



Material Safety Data Sheet (MSDS) for Polystyrene

Section 1: Identification

Product Name: Polystyrene

Chemical Formula: $(C_8H_8)_n$

Synonyms: PS, Styrofoam

CAS Number: 9003-53-6

Manufacturer's Name: ATDMC

Emergency Contact: 00903125147055

[Section 2: Hazard Identification

Classification:

Physical Hazards: Not classified as hazardous.

Health Hazards: Not classified as hazardous.

Environmental Hazards: Not classified as hazardous.

Potential Health Effects:

Inhalation: Inhalation of dust may cause respiratory irritation. Use in well-ventilated areas.

Skin Contact: May cause mild skin irritation. Prolonged or repeated contact may cause dermatitis.

Eye Contact: May cause eye irritation. Flush eyes with water for at least 15 minutes if irritation occurs.

Ingestion: Ingestion is not likely to occur under normal conditions. Swallowing large amounts may cause gastrointestinal irritation.

Section 3: Composition/Information on Ingredients

Chemical Name: Polystyrene

CAS Number: 9003-53-6

Concentration: 100%



Section 4: First Aid Measures

Inhalation: Remove to fresh air. If breathing difficulties persist, seek medical attention.

Skin Contact: Wash affected area with soap and water. If irritation persists, seek medical attention.

Eye Contact: Flush eyes with water for at least 15 minutes. If irritation persists, seek medical attention.

Ingestion: Rinse mouth with water. Do not induce vomiting. Seek medical attention if symptoms occur.

Section 5: Fire-fighting Measures

Extinguishing Media: Use water spray, foam, dry chemical, or carbon dioxide.

Firefighting Instructions: Wear appropriate protective equipment. Evacuate the area if the fire is uncontrollable.

Section 6: Accidental Release Measures

Personal Precautions: Wear protective equipment. Avoid breathing dust. Ventilate the area.

Environmental Precautions: Prevent material from entering drains or waterways.

Clean-up Procedures: Sweep or vacuum up spilled material. Dispose of in accordance with local regulations.

Section 7: Handling and Storage

Handling: Use in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Wash hands after handling.

Storage: Store in a cool, dry place away from direct sunlight and incompatible materials

Section 8: Exposure Controls/Personal Protection

Exposure Limits: Not established.

Personal Protective Equipment: Use gloves and safety glasses. Ensure adequate ventilation.

Section 9: Physical and Chemical Properties

Appearance: Transparent or translucent solid, often white or colorless

Density: Typically around 1.04 g/cm³

Melting Point: Approximately 240-260 °C (464-500 °F)

Solubility: Insoluble in water, soluble in many organic solvents such as benzene, toluene, and ethyl acetate



Section 10: Stability and Reactivity

Stability: Stable under normal conditions.

Incompatibility: Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: May release toxic fumes when heated to decomposition.

Section 11: Toxicological Information

Acute Toxicity: LD50 (oral, rat) >5000 mg/kg

Skin Irritation: Mild irritant

Eye Irritation: Irritant

Section 12: Ecological Information

Ecotoxicity: Not expected to be harmful to aquatic life.

Section 13: Disposal Considerations

Dispose of in accordance with local, state, and federal regulations.

Section 14: Transport Information

Not regulated for transportation.

Section 15: Regulatory Information

Follow all applicable regulations.

Section 16: Other Information

This information is provided in accordance with current regulations and is based on our knowledge and belief.