



Material Safety Data Sheet

Ethynylcyclopropane

MSDS No. 000052T

Date of Preparation: 06-03-08

Supersedes: 08-08-06

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Ethynylcyclopropane

Chemical Formula: C₅H₆

CAS Number: 6746-94-7

Other Designations: Cyclopropyl Acetylene, ECP.

General Use: N/a.

Manufacturer: Organic Technologies, 1245 South 6th Street, Coshocton, Ohio 43812 Telephone number (740)622-0755.

Fax number (740)622-3231. 24 Hour Emergency Telephone number (800)424-9300.

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	%wt or %vol
Ethynylcyclopropane	6746-94-7	>97%

Trace Impurities:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Ethylcyclopropane	None established	None established	None established	None established	None established	None established	None established

Section 3 - Hazards Identification

Emergency Overview

HMIS
H 2
F 3
R 0
PPE[†]
[†]Sec. 8

Potential Health Effects

Primary Entry Routes: Eyes, skin, lungs, ingestion..

Target Organs: Eyes, skin, lungs.

Acute Effects

Inhalation: May cause irritation.

Eye: Can cause severe eye irritation.

Skin: Can cause severe skin irritation.

Ingestion: May cause irritation.

Carcinogenicity: IARC, NTP, and OSHA do not list any components of this material as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure: None known.

Chronic Effects: None established. May cause central nervous system effects.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air. If problems persist, seek appropriate medical attention.

Eye Contact: Flush with copious amounts of water for at least fifteen minutes. Seek appropriate medical attention.

Skin Contact: Flush with copious amounts of water for at least fifteen minutes. Seek appropriate medical attention.

Ingestion: Do not induce vomiting. Immediately drink two glasses of water. Seek appropriate medical attention. An activated charcoal slurry may be used. Never give anything to an unconscious person.

Note to Physicians: To the best of our knowledge the toxicological properties of this material have not been fully evaluated.

Special Precautions/Procedures: Keep material of the skin and out of the eyes.

Section 5 - Fire-Fighting Measures

Flash Point: -42 °F

Flash Point Method: CC.

Burning Rate: None established.

Autoignition Temperature: None established.

LEL: 1% v/v

UEL: None established.

Flammability Classification: Flammable liquid.

Extinguishing Media: Dry chemical, water spray, CO₂, or foam.

Unusual Fire or Explosion Hazards: None established.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide.

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures:

Small Spills: Cover spill with absorbent, pick up, and place in a suitable container.

Large Spills

Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Cleanup: Follow all applicable local, state, and federal regulations pertaining to decon measures.

Regulatory Requirements: Follow all applicable local, state, and federal regulations.

Section 7 - Handling and Storage

Handling Precautions: Do not breathe vapor or mist. Wash thoroughly after handling. Do not consume or store food, drink, or tobacco in areas where this material is handled. Wear appropriate personal protective equipment.

Storage Requirements: Store in a well ventilated area. Extremely volatile material. Vapors can travel considerable distance to a source of ignition and flash back. Keep material away from heat, sparks, and flames.

Regulatory Requirements: Follow all applicable local, state, and federal regulations.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen.

Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

Physical State: Liquid.

Appearance and Odor: Clear, colorless liquid with strong, pungent, persistent odor.

Water Solubility: 3.96 g/L @ 20 degrees C

Other Solubilities: Ethanol, dimethylsulfoxide, toluene, and acetone.

Boiling Point: 52-65 degrees C

Ethynylcyclopropane

MSDS No. 000052T

Vapor Density (Air=1): None established.
Formula Weight: 66.1
Density: None established.
Specific Gravity (H₂O=1, at 4 °C): 0.7801
pH: Neutral.

Refractive Index: None established.
Surface Tension: None established.
% Volatile: None established.
Evaporation Rate: None established.

Section 10 - Stability and Reactivity

Stability: This material is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: None known.

Conditions to Avoid: Sources of ignition.

Hazardous Decomposition Products: Thermal oxidative decomposition will not occur if handled and stored properly.

Section 11- Toxicological Information

Toxicity Data:

Eye Effects: Based on the information from the skin irritation study, the material is expected to be a severe eye irritant.

Skin Effects: The acute lethal dermal dose is greater than 2000 mg/kg in the rat. This material was a moderate to severe skin irritant in rabbits. Two or three rabbits had reactions which persisted at the time of study termination day 14. The material was not a skin sensitizer or irritant in guinea pigs.

Acute Inhalation Effects: Rats exposed to an acute vapor concentration of 3.3 and 22.3 mg/L of cyclopropylactelyene exhibited reduced response to stimuli and partial closing of the eyes. Additional signs of muscle contractions, unsteady gait, piloerection, and shallow respiration were observed in the high dose animals.

Acute Oral Effects: An acute dose of 2000 mg/kg in the rat produced mortality, ataxia, piloerection, respiratory distress, and hunched posture. Lethargy, pallid extremities, and body tremors were less frequently noted.

Chronic Effects: None established.

Carcinogenicity: None established.

Mutagenicity: It was not genotoxic in the Ames and rat micronucleus. However, it was genotoxic in the human lymphocyte chromosome aberration assay.

Teratogenicity: None established.

Section 12 - Ecological Information

Ecotoxicity: May cause long term adverse effects to the aquatic environment. Prevent this material from entering low areas, sewers, or waterways.

Environmental Fate: None established.

Environmental Degradation: None established.

Soil Absorption/Mobility: None established.

Section 13 - Disposal Considerations

Disposal: Follow all applicable all applicable local, state, and federal regulations.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Flammable liquids, n.o.s.

Shipping Symbols: Flammable liquid

Hazard Class: 3

ID No.: UN1993

Packing Group: II

Label: Flammable liquid.

Section 15 - Regulatory Information

EPA Regulations:

40 CFR 112.101

MSDS No. 000052T

Ethynylcyclopropane

Chronic: No.
Fire: Yes.
Reactive: No.
Sudden Release: No.

SARA Toxic Chemical (40 CFR 372.65): Not listed.
SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed.

SARA Section 313 Supplier Notification: This product contains the following EPCRA section 313 chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40 CFR 372):

<u>CAS Number</u>	<u>Chemical Name</u>	<u>De Minimus Limit</u>
None	None	None

This information must be included in all MSDS's that are copied and distributed for this material.

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed.

Section 16 - Other Information

Prepared By: The Safety Department.

Revision Notes: The information of this form is furnished solely for the purpose of compliance with OSHA's Hazard Communication Standard, 29 CFR 1910.1200 and shall not be used for any other purpose.

Disclaimer: The information contained herein is believed to be accurate, but is not warranted to be. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. Organic Technologies and it's employees shall not be liable for any loss or damage arising out of the use thereof.