

# **MATERIAL DATA SAFETY SHEET**

Issued in Australia by Bilby 3D Pty Ltd.

The attached Material Data Safety Sheet has been prepared by the manufacturer outside Australia.

In accordance with Australia WHS regulations the following Australian contact details apply

## **Section 1: AUSTRALIAN COMPANY DETAILS**

In Australia the product is imported and distributed by:

Bilby 3D Pty Ltd

Mailing Address : PO Box 62 BEGA NSW 2550

Head Office Address : 452 Wyndham Lane Kanoona NSW 2550

Contact Phone: 1800 847 333

## **Section 2: AUSTRALIAN EMERGENCY CONTACT**

### **Emergency Contact**

In the event of an emergency please contact:

Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

## **Section 3: AUSTRALIAN ISSUE DATA**

**Date of Issue** : 1 March 2020



**Bilby 3D Pty. Ltd.**  
ABN: 84 168 376 538

Sydney: **23 / 110 Bourke Rd, Alexandria 2015**  
Brisbane: **2 / 474 Upper Edward St, Spring Hill 4000**  
Melbourne: **A5 / 2 Westall Rd, Clayton 3168**  
Bega: **452 Wyndham Lane, Kanoona 2550**

**1800-ThreeD**  
8 4 7 3 3 3

Fax: 02 8079 5971

Email: [reception@Bilby3D.com.au](mailto:reception@Bilby3D.com.au)

[www.Bilby3D.com.au](http://www.Bilby3D.com.au)

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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Flex/Flexible/TPE  
**Supplier:** Bilby 3D

**Website:** [Bilby3D.com.au](http://Bilby3D.com.au)  
**Emergency telephone:** 1800 847 333

### 2. COMPOSITION, INFORMATION ON INGREDIENTS

**Common names:** TPE, thermoplastic elastomer

**Chemical formula:** C<sub>26</sub>H<sub>20</sub>

Chemical Name	Weight	OSHA Exposure Limits:	ACGIH Exposure Limits:
thermoplastic elastomer	>90%	None	None
N,N Ethylene bistearamide	<5%	None	None
Typical Antioxidant	<5%	None	None

### 3. HAZARDS IDENTIFICATION

**Eye contact:** Contact with eyes may cause irritation.

**Skin contact:** Substance may cause slight skin irritation.

**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Inhalation:** Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.

Low hazard for usual industrial or commercial handling.

**Target organ effects:** There were no target organ effects noted following ingestion or dermal exposure in animal studies.

**Sensitization:** Did not cause sensitization on laboratory animals.

### 4. FIRST AID MEASURES

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

**Skin contact:** Rinse immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Cool skin rapidly with cold water after contact with hot polymer.

**Inhalation:** Move to fresh air. Call a physician immediately.

**Ingestion:** Drink water as a precaution. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a physician immediately.



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Notes to physician: Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:** Foam. Water. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Alcohol resistant foams are preferred if available. General-purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively.

**Extinguishing media which must not be used for safety reasons:** No information available

**Hazardous decomposition products:** Burning produces obnoxious and toxic fumes Aldehydes

Carbon monoxide (CO) carbon dioxide (CO<sub>2</sub>)

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Under fire conditions:** Cool containers / tanks with spray water. Water mist may be used to cool closed containers.

**Other information:** Fine dust dispersed in air may ignite. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective equipment. See Section 8. Remove all sources of ignition. Avoid dust formation. Avoid contact with skin and eyes. Sweep up to prevent slipping hazard.

**Environmental precautions:** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

**Methods for cleaning up:** Shovel into suitable container for disposal.

### 7. HANDLING AND STORAGE

**Safe handling advice:** Avoid contact with skin and eyes. Avoid dust formation. Workers should be protected from the possibility of contact with molten material during fabrication. Low hazard for usual industrial or commercial handling. Use personal protective equipment.

**Storage:** Store in cool place. Keep at temperatures below 163 °C

No special restrictions on storage with other products

**Precautions:** No special precautions required



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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering measures:** Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Provide appropriate exhaust ventilation at places where dust is formed.

**Control parameters:** None

**Personal protective equipment:**

**Eye protection:** Safety glasses with side-shields. Goggles.

**Skin and body protection:** Impervious clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear, translucent, opaque, pellets.

**Color:** Clear, Translucent, Opaque

**Physical state:** Solid

**Odor:** Sweet

**pH:** Not applicable

**Vapor pressure:** Not determined

**Vapor density:** Not determined

**Evaporation rate:** Not determined

**Density:** 0.96g/cm<sup>3</sup>

**Boiling point/range:** Not applicable

**Decomposition temperature:** 260°C

**Melting point/range:** Not determined

**Water solubility:** Insoluble

**Solubility in other solvents:** None known

### 10. STABILITY AND REACTIVITY

**Stability:** Stable under recommended storage conditions

**Conditions to avoid:** Temperatures above 446F (230 °C).

**Materials to avoid:** Oxidizing agents. Strong bases.

**Hazardous decomposition products:** Burning produces obnoxious and toxic fumes. Aldehydes.  
Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**Polymerization:** Not applicable



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### 11. TOXICOLOGICAL INFORMATION

**Reproductive toxicity:** No data is available on the product itself.

**Carcinogenic effects:** No data is available on the product itself. Mutagenic effects: Not mutagenic in AMES Test.

### 12. ECOLOGICAL INFORMATION

**Shipping Containers:** Samples bottles; Moisture proof laminated pouches.

**Proper Shipping name:** Not regulated as a hazardous by DOT OR IMO.

**\*\*The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made.**  
Consult the Company for Further Information.

**NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS:** The company does not recommend any of its products, including samples, for use: (A) in any application which is intended for any internal contact with human body fluids or body tissues (B) as a critical component in any medical device that supports or sustains human life; and (C) specifically pregnant women or in any applications designed specifically to promote or interfere with human reproduction.

### 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products:**

In accordance with local and national regulations.

### 14. TRANSPORT INFORMATION

Not regulated.

### 15. ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. This MSDS is written and designed solely as a guide for storage, use and disposal of Reprapper's 3d printing filament. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Reprapper be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages.