

Version 1.2

Issue date: 01/01/2023

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## 1. Product and Company Identification

Material name	PolyFlex™TPU95-HF
CAS #	See section 3
Product code	-
Product use	3D Printing Filament
Manufacturer/Supplier	
Supplier(Manufacturer):	JF Polymers (Suzhou) Co., Ltd.
Address:	Building 6&7&11, No.2, Hai Cheng Road, Chang Shu Economic &Technological Development Zone, 215513, People's Republic of China
Contact person(E-mail):	zhenxing.miao@polymaker.com
Telephone:	+86-512-52058005
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Emergency telephone Number:	+86-512-52058005

## 2. Hazards identification

### GHS Classification

This product is not hazardous in the form in which it is shipped by the manufacturer.

### GHS Label Elements

Signal word: Warning

Hazard statements: If fine particles are generated during further processing, handling or by other means, product may form combustible dust concentrations in air.

## 3. Composition / Information on Ingredients

### Hazardous Components

The following potentially hazardous ingredient(s) are used to formulate this product. As supplied, the ingredient(s) are bound in the polymer matrix. Because they are bound in the matrix, they are not expected to create any unusual hazards when handled and processed according to good manufacturing and industrial hygiene practices and the guidelines provided in this SDS.

Concentration	Components	CAS-No.
0.1 - 1%	2,2',6,6'-Tetraisopropylidiphenyl Carbodiimide	2162-74-5

## 4. First Aid Measures

### First aid procedures

Eye contact	None expected to require first aid measures. Flush with running water for at least 15 minutes. If irritation persists get medical attention.
Skin contact	None expected to require first aid measures. Wash thoroughly with soap and water. Get medical attention in the unlikely event that irritation persists.
Inhalation	None expected to require first aid measures. If breathed in, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical attention.
Ingestion	Immediate first aid is not likely to be required. A physician or poison control center can be contacted for advice.

Notes to physician	Treat symptoms.
<b>5. Fire Fighting Measure</b>	
Flammable properties	Not available.
Extinguishing media	
Suitable extinguishing media	Use extinguishers suitable for surrounding fire.
Unsuitable extinguishing media	Not available.
Firefighting equipment/instructions	Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous combustion products	Carbon oxides.
<b>6. Accidental Release Measures</b>	
Personal precautions	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions	Avoid disposing into drainage/sewer system or directly into the aquatic environment.
Methods for cleaning up	Sweep up and shovel into suitable containers. Clean up affected area.
<b>7. Handling and Storage</b>	
Handling	Ensure good ventilation/exhaustion at the workplace. Wash thoroughly after handling.
Storage	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
<b>8. Exposure Controls / Personal Protection</b>	
Occupational exposure limits	Country specific exposure limits have not been established or are not applicable
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>Individual protection measures, such as personal protective equipment:</b>	
Eye / face protection	Safety glasses with side-shields
Skin protection	No special skin protection requirements during normal handling and use.
Respiratory protection	general dilution or local exhaust ventilation
General hygiene considerations	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
<b>9. Physical &amp; Chemical Properties</b>	
Appearance	
Physical state	Solid
Form	Solid
Color	Various
Odor	Odorless
Odor threshold	Not available
pH	Not available
Vapor pressure	Not available
Vapor density	Not available
Boiling point	Not available
Melting point/Freezing point	Not available
Solubility (water)	Insoluble

Relative Density	1.18-1.23
Flash point	Not available
Partition coefficient	Not available
Flammability limits in air, upper, %by volume	Not available
Flammability limits in air, lower, % by volume	Not available
Auto-ignition temperature	Not available
VOC	Not available
Percent volatile	Not available
Molecular Formula	Not available
Molecular Weight	Not available
Other data	
Viscosity	Not available
Dissociation constant	Not available

## 10. Chemical Stability & Reactivity Information

Reactivity	The substance is stable under normal storage and handling conditions.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides 4,4'-Diphenylmethane Diisocyanate (MDI)
Possibility of hazardous reactions	No hazardous reactions known.

## 11. Toxicological Information

### Toxicokinetics, metabolism and distribution:

Non-human toxicological data:	Not available
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### Information on toxicological effects:

#### Acute toxicity:

LD50(Oral, Rat):	Not available
LD50(Dermal, Rabbit):	Not available
LC50(Inhalation, Rat):	Not available
Skin corrosion/Irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

## 12. Ecological Information

### Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
EC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability:	Not available.
Bioaccumulative potential:	Not available.

<b>Mobility in soil:</b>	Not available.
<b>Results of PBT&amp;vPvB assessment:</b>	Not available.
<b>Other adverse effects:</b>	Not available.

### 13. Disposal Considerations

<b>Disposal instructions</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport Information

#### DOT

##### Basic shipping requirements:

<b>UN number</b>	Not regulated
<b>Proper shipping name</b>	Not regulated
<b>Hazard class</b>	Not regulated
<b>Packing group</b>	Not regulated
<b>Environmental hazards</b>	No

#### IATA

<b>UN number</b>	Not regulated
<b>UN proper shipping name</b>	Not regulated
<b>Transport hazard class(es)</b>	Not regulated
<b>Packing group</b>	Not regulated
<b>Environmental hazards</b>	No

#### IMDG

<b>UN number</b>	Not regulated
<b>UN proper shipping name</b>	Not regulated
<b>Transport hazard class(es)</b>	Not regulated
<b>Packing group</b>	Not regulated
<b>Environmental hazards</b>	No

### 15. Regulatory Information

#### US federal regulations

##### Toxic Substances Control Act (TSCA)

United States Federal Regulations

US. Toxic Substances Control Act: Listed on the Active Portion of the TSCA Inventory.

No substances are subject to TSCA 12(b) export notification requirements.

US. EPA CERCLA Hazardous Substances (40 CFR 302) Components:

None

SARA Section 311/312 Hazard Categories:

Refer to hazard classification information in Section 2.

Material Name: AD.GPU 98A 000000 X2013 Material Number: 86518864

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components:

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components:

None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III  
Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components:  
None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes  
and Appendix VIII Hazardous Constituents (40 CFR 261):

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR  
261.2, to determine if that waste is a hazardous waste.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**16. Other Information**

**HMIS® ratings**

Health: 0

Flammability: 1

Physical hazard: 0

**NFPA ratings**

Health: 0

Flammability: 1

Instability: 0

**Disclaimer**

The information in the sheet was written based on the best knowledge and  
experience currently available.

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