

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: GP110

Product Type: General Purpose Polystyrene

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Can be used to produce injection or extrusion molded articles for commercial or Industrial products.

1.3 Detail of the Supplier of the safety data sheet

Manufacturer/Supplier: IRPC Public Company Limited

Address: 299 Moo. 5 Sukhumvit Road, Amphur Muang, Rayong THAILAND

Website: www.irpc.co.th , <https://polimaxx.irpc.co.th>

1.4 Emergency call: +66(0)38 802560

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation No. 1272/2008 (CLP) and GHS classification

Flammable liquids Category 3

Skin Corrosion/Irritation Category 2

Eye Irritation Category 2

Acute Toxicity Category 4

2.2 Label elements

Pictogram:



Signal Word: Warning

Hazard Statement:

H226 : Flammable liquid and vapour

H315 : Causes skin irritation

H319 : Causes serious eye irritation

H332 : Harmful if inhaled

Precautionary Statement:

P210 : Keep away from heat/sparks/open flames/hot surfaces and other ignition sources – No smoking

P233 : Keep container tightly closed

P240 : Ground, bond container and receiving equipment

P241 : Use explosion-proof electrical/ventilating/light/equipment

P242 : Use non-sparking tools

P243 : Take action to prevent static discharges

P261 : Avoid breathing dust/fume/gas/mist/vapours/spray

P264 : Wash hands thoroughly after handling

P271 : Use only outdoors or in a well-ventilated area

- P280 : Wear protective gloves/protective clothing/eye protection/face protection/hearing protection
- P302 + P352 : IF ON SKIN: Wash with plenty of water
- P303+P361+P353 : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected area with water or shower
- P304+P340 : IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.
Continue rinsing
- P317 : Get medical help
- P321 : "Specific treatment : reference to supplemental first aid instruction
- P332 + 317 : If skin irritation occurs: Get medical help
- P337+P317 : If eye irritation persists: Get medical help
- P362+P364 : Take off contaminated clothing and wash it before reuse
- P370+P378 : In case of fire: Use manufacturer/supplier or the competent authority to specify appropriate media to extinguish If water increase risk
- P403+P235 : Store in a well ventilated place. Keep cool
- P501 : Dispose of contents/containers in accordance with local regulation

2.3 Other hazards: Not available

SECTION 3: Compositions/information ingredients

3.1 Substances

Chemical Name	CAS Number	EC Number	Percent weight	SCL, M-factor, ATE
Polystyrene	9003-53-6	500-008-9	> 98	-
Additives	Proprietary	Proprietary	< 1	-
Styrene monomer (Impurities which not contribute to GHS classification or Hazard)	100-42-5	202-851-5	< 0.1	-

3.2 Additional information:

The product has not been contained dangerous substances above the limits.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes: Remove affected persons from the danger area and ensure that is the safety area.

Following inhalation: Move the exposed person to fresh air. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.

Following skin contact: In case of skin contact with hot polymer immediately immerse in or flush with clean, cold water.

Following eye contact: Remove contact lenses, if worn. Get immediate medical attention.

Following ingestion: No first aid procedures are required. Seek medical attention if a significant amount is swallowed.

Self – protection of the first aider: In case of working in the dangerous areas, please attention of safety in each areas.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measure

5.1 Extinguishing media

Suitable extinguishing media: Foam, CO₂, Dry chemical powder, water spray or fog.

Unsuitable extinguishing media: Avoid using direct streams of water on molten burning material.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon monoxide, carbon dioxide, original monomer other hydrocarbon oxidation products.

5.3 Advice for firefighters: Wear self-contained respiratory protective device.

SECTION 6: Accidental releases measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Protective equipment: Wear protective equipment, Ensure adequate ventilation, Keep unprotected persons away.

Avoid dust formation.

Emergency procedure: Not available.

6.2 Environmental precautions: Discharge into the environment must be avoided.

6.3 Method and material for containment and cleaning up

6.3.1 For containment: Use care during clean-up to avoid exposure to the material and injury from broken containers.

6.3.2 For cleaning up: Collect spilled material using a method that minimizes dust generation (e.g., wet methods, HEPA vacuum).

6.3.3 Other information: Place waste in an appropriate container for disposal.

6.4 Reference to other sections :

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

7.1 Precaution for safe handling

Protective measures: Handling of pellets may form dust. Filter and ventilate dust where necessary. Do not breathe dust.

Measures to prevent fire: Keep away from excessive heat and sources of ignition.

Measures to prevent aerosol and dust generation: Store in cool location and ventilated place.

Measures to protect the environment: Store in ventilated place.

Advice on general occupational hygiene: Not available.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep away from moisture, excessive heat and sources of ignition. Do not place in direct sunlight.

Packaging materials: Avoid using the broken containers.

Requirements for storage rooms and vessels:

Store in a cool, dry, well-ventilated area or silo away from sources of heat, flame and sparks.

Further information on storage conditions:

Chemicals that may be released include styrene monomer, benzene, and other hydrocarbons.

7.3 Specific end use(s)

Recommendations:

See the recommended processing condition and technical data sheet on this product for further information.

Industrial sector specific solutions: Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure limits: No exposure limit value known.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Substance/mixture related measures to prevent exposure during identified uses:

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.

Structural measure to prevent exposure:

Provide adequate ventilation when processing material at elevated temperatures. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Organizational measures to prevent exposure: Not available.

