



Material Safety Data Sheet

1. Product and Company Identification

Product name : **Ethyl Acetate**

Chemical formula : C-H3-C-O2-C2-HS

Synonyms : Acetic Ester; Acetic Ether; Ethyl Ethanoate; Ethyl Acetic Ester; Vinegar Naphtha; Acetic Acid Ethyl Ester; Acetidin

Company : Specialty Gases of America, Inc
6055 Brent Dr.
Toledo, OH 43611

Telephone : 419-729-7732

Emergency : 800-424-9300

2. Composition/Information on Ingredients

Components	CAS Number	% Volume
Ethyl Acetate	141-78-6	100%

3. Hazards Identification

Emergency Overview

May cause respiratory tract irritation, skin irritation, eye irritation, central nervous system depression. Flammable liquid and vapor. Vapor may cause flash fire.

Potential Health Effects

Inhalation : Irritation, symptoms of drunkenness.

Eye contact : Irritation, tearing.

Skin contact : Irritation.

Ingestion : Sore throat, diarrhea, stomach pain, headache, drowsiness, symptoms of drunkenness.

Chronic Health Hazard : None.

4. First Aid Measures

General advice : None.

Eye contact : Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Skin contact : Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Ingestion : Contact local poison control center or physician immediately. Never make an unconscious person vomit or drink fluids. When vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention immediately.

Inhalation : If adverse effects occur, remove to uncontaminated area. Give artificial

respiration if not breathing. If not breathing, oxygen should be administered by qualified personnel. Get immediate medical attention.

Note to physicians : For ingestion, consider gastric lavage and activated charcoal slurry. Consider oxygen.

5. Fire-Fighting Measures

Suitable extinguishing media : Alcohol resistant foam, carbon dioxide, regular dry chemical, water.
Large fires: Use alcohol-resistant foam or flood with fine water spray.

Specific hazards : Severe fire hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures are explosive above flash point.

Fire fighting : Move container from fire area if it can be done without risk. Cool containers with water spray until well after fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzle until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck: Evacuation radius: 800 meters (1/2 mile). Water may be ineffective.

6. Accidental Release Measures

Occupational spill/release : Avoid heat, flames, sparks and other sources of ignition. Remove sources of ignition. Stop leak if possible without personal risk. Reduce vapors with water spray. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

Additional advice : None.

7. Handling and Storage

Handling

Secure cylinder when using to protect from falling. Use suitable hand truck to move cylinders.

Storage

Store in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.106. Grounding and bonding required. Keep separated from incompatible substances.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH : 400 ppm TWA
OSHA (final) : 400 ppm TWA; 1400 mg/m³ TWA
OSHA (vacated) : 400 ppm TWA; 1400 mg/m³ TWA
NIOSH : 400 ppm TWA; 1400 mg/m³ TWA

IDLH

2000 ppm

Engineering measures/Ventilation

Provide local exhaust or process enclosure ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

Personal protective equipment

Respiratory protection	:	The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA. 2000 ppm – Any supplied-air respirator operated in a continuous-flow mode. Any powered, air-purifying respirator with organic vapor cartridge(s). Any air-purifying respirator with a full facepiece and organic vapor canister. Any air-purifying full-facepiece respirator (gas mask) with a chin-style, front-mounted or back-mounted organic vapor canister. Any self-contained breathing apparatus with a full facepiece. Any supplied-air respirator with a full facepiece. Emergency or planned entry into unknown concentrations or IDLH conditions – Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode. Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode. Escape – Any air-purifying full-facepiece respirator (gas mask) with a chin-style, front-mounted or back-mounted organic vapor canister. Any appropriate escape-type, self-contained breathing apparatus.
Hand protection	:	Wear appropriate chemical resistant gloves.
Eye protection	:	Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
Skin and body protection	:	Wear appropriate chemical resistant clothing.

9. Physical and Chemical Properties

Form	:	Volatile liquid.
Color	:	Colorless.
Odor	:	Fruity odor.
Molecular weight	:	88.11
Vapor pressure	:	100 mmHg @ 27°C
Vapor density	:	3.04 (air = 1)
Specific gravity	:	0.902 (water = 1)
Boiling point	:	171°F (77°C)
Melting point	:	-119°F (-84°C)
Water solubility	:	8.7%
Evaporation rate	:	6.0 (butyl acetate = 1)
Solvent solubility	:	Soluble: ethanol, acetone, chloroform, ether, benzene, fixed oils, volatile oils

10. Stability and Reactivity

Stability	:	Stable at normal temperatures and pressure.
Conditions to avoid	:	Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat.
Materials to avoid	:	Acids, bases, combustible materials, oxidizing materials.
Hazardous	:	Thermal decomposition products: Oxides of carbon.

decomposition
products

11. Toxicological Information

The components of this material have been reviewed in various sources and the following selected endpoints are published:

ETHYL ACETATE : Oral LD50 Rat: 5620 mg/kg; Dermal LD50 Rabbit: > 20 mL/kg; Dermal LD50
(141-78-6) Rabbit: > 18000 mg/kg

Acute Toxicity Level

ETHYL ACETATE : Slightly toxic: inhalation, ingestion
(141-78-6)

Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, OSHA or DFG.

Local Effects

ETHYL ACETATE : Irritant: inhalation, skin, eye
(141-78-6)

Target Organs

ETHYL ACETATE : Central nervous system
(141-78-6)

Medical Conditions Aggravated by Exposure

Blood system disorders, respiratory disorders, skin disorders and allergies

12. Ecological Information

Aquatic Toxicity

ETHYL ACETATE : Fish: 96 Hr LC50 Pimephales promelas: 220 - 250 mg/L [flow-through]; 96 Hr
(141-78-6) LC50 Oncorhynchus mykiss: 484 mg/L [flow-through]; 96 Hr LC50
Oncorhynchus mykiss: 352 – 500 mg/L [semi-static]
Algae: 48 Hr EC50 Desmodesmus subspicatus: 3300 mg/L
Invertebrate: 48 Hr EC50 Daphnia magna: 560 mg/L [static]

13. Disposal Considerations

Waste from residues : Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Water
/ unused products Number(s): D001
Contaminated : Return cylinder to supplier.
packaging

14. Transport Information

DOT (US only)

Proper shipping : Ethyl Acetate
name
Class : 3, Packing Group II
UN/ID No. : UN1173
Labeling : Flammable Liquid

15. Regulatory Information

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

ETHYL ACETATE (141-78-6) : 5000 lb final RQ; 2270 kg final RQ
CERCLA: 5000 lb final RQ; 2270 kg final RQ

SARA 311/312

Acute: Yes
Chronic: No
Fire: Yes
Reactive: No
Pressure: No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
ETHYL ACETATE	141-78-6	Yes	Yes	Yes	Yes	Yes	Yes

Not regulated under California Proposition 65.

16. Other Information

Prepared by : Specialty Gases of America, Inc.
For additional information, please visit our website at www.americangasgroup.com.