

SAFETY DATA SHEET

In Accordance with 4th revised edition of GHS

Section 1 – Identification

| | |
|----------------------------|---|
| Product Name | : KU901 |
| Product Type | : High Heat Resistance |
| Product Description | : ABS, ABS Resin |
| Chemical Name | : Acrylonitrile Butadiene Styrene |
| Chemical Formula | : $(C_3-H_3-N)_n(C_4-H_6)_n(C_8-H_8)_n$ |
| Chemical Family | : Thermoplastic Polymer |
| Product Use | : Can be used to produce 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. |
| Directive 67/548/EEC | : This product is not classified as dangerous according to EU Directive 67/548/EEC. |
| Regulation (EC) No 1907/2006 | : This product is complied REACH Regulation (EC) No 1907/2006. |
| GHS | : Not classified |
| Label elements | : Not applicable |
| Other hazards | : Not applicable |

Section 3 – Composition / Information on Ingredients

| Chemical name | CAS Number | EC Number | Percent weight |
|---|------------|-----------|----------------|
| Acrylonitrile Butadiene Styrene Copolymer | 9003-56-9 | Polymer | > 99 |

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

| | |
|----------------------------|--|
| General information | : Clothing and shoes must be immediately removed, decontaminated |
| 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 | : Flush with water for at least 20 minutes. Seek medical attention if irritation persists |
| Inhalation | : Remove person to fresh air. Assist in breathing if necessary. Seek medical attention. |
| Ingestion | : 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.

Hazards during fire-fighting : Carbon monoxide, carbon dioxide, hydrogen cyanide.

Protective equipment : Wear self-contained respiratory protective device.

Section 6 – Accidental Release Measures

Personal precautions : Avoid inhalation.

Environmental precautions : Discharge into the environment must be avoided.

Cleanup:

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Sweep/shovel up or spray with water and collect in a suitable container. Allow molten material to solidify before disposal. Avoid production of dust.

Section 7 – Handling and Storage

Handling : Do not handle material without proper protective equipment. Provide adequate ventilation. Maintain good housekeeping in work areas.

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

| Component Name | Reference | TWA | | STEL | |
|----------------|-----------|-----|-------------------|------|-------------------|
| | | ppm | mg/m ³ | ppm | mg/m ³ |
| Styrene | OSHA PEL* | 100 | - | - | - |
| | ACGIH TLV | 20 | - | 40 | - |

*OSHA PEL: Acceptable ceiling concentration (ACC) 200 ppm, maximum concentration above ACC 600 ppm

Exposure control : Ventilation, enclosures, or other controls may be needed to keep airborne contaminants 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.

Other protective equipment: N.A.

Section 9 – Physical and Chemical Properties

Physical State : Solid Form

Odor and Appearance : Plastic pellets in natural or compounded color with characteristic odor.

Softening Point : >105 °C

Specific Gravity : 1.03-1.07 (Water =1)

Percent Volatile (Vol %) : Nil
 Solubility in water : Insoluble
 Solubility (Qualitative) : Soluble in polar solvents

Section 10 – Stability and Reactivity

Stability : Stable
 Condition to Avoid : Avoid temperatures above 350°C.
 Material to Avoid : Avoid solvents and oxidizing agents.
 Dangerous decomposition: Carbon monoxide, carbon dioxide, styrene, acrylonitrile, hydrocarbon, cyanide.

Section 11 – Toxicological Information

Acute Toxicity

| Chemical name | Route | Species | Acute Toxic Value |
|---------------|------------|---------|-----------------------------|
| Styrene | Oral | Rat | LD ₅₀ 5000 mg/kg |
| | Inhalation | Rat | - |

Irritating/corrosive effects

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

Section 12 – Ecological Information

Toxicity : No relevant studies identified.
 Persistence and degradability : The product is not easily biodegradable.
 Bio-accumulative potential : Insoluble in water. Not expected to be bioaccumulative.
 Mobility in soil : No relevant studies identified.
 Other adverse effects : Not expected to pose a significant ecological hazard.

Section 13 – Disposal Considerations

Disposal methods:

Transfer to an approved disposal area in accordance with national, state and local regulations. Recycling uncontaminated packaging recommended.
 Package must be recycled in compliance with national legislation and environmental regulations.

Section 14 – Transport Information

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

Section 15 – Regulatory Information

US Toxic Substances Control Act

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 29 CFR 1910.1200.

HMIS -USA

Health – 0, Flammability – 1, Reactivity – 0

National Fire Protection Association - 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.

EU Directives 67/548/EEC, 1999/45/EC and Regulation (EC) No 1272/2008

The product is not classified as dangerous for supply according to the Regulation (EC) No 1272/2008 and the EC directive 67/548/EEC and 1999/45/EC.

Canada – WHMIS

Material is not controlled under WHMIS.

Section 16 – Other Information

The information in this document is based on our best present. Nevertheless, it does not constitute a guarantee for any specific product features and does not establish any a legally binding contract.

| | | |
|-------------|---|--|
| 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 |
| WHMIS | : | Workplace Hazardous Materials Information System |

The information above is believed to be accurate and represents the best of our knowledge, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.