Technical measures to prevent exposure: Not available.

8.2.2 Personal protection equipment

8.2.2.1 Eye and face protection: Chemical workers goggles recommended.

8.2.2.2 Skin protection: In case of fire, wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

Other skin protection: Not available.

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

8.2.3 Environmental exposure controls : Avoid discharge into environment.

Substance/mixture related measures to prevent exposure: None specific

Instruction measures to prevent exposure: None specific

Organizational measures to prevent exposure: None specific

Technical measures to prevent exposure: None specific

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: Pellet
Odor	: Odourless
Color	: -
Boiling Point	: Not applicable
Initial Boiling Point	: -
Flash Point	: Not applicable
Melting Point	: -
Vapor Pressure	: Not applicable
Auto ignition temperature	: Not applicable
Solubility	: Soluble in polar solvent
Viscosity	: Not applicable
Upper/Lower flammability or explosive limit	: Not applicable
pH	: Not applicable

Relative density	: Not applicable
Vapor density	: -
Partition characteristic	: -
Specific Gravity	: 1.04 – 1.05 (water = 1)
Partition coefficient: n - octanol/water	: Not applicable
Decomposition temperature	: Not applicable
Explosive properties	: Not applicable
Softening point	: > 90 Degree Celsius

9.2 Other safety information: Not available.

SECTION 10: Stability and reactivity

10.1 Reactivity: Non-reactive under normal handling and storage conditions.

10.2 Chemical stability: Stable under normal ambient temperature.

10.3 Possibility of hazardous reactions: Non hazards under normal handling and storage conditions.

10.4 Condition to avoid: Avoid temperatures above 300°C.

10.5 Incompatible material: Avoid solvents and oxidizing agents.

10.6 Hazardous decomposition products: Carbon dioxide, carbon monoxide, hydrocarbons, dense smoke.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

No relevant studies found the toxicity value

Acute toxicity: Harmful if inhaled.

Skin corrosion/irritation: Can cause skin irritation.

Serious eye damage/irritation: Can cause serious eye irritation.

Respiratory or skin sensitisation: Data lacking.

Germ cell mutagenicity: Data lacking.

Carcinogenicity: Data lacking.

Reproductive toxicity: Data lacking.

STOT-single exposure: Data lacking.

STOT-repeated exposure: Data lacking.

Aspiration hazard: Data lacking.

11.2 Irritating/corrosive effects

Eye Irritation: Prolonged contact can causes eye irritation.

Skin Irritation: May cause skin irritation.

Inhalation: May cause allergic respiratory response.

Ingestion: Swallowing larger amounts may cause injury.

SECTION 12: Ecological information

12.1 Toxicity : No relevant studies found.

12.2 Persistence and degradability

Abiotic Degradation: No data available.

Physical and photo-chemical elimination: No data available.

Biodegradation: The product is not easily biodegradable.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log K_{ow}): No data available.

Bioconcentration factor (BCF): No data available.

12.4 Mobility in soil

Known or predicted distribution to environmental compartments: No relevant studies identified.

Surface tension: No data available.

Adsorption/Desorption: No data available.

12.5 Results of PBT and vPvB assessment : No data available.

12.6 Endocrine disrupting properties : No data available.

12.7 Other adverse effects : No data available.

12.8 Additional information : Insoluble in water. Not expected to be bio-accumulative.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal:

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

Waste codes / waste designation according to LoW: No data available.

13.1.2 Waste treatment-relevant information:

Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

13.1.3 Sewage disposal-relevant information: Do not discharged into environment.

13.1.4 Other disposal recommendations: No data available.

SECTION 14: Transport information

Regulatory information	UN number	Classes	Packing group	Label	Additional information
DOT	Not regulated	-	-	-	-
ADR/RID	Not regulated	-	-	-	-
IMDG CODE	Not regulated	-	-	-	-
ICAO/IATA	Not regulated	-	-	-	-

Environmental hazards: No data available.

Special precautions for user: No data available.

Maritime transport in bulk according to IMO instruments: No data available.

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US Toxic Substances Control Act:

All components of this product are on the TSCA Inventory.

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.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

16.1 Indication change: According to Regulations (EC) 1907/2006(REACH) & 1272/2008(CLP)

16.2 Abbreviation and acronyms

ADR	: European agreement concerning the international carriage of dangerous goods by road.
RID	: Regulations concerning the international carriage of dangerous goods by rail.
CLP	: Classification and Labeling of Packaging
DOT	: Department of Transportation
GHS	: Globally Harmonized System of Classification and Labeling of Chemicals
HMIS	: Hazardous Materials Identification System
IATA	: International air transport association
ICAO	: International Civil Aviation Organization
IMDDG-CODE	: International maritime dangerous goods code
NFPA	: National Fire Protection Association
NIOSH	: The National Institute for Occupational Safety and Health
OSHA	: Occupational Safety and Health Administration
WHMIS	: Workplace Hazardous Materials Information System

16.3 Key literature references and sources for data

<http://echa.europa.eu/>

<https://cameochemicals.noaa.gov>

16.4 Training advice: No data available.

16.5 Further information:

NFPA - USA

Health : 0 Flammability : 1 Reactivity : 0

HMIS

Health : 0 Flammability : 1 Reactivity : 0

SDS Information

GHS Revision : 9

Revision Date: 8/03/2023

According to EU 1907/2006 (REACH), 1272/2008 (CLP), Commission Regulation (EU) 2020/878

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