

MATERIAL SAFETY DATA SHEET

Product Name: Isoprene

CAS No.: 78-79-5

Version: 0

1. Identification

Product Code : 90909
Company Name : Advent Chembio Private Limited
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2. Hazards Identification**Hazard classification**

Flammable liquids : Category 1
Germ cell mutagenicity : Category 2
Carcinogenicity : Category 1B
Chronic aquatic toxicity : Category 3

Label elements**Hazard symbol**

Signal word : Danger
Hazard statement : Extremely flammable liquid and vapour.
Suspected of causing genetic defects.
May cause cancer.
Harmful to aquatic life with long lasting effects.
Precautionary statement : Obtain special instructions before use.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Avoid release to the environment.
Use personal protective equipment as required.
IF exposed or concerned: Get medical advice/ attention.
Other hazards which do not result in GHS classification : None

3. Composition/information on ingredients

Ingredient	CAS No	Percent
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NLT- 98.0%

4. First Aid Measures**Description of first aid measures**

- General advice** : Consult a physician. Show this safety data sheet to the doctor in attendance.
- Inhalation** : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- Skin contact** : Wash off with soap and plenty of water. Consult a physician.
- Eye contact** : Flush eyes with water as a precaution.
- 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** : Inhalation of vapors may cause:, Dizziness, Irregular cardiac activity, narcosis, Nausea, Asphyxia, CNS depression with hypertension or circulatory failure, and respiratory depression, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
- Indication of any immediate medical attention and special treatment needed Treatment** : No data available

5. Fire fighting measures

- Extinguishing media**
- Suitable extinguishing media** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Special hazards arising from the substance or mixture** : Carbon oxides
- Advice for firefighters** : Wear self contained breathing apparatus for fire fighting if necessary
- Further information** : No data available

6. Accidental Release Measures

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- Personal precautions, protective equipment and emergency procedures** : Use personal protective equipment. Avoid breathing vapors, 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.
- 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
- Reference to other sections** : For disposal see section 13.

7. Handling and Storage

- 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.
Recommended storage temperature: 2 - 8 °C
Heat sensitive.
- Specific end use(s)** : No data available

8. Exposure Controls Personal Protection**Control parameters****Components with workplace control parameters****Exposure controls**

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection : Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection Hand 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.

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- Body Protection** : Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Respiratory protection** : Respiratory protection is required.

9. Physical and Chemical Properties

- Appearance** : Colorless liquid
- Odor** : No data available
- pH** : No data available
- Melting point/freezing point** : -146 °C
- Initial boiling point and boiling range** : 34 °C
- Flash Point** : -54 °C
- Vapor pressure** : 133 hPa at -16 °C
793 hPa at 21 °C
- Vapor density** : No data available
- Relative density** : 0.681 g/cm³ at 25 °C
- Solubility in water** : 0.38 g/l at 20 °C
- Solubility (other)** : No data available
- Formula** : C₅H₈
- Molecular Weight** : 68.12 g/mol

10. Stability and Reactivity

- 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. Extremes of temperature and direct sunlight.
- Incompatible materials** : Oxidizing agents, Strong bases, Ammonia, Alkali metals, Alcohols, Oxygen
- Hazardous decomposition products** : No data available

11. Toxicological Information**Information on toxicological effects**

- Acute toxicity** : LD₅₀ Oral - rat - 2.043 - 2.210 mg/kg
LC₅₀ Inhalation - rat - 4 h - 180 mg/l
- Skin corrosion/irritation** : Mild skin irritation

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Serious eye damage/eye irritation	:	No data available
Respiratory or skin sensitization	:	No data available
Germ cell mutagenicity	:	May alter genetic material
Carcinogenicity	:	IARC: 2B - Group 2B: Possibly carcinogenic to humans (Isoprene)
Reproductive toxicity	:	No data available
Specific target organ toxicity - single exposure	:	No data available
Specific target organ toxicity - repeated exposure	:	No data available
Aspiration hazard	:	No data available
Potential health effects	:	
Inhalation	:	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	:	May be harmful if swallowed.
Skin	:	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	:	May cause eye irritation.
Signs and Symptoms of Exposure	:	Inhalation of vapors may cause:, Dizziness, Irregular cardiac activity, narcosis, Nausea, Asphyxia, CNS depression with hypertension or circulatory failure, and respiratory depression, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological Information

Toxicity	:	Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 75,0 mg/l - 96,0 h
Persistence and degradability	:	No data available
Bioaccumulative potential	:	No data available
Mobility in soil	:	No data available
Other adverse effects	:	Toxic to aquatic life.

13. Disposal consideration

Disposal instructions	:	Discharge, treatment, or disposal may be subject to national, state, or local laws.
Contaminated packaging	:	Offer rinsed packaging material to local recycling facilities. Since emptied containers retain product residue, follow label warnings even after container is emptied.

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	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT	1218	ISOPRENE	3	I	No
IMDG	1218	ISOPRENE	3	I	No
IATA	1218	ISOPRENE	3	I	No

15. Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture
No Data Available.

16. Other Information**Issue Date :**01/08/2014**Version : 0**

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