

## Safety Data Sheet

### 1. IDENTIFICATION

<b>Product Identifier:</b>	<b>Ethyl Acetate</b>
<b>Product Code(s):</b>	E1020
<b>Synonyms:</b>	Acetic acid, ethyl ester
<b>Recommended Use:</b>	For manufacturing, industrial, and laboratory use only. Use a solvent or a laboratory reagent.
<b>Uses Advised Against:</b>	Not for food, drug, or household use.
<b>Supplier:</b>	Rocky Mountain Reagents, Inc. 4621 Technology Drive, Golden, CO 80403 Phone: (303) 762-0800 Fax: (303) 762-1240
<b>Emergency Phone Number:</b>	(800) 255-3924 (VelocityEHS)

### 2. HAZARDS IDENTIFICATION

<b>Hazard Classifications:</b>	Flammable Liquids:	Category 2
	Serious Eye Damage/Irritation:	Category 2A
	Specific Target Organ Toxicity (Single Exposure):	Category 3

**Signal Word:** DANGER

**Hazard Statements:** Highly flammable liquid and vapor.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.

**Pictograms:**



**Precautionary Statements:**

**Prevention:** Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.  
Keep container tightly closed.  
Ground or bond container and receiving equipment.  
Use explosion-proof electrical, ventilating, lighting, and transportation equipment.  
Use only non-sparking tools.

Take precautionary measures against static discharge.  
Wear protective gloves, eye protection, and face protection.  
Wash thoroughly after handling.  
Avoid breathing fume, mist, vapor, or spray.  
Use only outdoors or in a well-ventilated area.

**Response:** If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
In case of fire: Use water spray, dry powder, alcohol resistant foam, or carbon dioxide to extinguish.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.  
If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.

**Storage:** Store in a well-ventilated place.  
Keep cool.  
Keep container tightly closed.  
Store locked up.

**Disposal:** Dispose of contents and container in accordance with local, regional, national, and international regulations.

**Hazards Not Otherwise Classified:** Repeated exposure may cause skin dryness or cracking.

**Toxicity Statement:** Not applicable.

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	Common Name / Synonyms	CAS#	Chemical Formula	% by Weight
Ethyl Acetate	Acetic acid, ethyl ester	141-78-6	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	≥ 99.7

**Trade Secret Statement:** Not applicable.

### 4. FIRST AID MEASURES

#### First Aid Procedures:

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious, or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a poison center or doctor if symptoms occur.

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head low so that vomit does not enter lungs. Rinse mouth with water and give up to two glasses of water to drink. Never give anything by mouth to an unconscious person. Call a physician or poison control center if symptoms occur.

**Skin Contact:** Immediately remove contaminated clothing and shoes. Wash skin with soap and plenty of water for at least 15 minutes. Wash clothing before reuse. Call a physician if symptoms occur.

**Eye Contact:** Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Check for and remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

**General Advice:** Poison information centers in each state can provide additional assistance for scheduled poisons. Ensure that those providing first aid and medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**Symptoms and Effects:** Difficulty breathing. May cause central nervous system depression. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea, and vomiting. Causes serious eye irritation.

**Immediate Medical Care/  
Special Treatment:** If you feel unwell or are concerned, get medical attention. Treat symptomatically.

## 5. FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Water spray, dry powder, alcohol resistant foam, carbon dioxide.

**Unsuitable Extinguishing Media:** Water may be ineffective. Do not use a solid (straight) water stream, as it may scatter and spread fire.

**Hazardous Combustion  
Products:** Carbon oxides.

**Specific Hazards:** Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Vapors are heavier than air and may spread along floors. Containers may explode when heated. Development of hazardous combustion gases or vapors is possible in the event of fire.

**Special Protective Equipment/  
Precautions for Firefighters:** As in any fire, wear MSHA/NIOSH approved (or equivalent) self-contained, positive-pressure or pressure-demand breathing apparatus and full protective gear. Use water spray to cool unopened containers. Move containers from fire area if you can do so without risk.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and  
Protective Equipment:** Ventilate area of leak or spill. Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Keep upwind. Keep out of low areas. Wear appropriate personal protective equipment (see Section 8). Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. Avoid contact with eyes, skin, and clothing.

**Emergency Procedures:** Evacuate surrounding personnel as needed. In case of chemical emergency, or if unsure how to address an accidental release, consult a professional (see Section 1).

