SAFETY DATA SHEET

In Accordance with 3rd revised edition of GHS

Section 1 – Identification of the Substance and Company

Product Name : HI830
Product Type : High Impact Polystyrene
Product Use : Can be used to produce injection or extrusion molded articles for commercial or industrial products.
Manufacturer : IRPC Public Company Limited.
299 Moo 5 Sukhumvit Road Amphur Muang Rayong Thailand
Emergency Call : +66(0) 38 802560
Website : www.irpc.co.th, www.irpcmarket.com

Section 2 – Hazards Identification

Regulation (EC) No 1272/2008: This product is not classified as dangerous according to Regulation (EC) No 1272/2008.
GHS: Not classified as dangerous
Label elements: Not applicable
Other hazards: Not applicable

Section 3 – Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS Number</th>
<th>EC Number</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polystyrene</td>
<td>9003-53-6</td>
<td>500-008-9</td>
<td>≥ 87</td>
</tr>
<tr>
<td>1,3-Butadiene polymer</td>
<td>9003-17-2</td>
<td>Polymer</td>
<td>≥ 5</td>
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</tbody>
</table>

Product contains high molecular weight polymers, and is not expected to be chemically active under normal conditions of handling and processing.

Section 4 – First-aid Measures

Skin Exposure : In case of skin contact with hot polymer immediately immerse in or flush with clean, cold water. If irritation develops, seek medical attention.
Eyes Exposure : If molten material should splash into eyes, flush eyes immediately with fresh water for 15 minutes while holding the eyelid open. Remove contact lenses, if worn. Get immediate medical attention.
Inhalation : Move the exposed person to fresh air. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.
Ingestion : No first aid procedures are required. Seek medical attention if a significant amount is swallowed.

Section 5 – Fire-fighting Measures

Suitable extinguishing agents : Dry chemicals, foam, water, carbon dioxide, and halon. DO NOT use water jets for large fires. Avoid using direct streams of water on molten burning material.
Hazards during fire-fighting: Carbon monoxide, carbon dioxide, original monomer other hydrocarbon.

Protective equipment: Wear self-contained respiratory protective device.

Section 6 – Accidental Release Measures

Personal precautions: Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions: Discharge into the environment must be avoided.

Cleanup:
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Pellets on the floor could present a serious slipping problem. Good housekeeping must be maintained at all times to avoid this hazard. Sweep, shovel, or vacuum material into clean containers. Place waste in an appropriate container for disposal.

Section 7 – Handling and Storage

Handling: Exposure of polystyrene to extremely high temperatures (315 °C or higher) may cause partial decomposition. Chemicals that may be released include styrene monomer, benzene, and other hydrocarbons. Handling of pellets may form dust. Filter and ventilate dust where necessary.

Storage conditions: Store in a cool, dry place in the original container when possible. Store below 50 °C. Keep away from moisture, excessive heat and sources of ignition. Do not place in direct sunlight.

Section 8 – Exposure Controls / Personal Protection

Exposure limits: No information on Exposure Limit Values.

Exposure control: Ventilation, enclosures, or other controls may be needed to keep airborne contaminates below exposure limits.

Personal protective equipment

Respiratory protection: Wear respiratory protection if ventilation is inadequate. Breathing protection device if dust is formed.

Eye protection: Chemical workers goggles recommended.

Protective clothing: Gloves required when handling hot material. In case of fire, wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

Ventilation: Provide adequate ventilation when processing material at elevated temperatures.

Engineering Controls: For molten materials: Provide mechanical ventilation; in general such ventilation should be provided at compounding/ converting areas and at fabricating/ filling work stations where the material is heated. Local exhaust ventilation should be used over and in the vicinity of machinery involved in handling the molten material.

Section 9 – Physical and Chemical Properties

Physical State: Solid Form

Odor and Appearance: Opaque pellets with characteristic odor

Boiling Point: Not applicable

Flash Point: Not applicable

Auto-ignition Temperature: Not applicable
**Vapor Pressure**: Not applicable

**Softening Point**: >90 °C

**Specific Gravity**: 1.04-1.05 (Water =1)

**Solubility in water**: Insoluble

**Solubility (Qualitative)**: Soluble in polar solvents

**Partition coefficient**: n-octanol : Not applicable

**pH**: Not available

### Section 10 – Stability and Reactivity

**Stability**: Stable in ambient temperature.

**Condition to Avoid**: Avoid temperatures above 300°C.

**Material to Avoid**: Avoid solvents and oxidizing agents.

**Dangerous decomposition**: Carbon dioxide, carbon monoxide, hydrocarbons, dense smoke.

### Section 11 – Toxicological Information

**Acute toxicity**: No relevant information available.

**Irritating/corrosive effects**

- **Eye Irritation**: Prolonged contact can causes eye irritation.
- **Skin Irritation**: May cause skin irritation.
- **Respiratory Irritation**: May cause allergic respiratory response.
- **Ingestion Irritation**: Swallowing larger amounts may cause injury.

### Section 12 – Ecological Information

**Aquatic toxicity**: No relevant studies identified.

**Persistence and degradability**: The product is not easily biodegradable.

**Bio-accumulative potential**: Not expected to be bio-accumulative due to its insolubility in water.

**Mobility in soil**: No relevant studies identified.

**Other adverse effects**: Not expected to pose a significant ecological hazard.

### Section 13 – Disposal Considerations

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

Dispose of by: burial in a land-fill specifically licensed to accept chemical and/or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material). Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.
# Section 14 – Transport Information

<table>
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<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Class</th>
<th>Packing group</th>
<th>Label</th>
<th>Proper Shipping Name</th>
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# Section 15 – Regulatory Information

**US Toxic Substances Control Act**
All components of this product are on the TSCA Inventory.

**HMIS - USA**
Health – 0, Flammability – 1, Reactivity – 0

**NFPA - USA**
Health – 0, Flammability – 1, Reactivity – 0

**European Inventory of Existing Commercial Chemical Substances (EINECS)**
The components of this product are on the EINECS inventory or are exempt from inventory requirements.

**Canada – WHMIS**
Material is not controlled under WHMIS.

# Section 16 – Other Information

- **DOT**: Department of Transportation
- **ADR**: European agreement concerning the international carriage of dangerous goods by road.
- **RID**: Regulations concerning the international carriage of dangerous goods by rail.
- **IMDG – CODE**: International maritime dangerous goods code
- **ICAO**: International Civil Aviation Organization
- **IATA**: International air transport association
- **GHS**: Globally Harmonized System of Classification and Labeling of Chemicals
- **CLP**: Classification and Labeling of Packaging
- **NFPA**: National Fire Protection Association
- **HMS**: Hazardous Materials Identification System
- **WHMIS**: Workplace Hazardous Materials Information System

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