

PolyLite™ ABS

SDS number: A00120170216

Section 1: Product and company identification**1. Identification of the material**

PolyLite™ ABS 3D printing filament

2. Identified Uses

Used primarily for extrusion-based 3D printing processes

3. Manufacturer informationManufacturer:

JF Polymers (Suzhou) Co. Ltd.

Address:

Haicheng Industrial Park

Building 7

Changshu Economic and Technological Zone (CEDZ) Changshu, Suzhou, Jiangsu Province, 215513

China

Tel/Fax:

+86-512-52096516 / +86-512-52096512

4. Emergency contact numberEmergency telephone number:

+86-512-52096516; or call LOCAL POISON CONTROL CENTER

Section 2: Hazards identification**1. Classification of the substance of mixture****1.1. Classification according to Directive 67/548/EEC or 1999/45/EC as amended**

This substance does not meet the criteria for classification according to Directive 67/548/EEC as amended.

1.2. Classification according to Regulation (EC) No 1272/2008 as amended

This substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2. Label elements

Not applicable.

3. Other hazards

Not likely to be an irritant in the solid form. Danger of burns when heated/molten material is handled.

Section 3: Composition/information on ingredients

1. Substances

Chemical Name	CAS No.	Weight (%)	Exposure Limits
Acrylonitrile-Butadiene- Styrene copolymer	9003-56-9	>98	None
Additives		≤2	None

Section 4: First aid measures

1. Description of first aid measures

Remove affected persons from the danger area, at the same time ensuring your own safety. Remove all contaminated clothing immediately.

1.1. Inhalation

In case of gases evolving from melted resin, move subject to fresh air. Treat symptomatically

1.2. Skin contact

In case of pellets or powder, wash with water. In case of smelt, wash affected skin area and clothing with plenty of (soap and) water. Seek medical advice

1.3. Eye contact

In case of pellets or powder, flush with plenty of water for at least 15 minutes. Seek medical advice if any dust particles still remain. In case of gases evolving from melted resin of high temperature, flush with plenty of water for at least 15 minutes. Seek medical advice if necessary

1.4. Ingestion

Induce vomiting. Rinse mouth with water. Seek medical advice if necessary

2. Most important symptoms and effects, both acute and delayed

Dust: Skin irritation, eye irritations and redness

3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. (Decontamination, vital functions)

Section 5: Fire-fighting measures

1. Suitable extinguishing media

Water, foam, dry chemical powder

2. Special hazards arising from the substance or mixture

Not applicable

3. Advice for fire fighters

Protective equipment: Self-contained breathing apparatus

Section 6: Accidental release measures

1. Personal precautions, protective equipment and emergency procedures

Filaments remained on ground may cause slipping Wear protective equipment

Ensure adequate ventilation

Keep away from ignition sources

Keep unprotected persons away

2. Environmental precautions

Do not allow product to reach sewage system or water bodies. Inform respective authorities in case product reaches water, sewage system or soil

3. Methods and materials for containment and cleaning up

Recovery if not contaminated or disposal

Section 7: Handling and storage

1. Precautions for safe handling

Measures to prevent fire:

No biological exposure limits noted for the ingredient(s)

Measures to prevent aerosol and dust generation:

maintain good housekeeping standards to prevent accumulation of dust. To avoid dust explosion resulting from the existence of powder, electrostatics eliminators and grounding should be fixed to such equipment as air transferring pipes, bag filters and hoppers. Use electrically conductive filters for bag filters.

2. Conditions for safe storage

Store in ambient temperatures. Avoid exposure to high moisture levels. No special restrictions on storage with other products. Keep the material at a cool dry place. Protect from direct sunlight, rain and violent temperature fluctuation. Fire is inhibited around storage area.

Section 8: Exposure controls/personal protection

1. Control parameters

Exposure Limits:

None established

2. Engineering controls

Provide appropriate exhaust ventilation at places where dust is formed or the material is molten, such as during printing.

3. Personal protective equipment

Wear gloves when handling hot/molten material.

