vapors or dust:

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

Environmental precautions:

Discharge into the environment must be avoided.

Methods for clean-up:

Take up mechanically, placing in appropriate containers for disposal.

7. Handling and storage**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 vapors or dust:

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

Specific use(s)

Article for orthopedic procedures

Processing at Processing temperature and Forming temperature

(refer to section 9: Physical and chemical properties)

Storage

Requirements for storerooms and containers:

Keep container dry.

Protect from: UV-radiation/sunlight

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

Type	Limit value
USA: ACGIH: TWA	10 mg/m ³
USA: ACGIH: TWA	3 mg/m ³
USA: OSHA: TWA	15 mg/m ³
USA: OSHA: TWA	5 mg/m ³

Engineering controls

Provide adequate ventilation, and local exhaust as needed.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

- Eye/face protection: For mechanical processing: tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.
- Skin protection: If necessary:
Protective gloves against thermic risks.
For machine processing:
Protective gloves against mechanical risks.
OSHA Standard - 29 CFR: 1910.138
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- Respiratory protection: For mechanical processing: particulates filter
OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2
- General hygiene considerations:
Avoid generation of dust.
Wash hands before breaks and after work.
In case of heating: Do not breathe vapors.
Work place should be equipped with a shower and an eye rinsing apparatus..

9. Physical and chemical properties

Information on basic physical and chemical properties

- Appearance:
 - Form: solid, plate
 - Color: Article No. 616T3: natural colors
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 - Article No. 616T43: red
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 - Article No. 616T58: blue
 - Article No. 616T60: red
 - Article No. 616T61: yellow
 - Article No. 616T95: natural colors
- Odor: odorless
- Odor threshold: no data available
- pH value: no data available

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Melting point/freezing point:	no data available
Initial boiling point and boiling range:	no data available
Flash point/flash point range:	no data available
Evaporation rate:	no data available
Flammability:	662 - 680 °F
Explosion limits:	no data available
Vapor pressure:	no data available
Vapor density:	no data available
Density:	0.90 - 0.96 g/cm ³
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	no data available
Auto-ignition temperature:	no data available
Thermal decomposition:	> 300 °C
Additional information:	<p>melting range</p> <p>Article No. 616T3: 108 - 118 °C</p> <p>Article No. 616T19/22/43/44/58/60/61/95/97: 126 - 138°C</p> <p>Article No. 616T20: 160 - 165 °C</p> <p>Processing temperature</p> <p>Article No. 616T3: 125 °C / 257 °F</p> <p>Article No. 616T19/58/60/61/62/95: 180 °C / 356 °F</p> <p>Article No. 616T20: 215 °C / 419 °F</p> <p>Article No. 616T22/43/44: 195 °C / 383 °F</p> <p>Forming temperature</p> <p>Article No. 616T3: 125 °C / 257°F</p> <p>Article No. 616T19/58/60/61/62/95: 165 °C / 329 °F</p> <p>Article No. 616T20: 185 °C / 365°F</p> <p>Article No. 616T22/43/44: 185 °C / 365°F</p>

10. Stability and reactivity

Reactivity:	refer to section 10.3
Chemical stability:	Can be stored in any dry place.
Possibility of hazardous reactions	No dangerous reactions are known.
Conditions to avoid:	Avoid temperatures exceeding Processing temperature °C. (Processing temperature refer to section 9: Physical and chemical properties)
Incompatible materials:	no data available
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

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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.

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

12. Ecological information**Ecotoxicity**

Further details: no data available

Mobility in soil

no data available

Persistence and degradability

Further details: Product is not biodegradable.

Additional ecological information

Volatile organic compounds (VOC):

0 % by weight

General information: Discharge into the environment must be avoided.

13. Disposal considerations**Product**

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

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 - 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

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X

Reason of change: Changes in section 1: Address

Date of first version: 5/30/2008

Department issuing data sheet

Contact person: 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.