**Methods for Containment:** Eliminate all sources of ignition. Stop the flow of material if this is without risk. Prevent entry into waterways, sewer, basements, or confined areas. Dike the spilled material, where this is possible. Product should not be released to the environment. Contain and recover waste when possible.

**Methods for Cleanup:** Absorb spill with an inert material (e.g. vermiculite, dry sand, earth, cloth, or fleece) and place in a non-combustible container for reclamation or disposal. Do not flush to sewer. Clean contaminated surface thoroughly. Residues from spills can be diluted with water. Never return spills in original containers for reuse. Clean up in accordance with all applicable regulations.

## 7. HANDLING AND STORAGE

**Handling:** Do not handle, store, or open near an open flame, sources of heat, or sources of ignition. Wear personal protective equipment (see Section 8). Use only in well-ventilated areas. Provide sufficient air exchange and/or exhaust in work areas. Avoid contact with skin, eyes, and clothing. Do not breathe vapors or spray mist. Do not ingest. When using, do not eat, drink, or smoke. Take precautionary measures against static discharge. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials (see Section 10). Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Containers of this material may be hazardous when empty, as they retain product residues. Observe all warnings and precautions listed for this product.

**Storage:** Store in a cool, dry, ventilated area. Store in a segregated and approved area away from heat and incompatible materials (see Section 10). Store in original container. Keep containers tightly closed and upright. Keep away from food, drink, and animal foodstuffs. Keep out of the reach of children. Ground container and transfer equipment. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of this product.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>Exposure Limits:</b>	ACGIH:	TWA:	400 ppm
	OSHA:	TWA:	400 ppm
		TWA:	1400 mg/m <sup>3</sup>
	NIOSH:	IDLH:	2000 ppm
		TWA:	400 ppm
		TWA:	1400 mg/m <sup>3</sup>

**Engineering Controls:** Ensure adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Personal Protective Measures:

**Eye/Face Protection:** Wear safety glasses with side shields or goggles. Maintain approved eye wash station and accessible rinse facilities in work area.

**Skin Protection:** Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves.

**Respiratory Protection:** An air-purifying, NIOSH-approved respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a full-face, positive-pressure, air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are unknown, or if any other circumstances exist where air-purifying respirators may not provide adequate protection.

**Specific Requirements for Personal Protective Equipment:** Ensure that glove material is compatible with this product. This information is available from glove manufacturers.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

*Unless otherwise indicated, all properties are given at 25 °C and standard pressure.*

**Appearance:** Clear, colorless liquid.

<b>Odor:</b>	Sweet, fruity.
<b>Odor Threshold:</b>	No information found.
<b>Formula Weight:</b>	88.11
<b>pH:</b>	No information found.
<b>Melting/Freezing Point:</b>	-84 – -83.5 °C
<b>Boiling Point/Range:</b>	75 – 78 °C
<b>Decomposition Temperature:</b>	No information found.
<b>Flash Point:</b>	-4 °C
<b>Auto-ignition Temperature:</b>	427 °C
<b>Flammability:</b>	Highly flammable liquid and vapor.
<b>Flammability/Explosive Limits:</b>	Lower: 2.0 % by volume Upper: 11.5 % by volume
<b>Solubility:</b>	Slightly soluble in water.
<b>Vapor Pressure:</b>	103 mbar @ 20 °C
<b>Vapor Density:</b>	3.04 (Air = 1)
<b>Specific Gravity:</b>	0.902 (Water = 1)
<b>Evaporation Rate:</b>	6.2 (Butyl Acetate = 1)
<b>Viscosity:</b>	0.45 cP @ 20 °C
<b>Partition Coefficient (n-octanol/water):</b>	0.73

## 10. STABILITY AND REACTIVITY

<b>Reactivity Data:</b>	Vapors may form explosive mixture with air.
<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	Open flames, hot surfaces, sources of ignition, and incompatible materials.
<b>Incompatible Materials:</b>	Strong oxidizing agents, strong acids, amines, peroxides, fluorine, chlorosulfonic acid, fuming sulfuric acid, lithium aluminum hydride, alkali metals, hydrides, alkaline earth metals.
<b>Hazardous Decomposition Products:</b>	Carbon oxides.
<b>Possibility of Hazardous</b>	May react vigorously or violently with the incompatible materials listed above. Excessive thermal conditions may yield hazardous decomposition products listed above.
<b>Hazardous Polymerization:</b>	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>Routes of Exposure:</b>	Inhalation, ingestion, skin contact, eye contact.
<b>Acute Effects:</b>	Causes serious eye irritation. May cause central nervous system depression.
<b>Chronic Effects:</b>	No information found.

