

## 1 Identification

### Product identifier

**Product name:** Ethoxyacetylene, ca 50% w/w in hexanes

**Stock number:** L02922

**CAS Number:**

927-80-0

**Relevant identified uses of the substance or mixture and uses advised against.**

**Identified use:** SU24 Scientific research and development

### Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660

Fax: 800-322-4757

Email: tech@alfa.com

www.alfa.com

**Information Department:** Health, Safety and Environmental Department

#### Emergency telephone number:

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

## 2 Hazard(s) identification

### Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to the peripheral nervous system, the lung, the kidneys, the liver, the reproductive system and the brain through prolonged or repeated exposure. Route of exposure: Inhalative.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

**Hazards not otherwise classified** No information known.

### Label elements

**GHS label elements** The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

### Hazard pictograms



GHS02 GHS07 GHS08

### Signal word

**Danger**

### Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to the peripheral nervous system, the lung, the kidneys, the liver, the reproductive system and the brain through prolonged or repeated exposure. Route of exposure: Inhalative.

H304 May be fatal if swallowed and enters airways.

### Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P280 Wear protective gloves / protective clothing.

P281 Use personal protective equipment as required.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P315 Get immediate medical advice/attention.

P403+P235 Store in a well-ventilated place. Keep cool.

### WHMIS classification

B2 - Flammable liquid

D2A - Very toxic material causing other toxic effects



### Classification system

**HMIS ratings (scale 0-4)**

**(Hazardous Materials Identification System)**

HEALTH 2 Health (acute effects) = 2

FIRE 3 Flammability = 3

REACTIVITY 1 Physical Hazard = 1

### Other hazards

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Product name:** Ethoxyacetylene, ca 50% w/w in hexanes

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**3 Composition/information on ingredients**

**Chemical characterization:** Substances  
**CAS# Description:**  
927-80-0 Ethoxyacetylene, ca 50% w/w in hexanes

**4 First-aid measures**

**Description of first aid measures**  
**After inhalation**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm.  
Seek immediate medical advice.  
**After skin contact**  
Immediately wash with water and soap and rinse thoroughly.  
Seek immediate medical advice.  
**After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.  
**After swallowing** Seek medical treatment.  
**Information for doctor**  
**Most important symptoms and effects, both acute and delayed** No further relevant information available.  
**Indication of any immediate medical attention and special treatment needed** No further relevant information available.

**5 Fire-fighting measures**

**Extinguishing media**  
**Suitable extinguishing agents** CO2, sand, extinguishing powder. Do not use water.  
**Special hazards arising from the substance or mixture**  
If this product is involved in a fire, the following can be released:  
Carbon monoxide and carbon dioxide  
**Advice for firefighters**  
**Protective equipment:**  
Wear self-contained respirator.  
Wear fully protective impervious suit.

**6 Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Keep away from ignition sources  
**Environmental precautions:** Do not allow material to be released to the environment without proper governmental permits.  
**Methods and material for containment and cleaning up:**  
Keep away from ignition sources.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of contaminated material as waste according to section 13.  
Ensure adequate ventilation.  
**Prevention of secondary hazards:** Keep away from ignition sources.  
**Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage**

**Handling**  
**Precautions for safe handling**  
Keep container tightly sealed.  
Ensure good ventilation at the workplace.  
**Information about protection against explosions and fires:**  
Protect against electrostatic charges.  
Fumes can combine with air to form an explosive mixture.  
Keep ignition sources away.  
**Conditions for safe storage, including any incompatibilities**  
**Storage**  
**Requirements to be met by storerooms and receptacles:** Refrigerate  
**Information about storage in one common storage facility:**  
Store away from oxidizing agents.  
Protect from heat.  
**Further information about storage conditions:**  
Keep container tightly sealed.  
Refrigerate  
**Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

**Additional information about design of technical systems:**  
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.  
**Components with limit values that require monitoring at the workplace:**

n-Hexane	
ACGIH TLV	ppm 50 (skin)
Belgium TWA	50
France TWA	50
Germany TWA	50
Netherlands TWA	100
Switzerland TWA	50, 100-STEL
United Kingdom TWA	100, 125-STEL
Russia TWA	40
Denmark	50
Finland	50, 150-STEL
Hungary TWA	100 mg/m3, 200 mg/m3-STEL
Poland TWA	400 mg/m3
Sweden	25, 50-STEL
USA PEL	500

(Contd. on page 3)  
USA

Product name: **Ethoxyacetylene, ca 50% w/w in hexanes**

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**Control parameters**  
**Components with limit values that require monitoring at the workplace:**

