

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: TPU Filament

2.2 Components: Polymer-blend based on thermoplastic polyurethane

2.3 CAS No: TPU: 9009-54-5

2.4 Additional information: no harmful ingredients.

3. Hazard identification

3.1 OSHA/HCS status: This material is classified as NON-hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

3.12 Emergency overview: CAUTION!

During handling and use, product can cause static discharge. In the presence of flammable materials a fire and/or explosion may occur. Molten material may cause thermal eye burns. Molten material may cause thermal skin burns. Processing vapors may cause respiratory tract irritation.

No known significant effects or critical hazards.

See toxicological information (Section 11)

3.3 GENERAL INFORMATION : Read the entire MSDS for a more thorough evaluation of the hazards.

4. First-aid measures

4.1 If inhaled: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

4.2 If on skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

4.3 If in eyes: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

4.4 If swallowed: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately..

5. Fire-fighting measures

5.1 Flash point : Not applicable

5.2 Hazardous thermal decomposition products: Decomposition products may include the following

materials: carbon dioxide carbon monoxide and nitrogen oxides

Extinguishing media

5.3.Suitable: SMALL FIRE: Use dry chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

5.4 Not suitable: None known.

5.5 Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

5.6 Special remarks on fire hazards: During a fire, irritating and highly toxic gases may be generated during combustion or decomposition. Transferring dry pellets or granules between containers or charging into solvents can cause a build-up of static electricity which can be sufficient to cause fires and/or explosions in the presence of flammable materials. Equipment should provide a means of dissipating any charges that may develop.

Water spray should be used to cool containers.

6. Accidental release measures

6.1 Personal precautions: Lab coat. Impervious gloves. Safety glasses with side shields.

6.2 Environmental precautions: Collect product for recovery or disposal. Notify applicable government authority if release is reportable or could adversely affect the environment.

6.3 Methods for cleaning up: If emergency personnel are unavailable, carefully scoop up spilled materials and use a non-sparking or explosion-proof means to transfer material to an appropriate container for disposal by incineration.

7. Handling and storage

7.1 Handling: Use normal good industrial hygiene and housekeeping practices. Take precautionary measures against static discharges.

7.2 Storage :Store in a cool, dry, well-ventilated area. Keep away from heat, sparks and flames. Keep containers closed. Avoid moisture contamination. Transferring dry pellets or granules between containers or charging into solvents can cause a build-up of static electricity which can be sufficient to cause fires and/or explosions in the presence of flammable materials. Equipment should provide a means of dissipating any charges that may develop.

8. Physical and chemical properties

General information

Appearance

Physical state : Filament

Odor : Not available.

Important health, safety and environmental information

pH : Not available.

Boiling/condensation point : Not available.

Melting/freezing point : Not available.

Flash point : Not applicable.

Flammable limits : Not available.

Auto-ignition temperature : Not available.

Vapor pressure : Not available.

VOC : Not available.

9. Stability and reactivity

9.1 Chemical stability : The product is stable. Under normal conditions of storage and use, hazardous reactions will not occur.

9.2 Hazardous polymerization : Will not occur

9.3 Conditions to avoid : No specific data

9.4 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced

10. Toxicological information

10.1 Potential acute health effects

Inhalation : Non-irritating to the respiratory system.

Ingestion : /Not hazardous in normal industrial use.

Skin : Non-irritating. Molten polymer will adhere to skin causing deep thermal burns.

Eyes : May cause physical abrasion in contact with eyes. Molten polymer will cause serious burns to the eyes.

10.2 Potential chronic health effects

Chronic effects : No known significant effects or critical hazards

Target organs : No known significant effects or critical hazards.

Carcinogenicity: The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP.

Mutagenicity : There is no substantial evidence of mutagenic potential.

Teratogenicity : No information is available and no adverse teratogenic/embryotoxic effects are anticipated. No adverse reproductive effects are anticipated.

Fertility effects : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

11. Ecological information

11.1 Environmental effects : No known significant effects or critical hazards.

11.2 Biological Oxygen Demand (BOD 5 DAY) : Not Determined

11.3 Chemical Oxygen Demand (COD) : Not Determined

11.4 Other adverse effects : No known significant effects or critical hazards.

12. Disposal considerations

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements

Disposal should be in accordance with applicable regional, national and local laws and 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:

All information on this data sheet is based on the present state of our knowledge and does not guarantee of any kind of usage, application or purpose, whether implied or expressed since conditions of use are outside our control. It is provided for your guidance only. For your particular purpose, we recommend that you make tests to determine the suitability of a product prior to use. Each customer should establish his own rules and take proper steps appropriate to the circumstances within his control and must take responsibility for observing existing laws and regulations. This Data Sheet does not form part of the conditions of sale of our products and is of a general nature.

End of data sheet