

**SAFETY DATA SHEET****ACRYLONITRILE**

CAS No.: 107-13-1

This Safety Data Sheet is compiled from well-established published chemical, GHS classification and regulatory reference sources for this substance. It is supplied by Suraj Chemicals as the distributor/supplier of record and is not a manufacturer-issued document. Users should also consult the specific manufacturer's SDS where available.

1. IDENTIFICATION

Product Name	Acrylonitrile
CAS Number	107-13-1
Recommended Use	Industrial / commercial chemical trading and distribution
Supplier	Suraj Chemicals, No 92, Govindappa Naicken Street, Shiva Complex, Chennai - 600001, India
Emergency Telephone	+91 - 9840284032, 9176135357 / +91 - 44 - 25393652

2. HAZARD(S) IDENTIFICATION

GHS Signal Word	Danger
HAZARD CLASSIFICATION • Flammable liquid - Category 2 • Acute toxicity, oral - Category 3 • Acute toxicity, dermal - Category 3 • Acute toxicity, inhalation - Category 3 • Skin corrosion - Category 1B • Serious eye damage - Category 1 • Skin sensitization - Category 1 • Carcinogenicity - Category 1B • Specific target organ toxicity, single exposure - Category 3 (respiratory irritation) • Acute aquatic toxicity - Category 2	
HAZARD STATEMENTS • H225 - Highly flammable liquid and vapour • H301 - Toxic if swallowed • H311 - Toxic in contact with skin • H330 - Fatal if inhaled • H314 - Causes severe skin burns and eye damage • H317 - May cause an allergic skin reaction • H350 - May cause cancer • H335 - May cause respiratory irritation • H401 - Toxic to aquatic life	
PRECAUTIONARY STATEMENTS • P201 - Obtain special instructions before use • P210 - Keep away from heat, sparks, open flames and hot surfaces; no smoking • P260 - Do not breathe vapours • P264 - Wash exposed skin thoroughly after handling • P280 - Wear protective gloves/eye protection/face protection/respiratory protection • P284 - Wear respiratory protection • P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor • P303+P361+P353 - IF ON SKIN: remove contaminated clothing immediately and rinse skin with water • P304+P340 - IF INHALED: remove 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; continue rinsing • P310 - Immediately call a POISON CENTER or doctor • P405 - Store locked up	

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Acrylonitrile
CAS Number	107-13-1
Physical State	Liquid
Appearance / Odour	Colorless to pale yellow liquid with a sharp, onion/garlic-like odor.

4. FIRST-AID MEASURES

Eye Contact	Rinse cautiously with water for several minutes; remove contact lenses if present; continue rinsing and get immediate medical attention.
Skin Contact	Remove contaminated clothing immediately and rinse skin with plenty of water for at least 15 minutes; seek immediate medical attention.
Inhalation	Remove immediately to fresh air; if breathing is difficult, give oxygen; seek immediate medical attention due to cyanide-related toxicity risk.
Ingestion	Do NOT induce vomiting; rinse mouth; seek immediate medical attention.

5. FIRE-FIGHTING MEASURES	
Suitable Extinguishing Media	Dry chemical, carbon dioxide, alcohol-resistant foam; water spray to cool exposed containers.
Unsuitable Extinguishing Media	Avoid a straight/high-pressure water stream, which can spread the fire.
Special Hazards	Highly flammable, low-flash-point liquid producing vapor that readily forms explosive mixtures with air; combustion or thermal decomposition releases highly toxic hydrogen cyanide and oxides of nitrogen; uninhibited or heat-exposed material can undergo hazardous exothermic polymerization; firefighters must wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES	
Measures	Evacuate non-essential personnel, eliminate all ignition sources, ventilate the area, contain the spill, avoid all contact and inhalation, prevent entry into drains/waterways, and collect using appropriate absorbents for disposal by trained personnel.

