



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name 1-BUTYNE, 98%
Catalog # 3029
Version # 02
Revision date 02-Sep-2009
CAS # 107-00-6
Synonym(s) ETHYL ACETYLENE
Manufacturer information GFS Chemicals, Inc.
P.O. Box 245
Powell, OH 43065 US
www.gfschemicals.com
Fax 740-881-5989
Phone 740-881-5501
Toll Free 800-858-9682
Emergency Assistance Chemtrec 800-424-8300

2. Hazards Identification

Emergency overview DANGER

EXTREMELY FLAMMABLE LIQUID AND VAPOR.
Flammable gas. Contents under pressure. May cause flash fire or explosion. Vapors may cause a flash fire or ignite explosively. Will be easily ignited by heat, spark or flames. Heat may cause the containers to explode.

Vapors may be irritating to eyes, nose, throat, and lungs. May be harmful by inhalation. The toxicological properties of this material have not been fully investigated.

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

OSHA regulatory status

Potential health effects

Routes of exposure Eye contact. Skin contact. Inhalation.

Eyes Irritation of eyes and mucous membranes.

Skin May cause skin irritation.

Inhalation May be harmful if inhaled. Do not breathe dust/fume/gas/mist/vapors/spray.

Ingestion Health injuries are not known or expected under normal use. Do not ingest.

Potential environmental effects Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

Components	CAS #	Percent
1-BUTYNE	107-00-6	90 - 100

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention immediately. Continue to rinse.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Get medical attention immediately.

Ingestion Rinse mouth. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested the substance.

General advice If you feel unwell, seek medical advice (show the label where possible).

Material name: 1-BUTYNE, 98%

Catalog # 3029 Version #: 02 Revision date: 09-02-2009 Print date: 09-02-2009

MSDS US

1 / 5

5. Fire Fighting Measures

Flammable properties	Flammable by OSHA criteria. Heat may cause the containers to explode. Vapors may travel considerable distance to a source of ignition and flash back. Runoff to sewer may cause fire or explosion hazard.
Extinguishing media	
Suitable extinguishing media	Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Protection of firefighters	
Protective equipment and precautions for firefighters	In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Keep upwind. Keep out of low areas. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Methods for containment	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. Never return spills in original containers for re-use.

7. Handling and Storage

Handling	Vapors may form explosive mixtures with air. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. All equipment used when handling the product must be grounded. Use only in area provided with appropriate exhaust ventilation. Handle and open container with care.
Storage	The pressure in sealed containers can increase under the influence of heat. Keep away from heat, sparks and open flame. Keep away from heat and sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in cool place. Refrigeration recommended. Store in a well-ventilated place. Keep container tightly closed. Keep in an area equipped with sprinklers. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Personal protective equipment	
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	Rubber gloves.
Eye / face protection	Wear chemical goggles.
Skin protection	No special protective equipment required.

General hygiene considerations

When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

General

Not normally needed.

9. Physical & Chemical Properties

Appearance	Liquefied gas.
Color	Colorless.
Odor	Hydrocarbon-like.
Odor threshold	Not available.
Physical state	Liquid., Gas.
Form	Compressed liquefied gas.
pH	Not available.
Melting point	-194.8 °F (-126 °C)
Freezing point	Not available.
Boiling point	46.4 °F (8 °C)
Flash point	-77.8 °F (-61 °C)
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	11.7 %
Flammability limits in air, lower, % by volume	1.7 %
Vapor pressure	187.98 kPa at 25°C
Vapor density	Not available.
Specific gravity	0.67
Relative density	0.67 g/cm ³
Solubility (water)	somewhat soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	100 %
Molecular weight	54.0900 g/mol
Molecular formula	CH ₃ CH ₂ CCH

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions. Risk of explosion. Risk of ignition.
Conditions to avoid	Heat, flames and sparks. Avoid high temperatures.
Incompatible materials	Strong oxidizing agents. Halogens. Chlorinated solvents.
Hazardous decomposition products	No hazardous decomposition products are known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects	The toxicological properties of this material have not been fully investigated and its handling and use may be hazardous.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Further information	This product has no known adverse effect on human health.

12. Ecological Information

Ecotoxicity	This product has no known eco-toxicological effects.
Persistence and degradability	Not available.

13. Disposal Considerations

Waste codes D001: Waste Flammable material with a flash point <140 F
Disposal instructions Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

DOT

Basic shipping requirements:

Proper shipping name Ethylacetylene, stabilized
Hazard class 2.1
UN number UN2452
Additional information:
Packaging exceptions None
Packaging non bulk 304
Packaging bulk 314, 315
ERG number 116



15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - Yes
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

1-BUTYNE

107-00-6

500 LBS

16. Other Information**Further information**

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 0

Flammability: 4

Physical hazard: 3

NFPA ratings

Health: 0

Flammability: 4

Instability: 0

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date

02-Sep-2009

This data sheet contains changes from the previous version in section(s):

This document has undergone significant changes and should be reviewed in its entirety.