Hexane isomers, other than n-hexane  
ppm  
ACGIH TLV 500; 1000-STEL  
Alberta, Canada TWA 500; 625-STEL  
Australia TWA 500; 1000-STEL  
Germany MAK 200; 400-STEL  
Ireland TWA 500; 1000-STEL  
Netherlands TWA 200  
Quebec, Canada 500; 1000-STEL  
Sweden TWA 200; 300-STEL  
USA TWA 100; 510-Ceiling  
**Additional information:** No data

**Exposure controls**  
**Personal protective equipment**  
**General protective and hygienic measures**  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Remove all soiled and contaminated clothing immediately.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.  
Maintain an ergonomically appropriate working environment.  
**Breathing equipment:** Use suitable respirator when high concentrations are present.  
**Protection of hands:**  
Impervious gloves  
Check protective gloves prior to each use for their proper condition.  
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.  
**Penetration time of glove material (in minutes)** Not determined  
**Eye protection:** Safety glasses  
**Body protection:** Protective work clothing.

**9 Physical and chemical properties**

**Information on basic physical and chemical properties**

**General Information**

**Appearance:**

**Form:** Liquid  
**Color:** Dark yellow  
**Odor:** Recognizable  
**Odor threshold:** Not determined.

**pH-value:** Not determined.

**Change in condition**

**Melting point/Melting range:** Not determined  
**Boiling point/Boiling range:** Not determined  
**Sublimation temperature / start:** Not determined

**Flash point:** -28 °C (-18 °F)  
**Flammability (solid, gaseous)** Not determined.  
**Ignition temperature:** Not determined  
**Decomposition temperature:** Not determined  
**Auto igniting:** Not determined.

**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures is possible.

**Explosion limits:**  
**Lower:** Not determined  
**Upper:** Not determined  
**Vapor pressure:** Not determined  
**Density at 20 °C (68 °F):** 0.718 g/cm<sup>3</sup> (5.992 lbs/gal)  
**Relative density** Not determined.  
**Vapor density** Not determined.  
**Evaporation rate** Not determined.  
**Solubility in / Miscibility with**  
**Water:** Not miscible or difficult to mix  
**Partition coefficient (n-octanol/water):** Not determined.  
**Viscosity:**  
**dynamic:** Not determined.  
**kinematic:** Not determined.  
**Other information** No further relevant information available.

**10 Stability and reactivity**

**Reactivity** No information known.  
**Chemical stability** Stable under recommended storage conditions.  
**Thermal decomposition / conditions to be avoided:** Decomposition will not occur if used and stored according to specifications.  
**Possibility of hazardous reactions** No dangerous reactions known  
**Conditions to avoid** No further relevant information available.  
**Incompatible materials:**  
Oxidizing agents  
Heavy metal powders  
Heat  
**Hazardous decomposition products:** Carbon monoxide and carbon dioxide

**11 Toxicological information**

**Information on toxicological effects**

**Acute toxicity:** No effects known.

**LD/LC50 values that are relevant for classification:**

Oral LD50 2400 mg/kg (mouse)

**Skin irritation or corrosion:** Causes skin irritation.

**Eye irritation or corrosion:** May cause irritation






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USA

Product name: <b>Ethoxyacetylene, ca 50% w/w in hexanes</b>	
<div><div>Sensitization: No sensitizing effects known.</div><div>Germ cell mutagenicity: No effects known.</div><div>Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.</div><div>Reproductive toxicity: Suspected of damaging fertility or the unborn child.</div><div>Specific target organ system toxicity - repeated exposure: May cause damage to the peripheral nervous system, the lung, the kidneys, the liver, the reproductive system and the brain through prolonged or repeated exposure. Route of exposure: Inhalative.</div><div>Specific target organ system toxicity - single exposure: No effects known.</div><div>Aspiration hazard: May be fatal if swallowed and enters airways.</div><div>Subacute to chronic toxicity: No effects known.</div><div>Subacute to chronic toxicity: Hexanes may cause skin irritation, CNS effects, lung irritation, headache, dizziness, drowsiness.</div><div>Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.</div></div>	