7. HANDLING AND STORAGE	
Handling Precautions	Use only in a closed system or with robust local exhaust ventilation, keep away from heat/sparks/open flame, use grounded/bonded equipment, avoid all skin/eye contact and inhalation, and ensure the product remains properly inhibited to prevent hazardous polymerization; be aware of its metabolic conversion to cyanide in the body.
Storage Conditions	Store in a cool, well-ventilated, flammables-rated area away from heat, light and oxidizers, in tightly closed, inhibited containers; store locked up/restricted access given its carcinogenicity and acute toxicity classification; monitor inhibitor content per supplier guidance.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION	
Exposure Limits / PPE	OSHA PEL ~2 ppm TWA / ACGIH TLV ~2 ppm TWA (skin notation); requires chemical-resistant gloves (e.g., Viton, laminate film), full-face respirator with organic vapor cartridge or supplied air, chemical splash goggles, and impervious protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES	
Physical State	Liquid
Appearance / Odour	Colorless to pale yellow liquid with a sharp, onion/garlic-like odor.
Boiling Point	~77-78 C
Melting Point	~-84 C
Flash Point	~0 to -5 C (closed cup)
Density / Specific Gravity	~0.806 g/cm3 at 20 C
Water Solubility	~73-75 g/L at 20 C (moderately soluble)
pH Value	Not applicable (non-aqueous, essentially neutral organic liquid)

10. STABILITY AND REACTIVITY	
Stability	Stable when properly inhibited and stored per specification; exposure to heat, light or loss of inhibitor can trigger hazardous exothermic polymerization.
Incompatible Materials	Strong oxidizers, strong acids and bases, amines, and polymerization initiators/catalysts.
Hazardous Decomposition	Hydrogen cyanide, oxides of nitrogen, carbon monoxide and carbon dioxide on combustion or strong thermal decomposition.

11. TOXICOLOGICAL INFORMATION	
Summary	Fatal if inhaled, toxic if swallowed or in contact with skin; corrosive, causing severe skin burns and eye damage; a confirmed skin sensitizer; classified as a human carcinogen (IARC Group 2B/EU Category 1B) based on substantial animal and epidemiological evidence, chiefly from its role as a key acrylic fiber/ABS resin monomer; metabolized partly to cyanide, contributing to acute systemic toxicity.

12. ECOLOGICAL INFORMATION	
Summary	Toxic to aquatic organisms; moderately persistent; should be strictly prevented from entering waterways due to acute toxicity and carcinogenic hazard profile.

13. DISPOSAL CONSIDERATIONS	
Disposal Method	Dispose of as hazardous waste through a licensed specialist waste management/incineration facility in accordance with local regulations; never discharge to drains or the general environment.

14. TRANSPORT INFORMATION	
UN Number	UN1093
Transport Hazard Class	Class 3 (Flammable liquid), subsidiary risk Class 6.1 (Toxic)
Packing Group	I

15. REGULATORY INFORMATION	
Notes	Key monomer for acrylic fiber, ABS/SAN resin and acrylamide production; classified as a carcinogen, acutely toxic, corrosive, flammable and sensitizing substance under GHS, OSHA HCS and EU CLP; regulated for transport under IMDG/ADR/IATA as UN1093 'Acrylonitrile, stabilized', Class 3 (subsidiary 6.1), Packing Group I; handling restricted to trained personnel with appropriate engineering controls.

16. OTHER INFORMATION	
Prepared By	Suraj Chemicals, Technical / QA Desk
Date of Issue	29 Sep 2026
Note	This SDS is compiled from well-established published GHS hazard classification data and general chemical reference sources for this substance, in the standard 16-section format. Values are believed accurate but Suraj Chemicals makes no warranty, express or implied, regarding their completeness. Users should evaluate suitability for their own specific use.

"DEALERS IN ACIDS, SOLVENTS, MINERALS, BASES AND SPECIALISED CHEMICAL COMPOUNDS"

+91 - 9840284032, 9176135357
+91 - 44 - 25393652, 42130281
sales@surajchemicals.com
surajchemicals@yahoo.com

No 92, Govindappa Naicken Street
Shiva Complex, Chennai - 600001
www.surajchemicals.com
GST NO : 33ACEPV8190L1ZZ

AUTHORISED DEALER AND IMPORTER FOR
GRASIM INDUSTRIES (ADITYA BIRLA), BASF (GERMANY), GODREJ INDUSTRIES, SNF (FRANCE)