

Safety Data Sheet

According to Regulation (EC) No 1907/2006, Annex II,

Amended by COMMISSION REGULATION (EU) 2015/830,

According to REGULATION (EC) No 1272/2008

PolyFlex™ TPU90

Version 1.0

Issue date: 18-07-2020

Revision date: 18-07-2020 SDS Record Number: CSSS-TCO-010-133600

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:				
Identification on the label/Trade name:	PolyFlex™ TPU90			
Additional identification:	Not available			
Identification of the product:	See section 3			
Index Number:	Not available			
REACH registration No.:	Not available			
1.2 Relevant identified uses of the substance of	or mixture and uses advised against:			
1.2.1 Identified uses:				
3D Printing Filament.				
1.2.2 Uses advised against:				
Not available.				
1.3 Details of the supplier of the safety data sh	eet:			
Supplier(Only representative):	-			
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):	Zhenggang Cai (zhenggang.cai@polymaker.com)			
Telephone:	+86-512-52058005			
Fax:	-			
1.4 Emergency telephone Number:				
+86-512-52058005				
Available outside office hours?	YES NO X			
Section 2 Hazards Identification				
-				

2.1 Classification of the substance or mixture:

2.1.1 Classification:

According to REGULATION (EC) No 1272/2008, based on available data, the classification criteria are not met:

REGULATION (EC) No 1272/2008		
Hazard classes/Hazard categories	Hazard codes	
Not classified	N/A	

2.2 label elements:

Hazard Pictograms: No hazard pictogram is used.

Signal Word(S): No signal word is used.

Hazard Statement: Not applicable.

Precautionary statement: Not applicable.

2.3 Other hazards:

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Section 3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s): This product does not contain hazardous ingredients above cut-off value according to Regulation (EC)

1272/2008.

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

4.1.2 In case of skin contact:

May irritate damaged skin. Wash off with soap and plenty of water.

4.1.3 In case of eyes contact:

Immediately flush eyes with plenty of water, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

4.1.4 In case of ingestion:

If large amounts were swallowed, give water to drink and get medical advice.

4.2 Most important symptoms and effects, both acute and delayed:

The product is not classified as harmful to human health effect.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Not available. Unsuitable extinguishing media:

5.2 Special hazards arising from the

substance or mixture

No specific fire or explosion hazard.

5.3 Advice for firefighters: Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid dust formation. 6.1.1 For non-emergency personnel:

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

Do not let large amount of product enter drains. 6.2 Environmental Precautions:

6.3 Methods and material for Containment

and Cleaning up:

Sweep up and shovel. Keep in suitable, closed and properly labelled containers

for disposal.

See Section 7 for information on safe handling. 6.4 Reference to other sections:

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

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7.1 Precautions for safe handling:

7.1.1 Protective measures: Provide appropriate exhaust ventilation at places where dust is formed.

7.1.2 Advice on general occupational

hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including

any incompatibilities:

Keep container closed in a dry place. Avoid dust formation.

7.3 Specific end use(s): Not applicable.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Not available.8.1.2 Additional exposure limits under the Not available.

conditions of use:

8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls:

8.2.1Appropriate engineering controls: Use process enclosures, local exhaust ventilation or other engineering controls

to keep worker exposure to airborne contaminants below any recommended or statutory limits. If user operations generate dust, fumes or mist, use ventilation

to keep exposure to airborne contaminants below the exposure limit.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety glasses when eye contact is possible.

Hand protection: For prolonged or repeated contact use protective gloves.

Body protection: Skin covering working clothes; wear dust-proof overalls if large quantities of dust

are generated.

Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of

dusts are desired, use type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards

such as CEN (EU).

Thermal hazards: Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls: Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance: Solid

Colour: Translucent
Odour: Odorless
Odour threshold: Not available

pH: Not available

Melting point/range (°C): Not available

Boiling point/range (°C): Not available

Flash point (°C): Not available

Evaporation rate: Not available

Flammability limit - lower (%): Not available

Flammability (solid, gas): Not available

Ignition temperature (°C):Not availableUpper/lower explosive limits:Not available

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Vapour pressure (20°C): Not available Vapour density: Not available

Relative Density: 1.18-1.23

Bulk density (kg/m³): Not available

Water solubility (g/l): Insoluble in water

Not available n-Octanol/Water (log Po/w): Not available Auto-ignition temperature:

Not available **Decomposition temperature:**

Viscosity, dynamic (mPa.s): Not available

Explosive properties: Not available

Oxidising properties: Not available

Not available Molecular Formula: Not available

Molecular Weight: 9.2. Other information:

> Fat solubility(solvent-oil to be specified) Not available

etc:

Surface tension: Not available Dissociation constant in water(pKa): Not available **Oxidation-reduction Potential:** Not available

Section 10 Stability and reactivity

10.1 Reactivity: The substance is stable under normal storage and handling conditions.

10.2 Chemical stability: Stable at room temperature in closed containers under normal storage and

handling conditions.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: Incompatible materials. 10.5 Incompatible materials: Strong oxidizing agents

Carbon oxide. 10.6 Hazardous decomposition products:

Section 11 Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

LD50(Oral, Rat): Not available

LC50(Inhalation, Rat): Not available

Not available LD50(Dermal, Rabbit):

Skin corrosion/Irritation: Not classified

Not classified Serious eye damage/irritation: 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

Not classified Aspiration hazard:

Section 12 Ecological information

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12.1Toxicity:

Acute (short-term) toxicity:

LC50(96h, Fish): Not available LC50(48h, Crustacea): Not available EC50(72h, Algae/aquatic plants): Not available

Chronic (long-term) toxicity:

NOEC(Fish): Not available NOEC(Crustacea): Not available EC50(Algae/aquatic plants): Not available 12.2 Persistence and degradability: Not available. Not available. 12.3 Bioaccumulative potential: 12.4 Mobility in soil: Not available. 12.5 Results of PBT and vPvB assessment: Not available. 12.6 Other adverse effects: Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods: Any disposal practice must be in compliance with all local and national laws and

regulations. Do not dump into any sewers, on the ground, or into any body of

water.

Section 14 Transport information					
	Land transport	Inland waterways	Sea transport	Air transport	
	(ADR/RID)	(ADN)	(IMDG)	(ICAO/IATA)	
UN number	Not regulated	Not regulated	Not regulated	Not regulated	
UN Proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated	
Transport hazard Class(es)	Not regulated	Not regulated	Not regulated	Not regulated	
Packing group	Not regulated	Not regulated	Not regulated	Not regulated	
Environmental hazards	No	No	No	No	
Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2	
Transport in bulk according to Annex II of Marpol and the IBC Code	Not regulated	Not regulated	Not regulated	Not regulated	

Section 15 Regulatory information

15.1 Safety, health and environmental re	gulations/legislation specific	for the substance or mixture
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Relevant information regarding authorization: Not applicable. Relevant information regarding restriction: Not applicable.

Employment restrictions concerning young person must be observed. Other EU regulations:

For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical safety assessment YES NO Χ

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Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by (EU) 2015/830

16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation for rail International transportation of Dangerous goods

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization IATA: International Air Transport Association

LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

16.3 Key literature references and sources for data

ECHA Registered substances data

16.4 Training instructions:

Not applicable.

16.5 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.6 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this safety Date Shoet, or is combination with any other product or process, is the responsibility of the user.

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