

Material Safety Data Sheet For Cypermethrin Acid Chloride

Section 1: Chemical Product And Company Identification

Product Name : Cypermethric acid chloride
IUPAC name : 3-(2, 2-Dichlorovinyl)-2, 2-dimethylcyclopropane Carbonyl chloride
CAS No : 52314-67-7
Use : Intermediate for insecticide manufacture
Manufacturer / Supplier : **Bharat Rasayan Limited**
1501, Vikram Tower, Rajendra Place,
New Delhi – 110008, INDIA
Emergency Phones : +91-11-43661120, 1104 Fax 43661100

Section 2: Composition/Information on Ingredient

Component name	CAS No	Concentration (%w/w)
3-(2,2-Dichlorovinyl)-2,2-dimethylcyclopropanecarbonyl chloride	52314-67-7	98.0 w/w Min

Section 3: Hazard Identification (Potential Health Effect & Emergency Overview)

Eye: can cause temporary irritation, tearing and blurred vision.

Skin: can cause a slight irritation on more sensitive area (face, eyes, mouth) prolonged or repeated exposure can cause irritation and reddening of skin, possibly progressing into dermatitis.

Ingestion: can cause stomach irritation resulting in nausea, cramps and vomiting. Large doses may cause nasal and respiratory irritation.

Inhalation: Excessive inhalation can cause nasal and respiratory irritation.

Ecological: Toxic to fish and Aquatic organism.

Section 4: First Aid Measures

General Information: Immediately remove any clothing contaminated by the product. Move out of dangerous area. Consult a physician and show this safety data sheet.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical aid.

Skin contact: Immediately flush skin with running water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Obtain medical aid immediately.

Eye contact: Immediately flush open eyes with running water for at least 15 minutes. Obtain medical aid immediately.

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Ingestion: Do NOT induce vomiting without medical advice. Rinse mouth with water. Never administer anything by mouth to an unconscious person. Obtain medical aid immediately.

Most important symptoms and effects, both acute and delayed: No further information available.

Indication of any immediate medical attention and special treatment needed: No further information available.

Section 5: Fire Fighting Measures

Suitable extinguishing media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Specific hazards arising from the chemical: Carbon oxides, Hydrogen chloride.

Advice for firefighters: As in any fire, wear a NIOSH-approved or equivalent, pressure-demand, self-contained breathing apparatus and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Wear protective equipment and keep unprotected personnel away. Ensure adequate ventilation. Remove all sources of ignition. Prevent further leak or spill if safe to do so. For personal protective equipment.

Environmental precautions: Do not let product enter drains, other waterways, or soil.

Methods and materials for containment and cleaning up: Prevent further leak or spill if safe to do so. Vacuum, sweep up, or absorb with inert material and place into a suitable disposal container. Consult local regulations for disposal. **See section 13** for further disposal information.

Section 7: Handling and Storage

Precautions for safe handling: Avoid contact with skin, eyes, and personal clothing. Wash hands thoroughly after handling. Avoid breathing fumes. Use only with adequate ventilation. Wear suitable protective clothing, gloves, and eye/face protection. Keep away from sources of ignition. Minimize dust generation and accumulation. Keep container tightly closed. Open and handle container with care. Do not eat, drink, or smoke while handling.

Conditions for safe storage, including any incompatibilities: Store in a tightly-closed container when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from sources of ignition. , Store long-term at 2-8°C

Section 8: Exposure Controls/Personal Protection

Exposure limits: OSHA PEL: Not available. NIOSH REL: Not available. ACGIH TLV: Not available.

Appropriate engineering controls: Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product. Facilities storing or utilizing this material should be

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equipped with an eyewash fountain. Use adequate general and local exhaust ventilation to keep airborne concentrations low.

Personal protection:

Eyes: Based on an evaluation of the eye or face hazards present, wear chemical splash-resistant safety glasses or goggles with side protection. A face shield may be appropriate in some workplaces. Use eyewear tested and approved under appropriate government standards such as OSHA 29 CFR 1910.133 or EU EN166.

Hands: Wear gloves selected based on an evaluation of the possible hazards to hands and skin, the duration of use, the physical conditions of the workplace, and the chemical resistance and physical properties of the glove material.

Skin and body: Protective clothing must be selected based on the hazards present in the workplace, the physical environment, the duration of exposure, and other factors. No fabric can provide protection against all potential hazards; therefore it is important to select the appropriate protective clothing for each specific hazard. At the minimum, wear a laboratory coat and close-toed footwear.

Respiratory: Respirators are not a substitute for accepted engineering control measures such as enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials. When respiratory personal protective equipment is appropriate based on an assessment of respiratory hazards in the workplace, use a NIOSH- or CEN-certified respirator.

Section 9: Physical and Chemical Properties

Physical State	:	liquid
Color	:	yellow to pale yellow color
Odour	:	characteristic
Specific gravity	:	1.25-1.26 g/ml at 25 °C
Boiling point	:	78-80 °C at 1.5 mmhg and 116-117 °C at mmhg
Freezing point	:	does not freeze up to -5°C
Vapors pressure	:	NA
Solubility	:	Reacts violently with water. Evolves hydrogen chloride with water. Miscible in n-hexane, benzene, toluene, toluene, chloroform and carbon tetrachloride in all proportions.

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Section 10: Stability and Reactivity

Stability : Stable for two year under normal storage condition.
Materials to avoid : None under normal condition of use

Section 11: Toxicological Information

Acute Studies

Eye	:	Acute eye irritation in rabbits	Irritant to Eye and skin
Skin	:	Dermal sensitization in guinea pigs	may cause sensitization
Ingestion	:	NA	NA
Inhalation	:	NA	NA

Long term studies

Carcinogenicity : Non carcinogenicity in rat and mice
Mutagenicity : non mutagenicity. Did not cause any chromosomal effects. Did not cause any DNA single strand damage.
Reproductive Toxicity: No Teratogenic effects.

Section 12: Ecological information

Persistence in the environment : Strongly adsorbed in soil particles with no risk of leaching and moderately persistent in aquatic organism.

Toxic effects on organisms

Fish	:	NA
Daphnia magna	:	NA
Birds	:	NA

Section 13: Disposal Considerations

Product Disposal: Disposal of product would usually be by incineration in an appropriate licensed commercial incinerator. Advice may be obtained from local waste regulation authorities.

Container Disposal: Lightly contaminated packing may be accepted for land fill otherwise incineration will be required.

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Section 14 Transport Information

UN Number : 1760
UN Class : 8
UN Packing group : III
Proper Shipping name : Corrosive Liquid, N.O.S

Section 15: Regulatory Information

CAS NO : 52314-67-7
Component Name : Cypermethric acid chloride

The following precautions appear in the ‘PRECAUTIONS’ section of label /leaflet:

Wash Hands and Exposed Skin After Use Wash Splashes from Skin Or Eyes Immediately With Plenty Of Water.

The following precautions appear in the ‘STATUTORY CONDITIONS RELATING TO USE’ box of the label /leaflet:

- For use insecticide intermediates
- Wear suitable protective clothing /overall and synthetic rubber/PVC gloves and eye protections when using.

Section 16: Other Information

The information provided in this MSDS is of general nature not specific for a particular purpose or situation, and believed to be correct and faithful. Bharat Rasayan Limited does not make any warranty or guarantee of any kind regarding fitness or completeness of information. Bharat Rasayan Limited disclaims any liability to the result(s) obtained or arising out of any use of the product or reliance or data/information contained in this MSDS.