Section 9: Physical and chemical properties

1. Information on basic physical and chemical properties

Appearance: Filament, Solid

Color: Various

Odor: Odorless or negligible

Odor threshold: None

pH: Not applicable

Melting point/freezing point: Not determined

Boiling point: Not applicable

Flash point: 404°C

Evaporation rate: Not applicable

Flammability: Not available

Upper/lower flammability or explosive limits: 45 g/m³ (open cup, powder)

Vapor pressure: Not applicable

Vapor density: Not applicable

Relative density: 1.03 - 1.10 g/cm³

Solubility: No soluble

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: 466°C

Decomposition temperature: Onset of decomposition > 380°C

Viscosity: Not applicable

Section 10: Stability and reactivity

1. Reactivity

Non-reactive under normal handling and storage conditions

2. Chemical stability

Stable under normal handling and storage conditions

3. Possibility of hazardous reactions

Data no available

4. Conditions to avoid

Avoid excessive heat, flames and all sources of ignition

5. Incompatible materials

not applicable

6. Hazardous decomposition products

not applicable

Section 11: Toxicological information

1. Likely routes of exposure

Inhalation:

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing.

Skin contact:

Dust may irritate skin.

Eye contact:

Dust may irritate the eyes.

Ingestion:

May cause discomfort if swallowed.

2. Symptoms

Dust may irritate throat and respiratory system and cause coughing. Direct contact with eyes may cause temporary irritation.

3. Information on 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. May cause irritations.

eye damage/eye irritation: Lack of data. May cause irritations.

Sensitisation to the respiratory tract: Lack of data. Not to be expected

Skin sensitization: Lack of data. Not to be expected

Germ cell mutagenicity/Genotoxicity: Lack of data. Not to be expected

Carcinogenicity: Lack of data. Not to be expected

Reproductive toxicity: Lack of data. Not to be expected

Specific target organ toxicity - single exposure: Lack of data.

Dusts: Irritating to eyes, respiratory system and skin.

Specific target organ toxicity - repeated exposure: Lack of data.

Section 12: Ecological information

1. Toxicity

Short-term aquatic toxicity:

Based on available data on the constituents the classification criteria are not met.

LC(50)mixture = 5.78 mg/l (additivity and summation method, toxicity information available for 92,5 % of the mixture)

Long-term aquatic toxicity:

Based on available data on the constituents the classification criteria are met and the mixture is therefore classified as Aquatic Chronic 1. NOECmixture = 0.0079 mg/l (additivity and summation method, toxicity information available for 78 % of the mixture)

2. Persistence and degradability

Further details:

Biodegradation: Product is not readily biodegradable. The product is likely to persist in the environment.

Effects in sewage plants:

In sewage treatment plants it may be separated mechanically.

3. Bioaccumulative potential

To avoid bioaccumulation plastics should not be disposed in the sea or in other water environments.

4. Mobility in soil

No data available.

5. Other adverse effects

General information:

Do not allow to enter into ground-water, surface water or drains.

Section 13: Disposal considerations

1. Waste treatment methods

Product / Packaging disposal:

Dispose in accordance with the current local regulations.

Waste treatment-relevant information:

Inadequate incineration may generate toxic gases such as CO, HCN, AN and SM

Section 14: Transport information

ADR/RID:

UN number

Not applicable

UN proper shipping name

Proper Shipping Name: NOT REGULATED

Transport hazard class(es)

Not applicable

Packing Group

Not applicable

Environmental hazards

Not considered environmentally hazardous based on available data

Special precautions for user

Special Provisions: no data available

Hazard identification No: no data available

ADNR / ADN

UN number

Not applicable

UN proper shipping name

Proper Shipping Name: NOT REGULATED

Transport hazard class(es)

Not applicable

Packing Group

Not applicable

Environmental hazards

Not considered environmentally hazardous based on available data

Special precautions for user

no data available

IMDGUN number

Not applicable

UN proper shipping name

Proper Shipping Name: NOT REGULATED

Transport hazard class(es)

Not applicable

Packing Group

Not applicable

Environmental hazards

Not considered environmentally hazardous based on available data

Special precautions for user

EMS Number: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

ICAO/IATAUN number

Not applicable

UN proper shipping name

Proper Shipping Name: NOT REGULATED

Transport hazard class(es)

Not applicable

Packing Group

Not applicable

Environmental hazards

Not considered environmentally hazardous based on available data

Special precautions for user

no data available

Section 15: Regulatory information

1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations

Authorization and / or restrictions on use: None

Other EU regulations: The following substances are under European Seveso regulation:

Substance	Seveso category	Other Seveso categories	Seveso concentrations	Categories
Acrylonitrile	2	9ii/7b	10% ≤ C < 20%	2
Buta-1,3-diene	0	7b	-	-
Styrene	6	-	C ≥ 12.5%	-

2. Chemical safety assessment

For this substance a chemical safety assessment is not yet required.

Section 16: Other information

Revision information

Date of this revision: Feb 16, 2017

Declare to reader

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