

## 1. Product and Company Identification

www.rxmarine.com

Product Name Acrylonitrile  
Part Number RXSOL-19-6517-001

### Company Details:

RX MARINE INTERNATIONAL  
105, A wing , BSEL , TECH PARK.  
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone +91 22 20871200 - 1400  
Fax +91 22 27612100 ::AOH :0091 9821214367  
Email [mail@rxmarine.com](mailto:mail@rxmarine.com)  
Website [www.rxmarine.com](http://www.rxmarine.com)

## 2. Composition / Information on ingredients

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Chemical Name Acrylonitrile 500ML  
Cas no. 107-13-1  
Formula CH<sub>2</sub>.CH.CN  
Molecular weight 53.06 g/mol  
EC-No 203-466-5  
Index-No. 608-003-00-4

## 3. Hazards Identification

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Classification of the substance or mixture

- Flammable liquids (Category 2), H225
- Acute toxicity, Oral (Category 3), H301
- Acute toxicity, Inhalation (Category 3), H331
- Acute toxicity, Dermal (Category 3), H311
- Skin irritation (Category 2), H315
- Serious eye damage (Category 1), H318
- Skin sensitisation (Category 1), H317
- Carcinogenicity (Category 1B), H350
- Reproductive toxicity (Category 2), H361
- Specific target organ toxicity - single exposure (Category 3),  
Respiratory system, H335
- Chronic aquatic toxicity (Category 2), H411

Flammable liquids (Category 2), H225

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Skin irritation (Category 2), H315

Serious eye damage (Category 1), H318

Skin sensitisation (Category 1), H317

Carcinogenicity (Category 1B), H350

Reproductive toxicity (Category 2), H361

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Hazard statement(s)

H225	Highly flammable liquid and vapour
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child
H411	Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
Supplemental Hazard Statements	None
Other hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Lachrymator., Vesicant.

## 4. First Aid Measures

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General advice

Consult a physician. Show this safety data sheet to the doctor in attendance

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

## 5. Fire-fighting Measures

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Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

Further information

Use water spray to cool unopened containers

## 6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Reference to other sections

For disposal see section 13.

## 7. Handling and Storage

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Precautions for safe handling

Avoid exposure

obtain special instructions before use. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition

No smoking. Take measures to prevent the build up of electrostatic charge.

Conditions for safe storage, including any incompatibilities

Store in cool place

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510)

Flammable liquids

## 8. Exposure controls and personal protection

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Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product..

PERSONAL PROTECTION

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at

Respiratory protection	the specific workplace Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

## 9. Physical and chemical properties

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Appearance	Clear liquid
Colour	Colourless
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	Melting point/range: -83 °C - lit.
Initial boiling point and boiling range	77 °C - lit.
Flash point	-4.99 °C - closed cup
Evaporation rate	No data available
Flammability (solid, gas) Upper/lower	No data available Upper explosion limit: 17 %(V) Lower explosion limit: 3 %(V)
flammability or explosive limits	
Vapour pressure	86 mmHg at 20 °C
Vapour density	1.83 - (Air = 1.0)
Relative density	0.806 g/cm <sup>3</sup>
Water solubility	soluble
Partition coefficient n octanol/water	log Pow: 0.25
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## 10. Stability and reactivity

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Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Oxidizing agents, Copper
Hazardous decomposition products	
Hazardous decomposition products formed under fire conditions	Carbon oxides, Nitrogen oxides (NOx)
Other decomposition products	No data available
In the event of fire	see section 5

## 11. Toxicological information

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## Information on toxicological effects

Acute toxicity	LD50 Oral - Rat - 81 mg/kg(Acrylonitrile) LC50 Inhalation - Rat - male - 4 h - 2.09 mg/l(Acrylonitrile)
Skin corrosion/irritation	LD50 Dermal - Rabbit - 226 mg/kg(Acrylonitrile) Stable under recommended storage conditions. Skin - Rabbit(Acrylonitrile) Result: Skin irritation  (OECD Test Guideline 404)
Serious eye damage/eye irritation	Eyes - Rabbit(Acrylonitrile)  Result: Risk of serious damage to eyes.
Respiratory or skin sensitisation	Maximisation Test - Guinea pig(Acrylonitrile) Result: May cause sensitisation by skin contact. (OECD Test Guideline 406)
Germ cell mutagenicity	No data available(Acrylonitrile)
Carcinogenicity	Possible human carcinogen(Acrylonitrile)  (Acrylonitrile)  (Acrylonitrile)
Reproductive toxicity	Suspected human reproductive toxicant(Acrylonitrile)
Specific target organ toxicity single exposure	May cause respiratory irritation.(Acrylonitrile)
Specific target organ toxicity repeated exposure	No data available
Aspiration hazard	No data available(Acrylonitrile)
RTECS	AT5250000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea(Acrylonitrile)

## 12. Ecological information

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Toxicity	Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 7.4 - 10.0 mg/l - 48h (Acrylonitrile) other aquatic invertebrates
Persistence and degradability	Biodegradability Biotic/Aerobic - Exposure time 28 d(Acrylonitrile)
Bioaccumulative potential	Bioaccumulation Lepomis macrochirus - 14 d - 9.94 µg/l(Acrylonitrile)
Mobility in soil	No data available(Acrylonitrile)
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Other adverse effects	Toxic to aquatic life with long lasting effects

## 13. Disposal considerations

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PRODUCT RESIDUES	
Product	Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Dispose of as unused product.

## 14. Transport information

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UN number	ADR/RID: 1093 IMDG: 1093 IATA: 1093
UN proper shipping name	ADR/RID: ACRYLONITRILE, STABILIZED
	IMDG: ACRYLONITRILE, STABILIZED
	IATA: Acrylonitrile, stabilized
	Passenger Aircraft: Not permitted for transport
Transport hazard class(es)	ADR/RID: 3 IMDG: 3 IATA: 3
Packaging group	ADR/RID: I IMDG: I IATA: I
Environmental hazards	ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user	No data available

## 15. Regulatory information

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Safety, health and environmental regulations/legislation specific for the substance or mixture	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006
Chemical safety assessment	For this product a chemical safety assessment was not carried out

## 16. Other information

[www.rxmarine.com](http://www.rxmarine.com)

No data available

Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, 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. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

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Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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760 mm Hg @ 105°C

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