

**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**  
**PolyMide™ PA12-CF**

Version 1.0

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SDS Record Number: CSSS-TCO-010-230895

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

### 1.1 Product identifier:

Identification on the label/Trade name: PolyMide™ PA12-CF  
Additional identification: Not available  
Identification of the product: See section 3  
Index Number: See section 3  
REACH registration No.: See section 3

### 1.2 Relevant identified uses of the substance 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 sheet:

Supplier(Only representative): -  
Supplier(Manufacturer): JF Polymers (Suzhou) Co., Ltd.  
Address: Haicheng Industrial Park, Bldg 7, Changshu Economic Development Zone (CEDZ), Changshu, Jiangsu Province 215513, China  
Contact person(E-mail): zhenggang.cai@polymaker.com  
Telephone: +86-512-52058005  
Fax: -

### 1.4 Emergency telephone Number:

+86-512-52058005 Only available during office hours (9:00a.m.-17:30p.m)

Available outside office hours? YES  NO

## Section 2 Hazards Identification

### 2.1 Classification of the substance or mixture:

#### 2.1.1 Classification:

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard codes
N/A	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:

Not available.

## Section 3 Composition/information on ingredients

Substance/Mixture: Mixture

### Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration	Classification
Chopped Carbon Fiber	N/A	7440-44-0	231-153-3	10-30%	Not Classified

## 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:

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.

#### 4.1.2 In case of 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.

#### 4.1.3 In case of eyes contact:

None expected to require first aid measures. Flush with running water for at least 15 minutes. If irritation persists get medical attention.

#### 4.1.4 In case of ingestion:

Immediate first aid is not likely to be required. A physician or poison control center can be contacted for 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:

Symptomatic treatment.

## Section 5 Firefighting measures

### 5.1 Extinguishing media:

**Suitable extinguishing media:** Use extinguishing agents appropriate for surrounding fire.

**Unsuitable extinguishing media:** Not available.

### 5.2 Special hazards arising from the substance or mixture

No specific fire or explosion hazard. In case of fire, the following can be released: carbon monoxide, carbon dioxide.

### 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:

**6.1.1 For non-emergency personnel:** Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.

**6.1.2 For emergency responders:** Avoid skin and eye contact. Refer to section 8 of SDS for personal protection details.

### 6.2 Environmental Precautions:

Avoid disposing into drainage/sewer system or directly into the aquatic

environment.

### 6.3 Methods and material for Containment and Cleaning up:

Sweep up and shovel into suitable containers. Clean up affected area.

### 6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

## Section 7 Handling and storage

### 7.1 Precautions for safe handling:

#### 7.1.1 Protective measures:

Ensure good ventilation/exhaustion at the workplace. Wash thoroughly after handling.

#### 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:

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.

### 7.3 Specific end use(s):

Not available.

## Section 8 Exposure Controls/Personal Protection

### 8.1 Control parameters:

#### 8.1.1 Occupational exposure limits:

Country	Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
				ppm	mg/ m3	ppm	mg/ m3	Note
Ireland	Graphite total inhalable dust	231-153-3	7440-44-0	-	10	-	-	-
	respirable dust			-	4	-	-	-

8.1.2 Additional exposure limits under the conditions of use: Not available.

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

### 8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Use adequate ventilation to keep airborne concentrations low.

#### 8.2.2 Individual protection measures, such as personal protective equipment:

**Eye/face protection:** No special requirements.

**Hand protection:** No special requirements.

**Body protection:** No special requirements.

**Respiratory protection:** No special requirements.

**Thermal hazards:** Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls: Avoid discharge into the environment. Dispose of rinse water in accordance with local and national regulations

## Section 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties:

**Appearance:** Solid

**Colour:** Black

**Odour:** Odorless

<b>Odour threshold:</b>	Not available
<b>pH:</b>	Not available
<b>Melting point/range (°C):</b>	179°C
<b>Boiling point/range (°C):</b>	Not available
<b>Flash point (°C):</b>	Not available
<b>Evaporation rate:</b>	Not available
<b>Flammability limit - lower (%):</b>	Not available
<b>Flammability (solid, gas):</b>	Not available
<b>Ignition temperature (°C):</b>	Not available
<b>Upper/lower explosive limits:</b>	Not available
<b>Vapour pressure (20°C):</b>	Not available
<b>Vapour density:</b>	Not available
<b>Relative Density:</b>	1.02
<b>Bulk density (kg/m<sup>3</sup>):</b>	Not available
<b>Water solubility (g/l):</b>	Insoluble
<b>n-Octanol/Water (log Po/w):</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Viscosity, dynamic (mPa.s):</b>	Not available
<b>Explosive properties:</b>	Not available
<b>Oxidising properties:</b>	Not available
<b>9.2. Other information:</b>	
<b>Fat solubility(solvent– oil to be specified)</b>	Not available
<b>etc:</b>	
<b>Surface tension:</b>	Not available
<b>Dissociation constant in water( pKa):</b>	Not available
<b>Oxidation-reduction Potential:</b>	Not available

## Section 10 Stability and reactivity

<b>10.1 Reactivity:</b>	The substance is stable under normal storage and handling conditions.
<b>10.2 Chemical stability:</b>	Stable at room temperature in closed containers under normal storage and handling conditions.
<b>10.3 Possibility of hazardous reactions:</b>	No dangerous reactions known.
<b>10.4 Conditions to avoid:</b>	Incompatible materials.
<b>10.5 Incompatible materials:</b>	Strong oxidizing agents.
<b>10.6 Hazardous decomposition products:</b>	Carbon oxides.

## Section 11 Toxicological information

<b>11.1 Information on toxicological effects:</b>	
<b>Acute toxicity:</b>	
<b>ATE<sub>mix</sub>(oral):</b>	Not available
<b>ATE<sub>mix</sub>(Dermal):</b>	Not available
<b>ATE<sub>mix</sub>(inhalation):</b>	Not available
<b>LD50(Oral, Rat):</b>	Not available
<b>LD50(Dermal, Rabbit):</b>	Not available
<b>LC50(Inhalation, Rat):</b>	Not available

<b>Skin corrosion/Irritation:</b>	Not classified
<b>Serious eye damage/irritation:</b>	Not classified
<b>Respiratory or skin sensitization:</b>	Not classified
<b>Germ cell mutagenicity:</b>	Not classified
<b>Carcinogenicity:</b>	Not classified
<b>Reproductive toxicity:</b>	Not classified
<b>STOT- single exposure:</b>	Not classified
<b>STOT-repeated exposure:</b>	Not classified
<b>Aspiration hazard:</b>	Not classified

## Section 12 Ecological information

### 12.1 Toxicity:

#### 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.

**12.3 Bioaccumulative potential:** Not available.

**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:** The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

## Section 14 Transport information

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

## Section 15 Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

**Relevant information regarding authorization:** Not applicable.  
**Relevant information regarding restriction:** Not applicable.  
**Other EU regulations:** Employment restrictions concerning young person must be observed.  
For use only by technically qualified individuals.  
**Other National regulations:** Not applicable

### 15.2 Chemical safety assessment

YES  NO

## 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-TI: International Civil Aviation Organization The International Civil Aviation Covenant  
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:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.