

SAFETY DATA SHEET

In According with 3rd revision GHS SDS

Section 1 – Identification

Product Name	: AN450R
Product Type	: Flame Retardant
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	: Thai ABS Company Limited (A Company of IRPC Group) 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	75
Flame Retardant Additives	Proprietary	-	23
Other Additives	Proprietary	-	< 2

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/m3	ppm	mg/m3
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 equipments

Respiratory protection : Wear respiratory protection if ventilation is inadequate. Breathing protection device is needed 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 equipments: 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 : > 100 °C

Specific Gravity (Water =1): 1.04-1.07

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 300°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 bio-accumulative.
- 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	Classes	Packing group	Label	Additional information
ADR / RID Class	Not regulated	-	-	-	-
IMDG Class	Not regulated	-	-	-	-
ICAO / IATA Class	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.

SARA 313

Material is not subject to SARA 313 reporting requirements.

OSHA

None of the chemicals in this product are considered highly hazardous by OSHA.

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.

Department issuing SDS : Petrochemical Scheduling and Inventory Division , IRPC (Public) CO., LTD.

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.

ABS Flame Retardant
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