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12 Ecological information	
<div><div>Toxicity</div><div>Aquatic toxicity: No further relevant information available.</div><div>Persistence and degradability: No further relevant information available.</div><div>Bioaccumulative potential: No further relevant information available.</div><div>Mobility in soil: No further relevant information available.</div><div>Ecotoxicological effects:</div><div>Remark: Toxic for aquatic organisms</div><div>Additional ecological information:</div><div>General notes:</div><div>Do not allow product to reach ground water, water course or sewage system.</div><div>Do not allow material to be released to the environment without proper governmental permits.</div><div>Toxic for aquatic organisms</div><div>Do not allow product to reach ground water, water course or sewage system, even in small quantities.</div><div>Danger to drinking water if even extremely small quantities leak into the ground.</div><div>Also poisonous for fish and plankton in water bodies.</div><div>Toxic to aquatic life.</div><div>May cause long lasting harmful effects to aquatic life.</div><div>Avoid transfer into the environment.</div><div>Results of PBT and vPvB assessment</div><div>PBT: Not applicable.</div><div>vPvB: Not applicable.</div><div>Other adverse effects: No further relevant information available.</div></div>	

13 Disposal considerations	
<div><div>Waste treatment methods</div><div>Recommendation: Consult state, local or national regulations to ensure proper disposal.</div><div>Uncleaned packagings:</div><div>Recommendation: Disposal must be made according to official regulations.</div></div>	




14 Transport information	
UN-Number DOT, IMDG, IATA	UN1993
UN proper shipping name DOT IMDG IATA	Flammable liquids, n.o.s. (Ethoxyacetylene solution in hexanes) FLAMMABLE LIQUID, N.O.S. (Ethoxyacetylene solution in hexanes), MARINE POLLUTANT FLAMMABLE LIQUID, N.O.S. (Ethoxyacetylene solution in hexanes)
Transport hazard class(es) DOT	
 	
Class Label Class Label IMDG	3 Flammable liquids. 3 3 (F1) Flammable liquids 3
 	
Class Label IATA	3 Flammable liquids. 3
	
Class Label	3 Flammable liquids. 3
Packing group DOT, IMDG, IATA	II
Environmental hazards: Marine pollutant (IMDG):	Environmentally hazardous substance, liquid; Marine Pollutant Symbol (fish and tree)
Special precautions for user EMS Number:	Warning: Flammable liquids F-E,S-E
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No

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USA

Product name: <b>Ethoxyacetylene, ca 50% w/w in hexanes</b>	
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Remarks:	Special marking with the symbol (fish and tree).
UN "Model Regulation":	UN1993, Flammable liquids, n.o.s., special provision 640D (Ethoxyacetylene solution in hexanes), 3, II

**15 Regulatory information**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**  
**GHS label elements** The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)  
**Hazard pictograms**



GHS02 GHS07 GHS08

**Signal word** Danger

**Hazard statements**  
H225 Highly flammable liquid and vapor.  
H315 Causes skin irritation.  
H361 Suspected of damaging fertility or the unborn child.  
H373 May cause damage to the peripheral nervous system, the lung, the kidneys, the liver, the reproductive system and the brain through prolonged or repeated exposure. Route of exposure: Inhalative.  
H304 May be fatal if swallowed and enters airways.

**Precautionary statements**  
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P280 Wear protective gloves / protective clothing.  
P281 Use personal protective equipment as required.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P315 Get immediate medical advice/attention.  
P403+P235 Store in a well-ventilated place. Keep cool.

**National regulations**  
This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.  
**SARA Section 313 (specific toxic chemical listings)** Substance is not listed.  
**California Proposition 65**  
**Prop 65 - Chemicals known to cause cancer** Substance is not listed.  
**Prop 65 - Developmental toxicity** Substance is not listed.  
**Prop 65 - Developmental toxicity, female** Substance is not listed.  
**Prop 65 - Developmental toxicity, male** Substance is not listed.  
**Information about limitation of use:**  
For use only by technically qualified individuals.  
This product is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40CFR372.  
**Other regulations, limitations and prohibitive regulations**  
**Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.** Substance is not listed.  
**The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.**  
Substance is not listed.  
**Annex XIV of the REACH Regulations (requiring Authorisation for use)** Substance is not listed.  
**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing SDS:** Global Marketing Department  
**Date of preparation / last revision** 11/23/2015 / -  
**Abbreviations and acronyms:**  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IATA-DSR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
HMIS: Hazardous Materials Identification System (USA)  
WHMIS: Workplace Hazardous Materials Information System (Canada)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
vPvB: very Persistent and very Bioaccumulative  
ACGIH: American Conference of Governmental Industrial Hygienists (USA)  
OSHA: Occupational Safety and Health Administration (USA)  
NTP: National Toxicology Program (USA)  
IARC: International Agency for Research on Cancer  
EPA: Environmental Protection Agency (USA)