

Material Safety Data Sheet

1. Company identification

1.1 **Company:** Hangzhou Zhuopu New Materials Co., Ltd.

1.2 **Address:** No. 399 North Huancheng Road, Lin'an, Hangzhou, Zhejiang 311300, P.R. China.

1.3 **Tel:** +86-571-58615097 **Fax:** +86-571-58615099

2. Substance identification

2.1 **Trade Name:** Ceramic Filament

2.2 **Components:** Polymer-blend based on Poly(vinyl butyral) (PVB), contains some additives..

2.3 **CAS No:** PVB: 63148-65-2

2.4 **Additional information:** no harmful ingredients.

3. Hazard identification

GHS classification

The product is not classified according to GHS.

GHS label elements

Symbols None.

Signal words None

Hazard statement None.

Precautionary statement

Prevention Use personal protective equipment as required.

Response No specific first aid measures noted.

Storage Store in a dry place. Store in a closed container.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Main symptoms and emergency overview

Main symptoms Coughing.

Emergency overview Low hazard for usual industrial or commercial handling by trained personnel. Exposure to powder or dusts may be irritating to eyes, nose and throat.

4. First-aid measures

If powder inhaled If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

If powder on skin Rinse skin with water. Get medical attention if irritation develops and persists.

If powder in eyes	Do not rub eye. Rinse with water. Get medical attention if irritation develops and persists.
If swallowed	Get medical attention if symptoms occur.
Most important symptoms/ effects, acute and delayed	Contact with dust: Irritation of eyes and mucous membranes. Coughing.
Notes to physician	Provide general supportive measures and treat symptomatically.

5. Fire-fighting measures

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Extinguishing media to avoid	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Use standard firefighting procedures and consider the hazards of other involved materials.
Protection of fire-fighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
General fire hazards	The product is not flammable. The product may form dust and can accumulate electrostatic charges, which may cause an electrical spark (ignition source). Use proper grounding procedures.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures	Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment.
Environmental precautions	Environmental manager must be informed of all major spillages.
Methods or materials for containment and cleaning up	Avoid dust formation. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Do not use compressed air when cleaning.

7. Handling and storage

Keep container tightly closed and dry; store in a cool place below 60 °C

Avoid extreme heat. Avoid direct sunlight.

Avoid all sources of ignition: heat, sparks, opening flame. Store away from incompatible materials.

8. Physical and chemical properties

Density (20°C)	1.1g/cm ³
Form	filament
Melting temperature	135-210 °C
Thermal decomposition	300°C (TGA, 10 K/min)
Odour	odourless
Oxidising properties	not self igniting / flammable
Explosions limits	not applicable
Solubility in water	insoluble

9.Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials. Avoid dust close to ignition sources.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Carbon monoxide.

10.Toxicological information

Acute toxicity	Dusts may irritate the respiratory tract, skin and eyes.
Skin corrosion/irritation	Dust may irritate skin.
Serious eye damage/eye irritation	Dust may irritate the eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
Respiratory or skin sensitization	Respiratory sensitization Not classified. Skin sensitization Not a skin sensitizer.
Germ cell mutagenicity	Not expected to be mutagenic.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target organ toxicity single exposure	No data available.
Specific target organ toxicity repeated exposure	No data available.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Other information	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

11. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data available.

Bioaccumulation

No data available.

Mobility in soil

No data available.

Hazardous to the ozone layer

Not available.

12. Disposal considerations

Residual waste

Dispose of in accordance with local regulations.

Contaminated packaging

Dispose of in accordance with local regulations.

Local disposal regulations

Dispose of in accordance with local regulations

13. Regulatory information

Complies with TSCA.

14. Other information

Please call to (86)571- 58615097 or visit to our website: www.cc3dchina.com

Important:

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End of data sheet