

Material Safety Data Sheet

Product Name : ABS Model

1.COMPANY IDENTIFICATION

Company	XYZprinting, Inc.
Address	No.147, Sec. 3, Beishen Rd., Shengkeng Dist., New Taipei City, Taiwan (R.O.C.)
Information Phone No.	886-2-77058001
Emergency Phone No.	886-2-77058001

2.COMPOSITION / INFORMATION ON INGREDIENTS

Substance or Preparation	Substance
Chemical Name	Acrylonitrile-Butadiene-Styrene Copolymer
Content	> 98 % (Additives ≤ 2 %)
Formula	(C ₃ H ₃ N, C ₄ H ₆ , C ₈ H ₈) _x
CAS No.	9003-56-9
Impurities Contributing to Hazard	None

3.HAZARD IDENTIFICATION

Most Important Hazards	None
Adverse Human Health Effects	None
Environmental Effects	None
Physical and Chemical Hazards	None

4.FIRST AID MEASURES

Inhalation	In case of gases evolving from melted resin, move subject to fresh air. 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. Seek medical advice.
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.
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
Personal Precautions	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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Threshold Limit Value		Not determined
Ventilation		Necessary to exclude dust, fumes and gases.
Personal Protection	Eye	Wear safety glasses for general purpose. Wear chemical goggles for cleaning molding machines.
	Respiratory	Wear masks for cleaning molding machines.
	Gloves	Necessary for handling melted resin.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Off white pellets
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.
Dust Explosion	Possible if powder exists. Explosion data for powder (< 145 mesh)
	Lower explosion limit 45 g/m ³
	Minimum ignition energy 3.6 mJ
	Maximum explosion pressure 7 x 10 ⁵ Pa
	Maximum pressure increase rate 3.2 x 10 ⁷ Pa/S
Thermal Decomposition Gases	CO, HCN, AN, SM and NO
Combustion Energy	3.53 x 10 ⁷ 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