

# Safety Data Sheet

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Beijing Tiertime Technology Co., Ltd.

No.18 Yanqi Avenue

Yanqi Economic Development Area

Huairou District, Beijing, P. R. China

Tel: +86 10-69667183

Fax: +86 10-51662221-805

| 1. PRODUCT AND COMPANY IDENTIFICATION |   |
|---------------------------------------|---|
| Product Name                          | ABS Filament, ABS+ Filament   |
| Region                                | China   |
| Company Name                          | Beijing Tiertime Technology Co., Ltd.   |
| Product type                          | Plastic Filament  |
| Restriction of use                    | None identified   |
| Company Name                          | Beijing Tiertime Technology Co., Ltd.<br>No.18 Yanqi Avenue Yanqi Economic Development Area Huairou District, Beijing P. R. China<br>Tel: +86 10-69667183 Fax: +86 10-51662221-805<br>E-mail: overseas@tiertime.com |

| 2. HAZARDS IDENTIFICATION     |      |
|-------------------------------|------|
| Most Important Hazards        | None |
| Adverse Human Health Effects  | None |
| Environmental Effects         | None |
| Physical and Chemical Hazards | None |

| 3. COMPOSITION/INFORMATION ON INGREDIENTS |  |
|---|--|
| Substance or Preparation                  | Substance  |
| Chemical Name                             | Acrylonitrile-Butadiene-Styrene Copolymer  |
| Content                                   | > 99 % (Additives < 1 %)   |
| Formula                                   | (C <sub>3</sub> H <sub>3</sub> N, C <sub>4</sub> H <sub>6</sub> , C <sub>8</sub> H <sub>8</sub> ) <sub>x</sub> |
| CAS No.                                   | 9003-56-9  |
| Impurities Contributing to                | None   |

|        |  |
|--------|--|
| Hazard |  |
|--------|--|

#### 4. FIRST AID MEASURES

|              |  |
|--------------|--|
| Inhalation   | In case of gases evolving from melted resin, move subject to fresh air.<br>Treat symptomatically.  |
| Skin Contact | In case of pellets or powder, wash with water. In case of melt, wash affected skin area and clothing with plenty of (soap and) water.<br>Seek medical advice.  |
| Eye Contact  | In case of pellets or powder, flush with plenty of water for at least 15 minutes.<br>Seek medical advice if any dust particles still remain.<br>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. |
| Ingestion    | Induce vomiting. Rinse mouth with water. Seek medical advice if necessary.   |

#### 5. FIRE-FIGHTING MEASURES

|                                 |                                    |
|---------------------------------|------------------------------------|
| Extinguishing Media             | Water, Foam, Dry chemical powder   |
| Special Fire-Fighting Procedure | Self contained breathing apparatus |
| Fire and Explosion Hazards      | None                               |

#### 6. ACCIDENTAL RELEASE MEASURES

|  |   |
|--|---|
| Methods for Cleaning up                  | Recovery if not contaminated or Disposal  |
| Recovery if not contaminated or Disposal | Pellets or powder remained on ground may cause slipping                                   |
| Environmental Precautions                | Gather pellets and powder thoroughly to avoid birds or fishes taking from draining water. |

#### 7. HANDLING AND STORAGE

|          |   |
|----------|---|
| Handling | Prevent from fire around handling area. 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. |
| Storage  | Keep the materials at a cool dry place. Protect from direct sunlight, rain and violent temperature fluctuation. Fire is inhibited around storage area.  |

| <b>8. EXPOSURE CONTROLS / PERSONAL PROTECTION</b> |   |
|---|---|
| Engineering measures                              | Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Provide appropriate exhaust ventilation at places where dust is formed.   |
| Control parameters                                | None  |
| PERSONAL PROTECTIVE EQUIPMENT:                    |   |
| Eye protection                                    | Safety glasses with side-shields. Goggles.  |
| Skin and body protection                          | Impervious clothing.  |
| Respiratory protection                            | Respirator must be worn if exposed to dust. Wear respirator with dust filter. Consult an industrial hygiene professional prior to respirator selection and use. Use a positive-pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. <b>WARNING:</b> Air purifying respirators do not protect workers in oxygen-deficient atmospheres. |
| Hand protection                                   | Preventive skin protection.   |
| Hygiene measures                                  | Avoid contact with skin, eyes and clothing.   |

| <b>9. PHYSICAL AND CHEMICAL PROPERTIES</b> |                       |
|--|-----------------------|
| Appearance                                 | Filament              |
| Physical state                             | Solid                 |
| Odor:                                      | None                  |
| Melting Temperature                        | Softening above 100°C |
| Solubility                                 | Insoluble in water    |
| Specific Gravity                           | 1.03 ~ 1.10           |

**10. STABILITY AND REACTIVITY**

|                             |  |
|-----------------------------|--|
| Flammability                | Yes  |
| Flash Point                 | 404°C  |
| Auto-ignition Temperature   | 466°C  |
| Reactivity with Water       | No   |
| Stability                   | Stable and non-reactive under normal handling and storage condition. |
| Thermal Decomposition Gases | CO, HCN, AN, SM and NO   |
| Combustion Energy           | 3.53 x 10 <sup>7</sup> J/kg (8424 Kcal/kg)                           |

**11. TOXICOLOGICAL INFORMATION**

|                            |   |
|----------------------------|---|
| Irritation                 | Fumes or vapors generated from decomposing resin may be irritant to eyes. |
| Acute oral toxicity (LD50) | Not determined  |
| Mutagenicity               | Not determined  |

**12. ECOLOGICAL INFORMATION**

To avoid being taken by ocean species or birds, disposal of the waste to the ocean and water sources is inhibited.

**13. DISPOSAL CONSIDERATIONS**

Controlled incineration or landfill according to local, state or national laws and regulations concerning health and pollution.  
Inadequate incineration may generate toxic gases such as CO, HCN, AN and SM.

**14. TRANSPORT INFORMATION**

Not classified

**15. REGULATORY INFORMATION**

Not available

**16. OTHER INFORMATION**

None