

SAFETY DATA SHEET

In Accordance with 3rd revised edition of GHS

Section 1 – Identification of the Substance and Company

Product Name	: 1100S
Product Type	: PP Homopolymer
Product Use	: Raw material for plastic industry, Resin, extrusion and compounding, plastic molding, molded articles, films and coatings
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

Chemical name	CAS Number	EC Number	Composition
Polypropylene	9003-07-0	Polymer	≥ 99

Section 4 – First-aid Measures

Skin Exposure	: If molten material comes in contact with the skin, cool under ice water or a running stream of water. DO NOT attempt to remove the material from the skin. Remove could result in severe tissue damage. Get 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. 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** : Collect spilled material using a method that minimizes dust generation (e.g. wet methods, HEPA vacuum). Place waste in an appropriate container for disposal. Allow molten material to solidify before 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, well-ventilated area or silo away from sources of heat, flame and sparks. Ventilate enclosed storage areas, such as trailers and railcars, before entering. Have emergency equipment for fires and spills readily available.

Section 8 – Exposure Controls / Personal Protection

Exposure limits

Component Name	Reference	TWA	
		ppm	mg/m3
Polypropylene	Italy-OEL	-	10
	Canada-OEL	-	10

- Exposure control** : Ventilation, enclosures, or other controls may be needed to keep airborne contaminates below exposure limits.
- Personal protective equipment**
- Respiratory protection : No special respiration protection is normally required.
- 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

- Appearance** : Opaque, translucent, colorless pellets or white fluff (powder), solid
- Odor** : Characteristic odor
- Boiling Point** : Not applicable
- Flash Point** : 348 °C (ASTM D1929)

Melting Point	: 130 – 170 °C
Auto-ignition Temperature	: 380 °C
Vapor Pressure	: Not applicable
Specific Gravity	: 0.85 – 0.95
Density	: 0.85 – 0.95 g/cm ³
Solubility in water	: Insoluble
Solubility (Qualitative)	: Soluble in polar solvents
Partition coefficient: n-octanal	: Not applicable
pH	: Not available
Bulk Density	: 400(powder)-600(pellet) kg/m ³

Section 10 – Stability and Reactivity

Stability	: This material is considered a stable thermoplastic, with no chemical reactivity under normal ambient and anticipated handling conditions of temperature and pressure.
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

Chemical name	Route	Species	Acute Toxic Value
Polypropylene	Oral	Rat	LD ₅₀ > 8,000 mg/kg

Irritating/corrosive effects

Eye Irritation	: Solid particles may cause transient irritation from mechanical abrasion.
Skin Irritation	: Molten material may cause thermal burns.
Respiratory Irritation	: Not a likely route of exposure. Process fumes may cause irritation.
Ingestion Irritation	: May cause a choking hazard if swallowed.

Carcinogenic effect:

International Agency for Research on Cancer (IARC): Group 3
NOT classifiable as to its carcinogenicity to humans.

Section 12 – Ecological Information

Aquatic toxicity	: No relevant studies identified.
Persistence and degradability	: This material is not expected to be readily 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

Regulatory information	UN number	Class	Packing group	Label	Proper Shipping Name
DOT	-	-	-	-	-
ADR/RID	-	-	-	-	-
IMDG CODE	-	-	-	-	-
ICAO/IATA	-	-	-	-	-

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
HMIS	: Hazardous Materials Identification System
WHMIS	: Workplace Hazardous Materials Information System

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