

**616T52 - ThermoLyn rigid (polystyrene)**

Material number 616T52

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

Trade name: 616T52 - ThermoLyn rigid (polystyrene)

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

General use: Article for orthopedic procedures  
Processing at Processing temperature and Forming temperature  
(refer to section 9: Physical and chemical properties)  
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  
Postal Code, city: Salt Lake City, UT 84120  
USA

WWW: [www.ottobockus.com](http://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](mailto:USRegulatory@ottobock.com)

Additional information: Corporate headquarters:  
Ottobock SE & Co. KGaA  
Max-Näder-Straße 15  
Duderstadt  
Germany

**Emergency phone number****CHEMTREC, Telephone: +1 (800) 424-9300****2. Hazards identification****Emergency overview**

Appearance: Form: solid, plate  
Color: transparent, colorless  
Odor: weak 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.

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**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 section 7: Handling, section 8: Exposure controls / personal protection and section 11: Toxicology.

In case of heating: risk of burns.

dust/vapors: mild irritant.

see section 11: Toxicological information

**3. Composition / Information on ingredients**

Chemical characterization: Thermoplastic-Polystyrene  
copolymer based on Styrene and 1,3-Butadiene

**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. Consult physician immediately.

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.

dust/vapors: mild irritant.

**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 spray jet, foam, dry chemical powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

**Specific hazards arising from the chemical**

In case of fire may be liberated: carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

## 6. Accidental release measures

Personal precautions: If necessary: Suitable protective clothing.  
 In case of development of vapors or dust:  
 Provide fresh air. Do not inhale vapors or dust particles. Wear protective equipment.

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

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.

Precautions against fire and explosion:  
 Avoid open flames.  
 Take precautionary measures against static discharges.

### Storage

Requirements for storerooms and containers:  
 Keep only in the original container. Keep container dry.  
 Protect against direct sunlight.  
 Keep at temperature not exceeding 122 °F.

Hints on joint storage: Keep away from aromatic hydrocarbons.

## 8. Exposure controls / personal protection

### Exposure guidelines

Occupational exposure limit values:

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

### Engineering controls

Provide for constant fresh air supply during and after processing.  
 See also information in chapter 7, section storage.

### Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.



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Chemical stability:	Stable under recommended storage conditions. Maximum storage period (time) 3 year(s)
Possibility of hazardous reactions	No dangerous reactions are known.
Conditions to avoid:	Avoid temperatures exceeding 170 °C / 338 °F °C. Protect against direct sunlight. Keep at temperature not exceeding 122 °F.
Incompatible materials:	Aromatic hydrocarbons
Hazardous decomposition products:	On heating or in case of fire toxic gases may form. Formation of styrene, 1,3-Butadiene, carbon monoxide and carbon dioxide.
Thermal decomposition:	> 350 °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. 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.
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### 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/vapors: 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: 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 - 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	



# SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Revision date: 3/22/2018

Version: 7

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Literature: At processing: See information supplied by the manufacturer.

Reason of change: Changes in section 1.3: Corporate headquarters

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.