

## MATERIAL SAFETY DATA SHEET

<b>Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</b>		
Trade Name: <b>MAGERIAL SCIENCE</b>		
Supplier:	BLD. 3, #16888 EAST TAIHU RD. SUZHOU PRC	<u>Emergency Response Number</u> +86 173-6613-9661

### Section 2. Composition and Information on Ingredients

<u>CAS Number</u>	<u>Chemical Name</u>
9003-56-9	Acrylonitrile/Butadiene/Styrene
9003-54-7	Styrene/Acrylonitrile Copolymer
100-42-5	Acrylonitrile/Butadiene/Styrene Terpolymer
107-13-1	Residual Arrylonitrile Monomer

### Section 3 Hazard Identification

<p><u>Emergency Overview</u> The ABS sheet is not expected to be an inhalation hazard under normal processing conditions. If material is processed under prolonged exposure to flame or high temperature, thermal burns to the skin may occur, and gases may be produced that are irritating to the respiratory system.</p> <p><u>Primary Routes of Exposure</u> Routes of entry could include eye, skin, and inhalation, due to exposure to flame (molten plastic).</p> <p><u>Acute Effects of Exposure due to High Temperature and Thermal Decomposition.</u> At Thermal Decomposition small amounts of Styrene, Ethylbenzene and Acrylonitrile may be emitted. Exposure of high concentrations of these vapors and fumes could cause nausea, drowsiness, and headache.</p> <p><u>Chronic Effects of Exposure to High Temperature and Thermal Decomposition</u> In October 1988, the National Institute for Occupational Safety and Health (NIOSH) found insufficient evidence to classify Styrene as a Carcinogen.</p>
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### Section 4 First-Aid Measures

<p><u>Inhalation</u> Remove affected individual to fresh air, seek medical attention if difficulties in breathing occur.</p> <p><u>Skin</u> If skin has contact with molten material, place affected area under cold running water. Seek medical attention for removal of material from the affected area.</p> <p><u>Eyes</u> If there is contact to the eyes with molten material, rinse with plenty of water and seek immediate medical attention. If fines enter the eye, rinse with water for 15 minutes and seek immediate medical attention if irritation develops.</p>
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### Section 5 Fire-Fighting Measures

<p><u>Suitable Extinguishing Media</u> Dry extinguisher, water, carbon dioxide, foam</p> <p><u>Protective Equipment for Fire-Fighting</u> Firefighters should be equipped with self-contained breathing apparatus.</p> <p><u>Hazardous Combustion Products</u> During a fire, irritating and toxic gasses and aerosols may be generated by thermal decomposition and combustion.</p>
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**Section 6 Accidental Release Measures**

The ABS material in sheet form is not applicable for this section.

**Section 7 Handling and Storage**Handling

Protect against flame and intense heat.

Storage

Store in well ventilated area, avoid extreme heat and any sources of ignition, or open flames.

Secondary Use / Reprocessing

When reprocessing material for secondary use, ground all handling equipment. Keep material and dust produced away from high heat and flame. Use good housekeeping practices when reprocessing material.

**Section 8 Exposure Controls and Personal Protection**Personal Protective EquipmentRespiratory Protection

During processing, respiratory protection may not be necessary if ventilation is adequately provided. At excessive processing temperatures, breathing protection may be required.

Hand Protection

Gloves may be required when processing the sheet due to sharp edges and when plastic is in the molten state.

Eye Protection

Safety glasses with side-shields are recommended.

General

Avoid contact with molten material on the skin, eyes and clothing. Handle product in accordance with good industrial hygiene and safety practices.

**Section 9 Physical and Chemical Properties**Physical State and Appearance

Solid ABS Sheet.

Flashpoint

730 deg. F - 752 deg. F (388 deg. C - 400 deg. C)

Autoignition Temperature

923 deg. F - 950 deg. F (495 deg. C - 510 deg. C)

Melting Point

180 deg. F - 225 deg. F (82 deg. C - 107 deg. C)

**Section 10 Stability and Reactivity**Stability and Reactivity

This product in the finished state (sheet) is stable.

Incompatibility with Various Substances

Reactive with strong oxidizing agents.

Decomposition Temperature

Begins at approximately 500 deg. F (260 deg. C).

**Section 10 Stability and Reactivity Continued:**Hazardous Decomposition Products

Carbon Dioxide, Water, Carbon Monoxide, Hydrocarbons, Hydrogen cyanide and possibly some original monomers (styrene and acrylonitrile) are released as fumes and vapors when processing the sheet at high temperature and exposure to flame.

**Section 11 Toxicological Information**Chronic Effects on Humans

No specific information is available, but no ecological hazard is suspected.

Other Toxic Effects on Humans

In plastic sheet form, not considered dangerous to humans.

**Section 12 Ecological Information**

No information is available but no ecological hazard is suspected

**Section 13 Disposal Considerations**Waste Information

Transfer to an approved disposal area in accordance with federal, state and local regulations.

**Section 14 Transport Information**DOT Classification

Not a DOT controlled or regulated material (U.S.A)

**Section 15 Regulatory Information**OSHA Classification

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA

Components of this product are listed on the TSCA Inventory.

CERCLA

This material is not subject to special reporting under the requirements of the Comprehensive Environment Response, Compensation and Liability Act.

SARA Title III

Section 302 Extremely Hazardous Substances.  
None reported.

## Section 311/312 Hazard Categories

Immediate Health Hazard; Delayed Health Hazard

## RCRA Status

It is the responsibility of the product user to determine at the time of disposal of the material, if it should be classified as a hazardous waste. (40 CFR 261.20.24)

State Regulations

No Proposition 65 chemicals present at levels that would require a warning under the California Safe Drinking Water and Toxic Enforcement Act.

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**Section 16 Other Information**

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Hazardous Material Information System (U.S.A)

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	0

ABS - Acrylonitrile/Butadiene/Styrene Terpolymer

Date Prepared: Feb. 26, 2023

The information listed within this MSDS is solely designated for the finished processed sheet. The information listed is to the best of our knowledge, accurate and reliable. However, there is no warranty or guarantee that can be made to its accuracy, reliability, or completeness. Magerial Science will not accept liability for any loss or damage that may occur from the use of this information.

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