<b>Toxicological Data:</b>	LD <sub>50</sub> Oral, Rat:	5,620 mg/kg
	LD <sub>50</sub> Dermal, Rabbit:	> 20 mL/kg > 18,000 mg/kg
	LC <sub>50</sub> Inhalation, Rat:	58 mg/L, 8 h
<b>Symptoms of Exposure:</b>	Eye irritation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea, narcosis, anemia, and vomiting.	
<b>Carcinogenic Effects:</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicological Data:</b>	EC <sub>50</sub> Freshwater Algae ( <i>Desmodesmus subspicatus</i> ):	3,300 mg/L, 48 h > 100 mg/L, 72 h
	LC <sub>50</sub> Fathead Minnow ( <i>Pimephales promelas</i> ):	230 mg/L, 96 h
	LC <sub>50</sub> Gold Orfe ( <i>Leuciscus idus</i> ):	270 mg/L, 48 h
	EC <sub>50</sub> Water Flea ( <i>Daphnia magna</i> ):	717 mg/L, 48 h 2.4 mg/L, 21 d
	EC <sub>50</sub> Microtoxicity:	1,180 mg/L, 5 min
		1,500 mg/L, 15 min
5,870 mg/L, 15 min 7,400 mg/L, 2 h		

**Persistence and Degradability:** Readily biodegradable.

**Environmental Effects:** Not expected to be hazardous to the environment. However, the possibility of an environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Partition Coefficient (n-octanol/water): 0.73

## 13. DISPOSAL INFORMATION

**Disposal Instructions:** Dispose of this material and its container to an approved waste collection point. Minimize exposure to product waste (see Section 8). Do not dispose unused waste down drains or into sewers. All wastes must be handled in accordance with local, state, and federal regulations.

**Contaminated Packaging:** Because containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near product container. Offer rinsed packaging material to local recycling facilities.

**Waste Codes:** U112 (US RCRA Hazardous Waste U List – Ignitable Waste)

## 14. TRANSPORT INFORMATION

**DOT:**

<b>UN Number:</b>	UN1173
<b>Proper Shipping Name:</b>	Ethyl acetate
<b>Hazard Class:</b>	3
<b>Packing Group:</b>	II

ERG Number: 129

Environmental Hazard Regulations: No information found.

Other Transport Precautions: DOT Reportable Quantity: 5000 lb

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations:

**OSHA:** This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Inventory:** All components of this product are on the U.S. TSCA Inventory.

### U.S. EPCRA (SARA Title III):

**Section 302:** No information found.

**Sections 311/312:**

Hazard Category	List (Yes/No)
Section 311 – Hazardous Chemical	Yes
Immediate Hazard	Yes
Delayed Hazard	Yes
Fire Hazard	Yes
Pressure Hazard	No
Reactivity Hazard	No

**Section 313:** No information found.

**CERCLA Reportable Quantities:** Ethyl Acetate: 5000 lb

### International Inventories:

Country 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 Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

\*A "Yes" indicates that the listed components of this product comply with the inventory requirements administered by the governing country or region.

## 16. OTHER INFORMATION

**Disclaimer:** Rocky Mountain Reagents, Inc. provides the information in this Safety Data Sheet in the belief that it is reliable but assumes no responsibility for its completeness or accuracy. The physical properties reported in this SDS are obtained from literature and do not constitute product specifications. Rocky Mountain Reagents, Inc. makes and gives no representations or warranties with respect to the information contained herein or the product to which it refers, whether express, implied, or statutory, including without limitation, warranties of accuracy, completeness, merchantability, non-infringement, performance, safety, suitability, stability, and fitness for a particular purpose. No warranty against infringement of any patent, copyright or trademark is made or implied. This SDS is intended only as a guide to the appropriate handling of the material by a properly trained person. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. Accordingly, Rocky Mountain Reagents, Inc. assumes no liability whatsoever for the use of or reliance upon this information including results obtained, incidental or consequential damages, or lost profits.

**Issue Date:** May 20, 2024

**Reason for Revision:** Not applicable.