# CORCO CHEMICAL CORPORATION

Manufacturers of ACS Reagents and Semiconductor Grade Chemicals

## SAFETY DATA SHEET ETHYL ACETATE

## 1. Identification

Product identifier: Ethyl Acetate Product Code Number: 1101 Trade Name: Ethyl Acetate

**Synonyms:** None

Chemical Formula: C4H8O2

**Product Use:** Process chemical, Laboratory and scientific research and development

**Restrictions on use:** None known.

**Company Identification:** Corco Chemical Corporation

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Fairless Hills, PA 19030 Phone: 215-295-5006 Fax: 215-295-0781

**24 Hour Emergency Telephone Number:** 

**CHEMTREC (U.S.):** 1-800-424-9300

CHEMTREC (Outside U.S.): 1-703-527-3887

**SDS Date of Preparation:** 12/10/19

## 2. Hazard(s) identification

#### Classification of the Substance or Mixture:

Flammable Liquid Category 2

Specific Target Organ Toxicity Single Exposure Category 3 (Narcotic effects)

#### **Label Elements:**

Danger!



#### **Hazard Statements:**

H225 Highly flammable liquid and vapor.

H336 May cause drowsiness or dizziness.

#### **Precautionary Statements:**

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

P233 Keep container tightly closed.

P240 Ground or bond container and receiving equipment.

P241 Use explosion-proof electrical, ventilating, or lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing mist or vapors.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor if you feel unwell.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P370+P378 In case of fire: Use water mist, alcohol-resistant foam, dry chemical, or carbon dioxide to extinguish.

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

P405 Store locked up.

P501 Dispose of contents and container in accordance with local and national regulations.

Other Hazards: None known.

## 3. Composition/information on ingredients

Ingredient	CAS Number	Percent	Hazardous Chemical
Ethyl Acetate	141-78-6	100%	Yes

#### 4. First-aid measures

**Inhalation:** If symptoms develop move victim to fresh air. Get medical attention if symptoms develop.

**Skin contact:** Flush thoroughly with water. Get medical attention if irritation or symptoms of exposure develop. Remove and launder contaminated clothing before re-use.

**Eye contact:** Rinse thoroughly with water. Get medical attention if irritation occurs and persists.

**Ingestion:** Rinse mouth with water. Do not induce vomiting unless directed to do so by a medical professional. Get medical attention if you fell unwell.

Most important symptoms/effects, acute and delayed: Direct contact with liquid may cause mild eye irritation. Inhalation of mists or vapors may cause headache, dizziness, nausea and other symptoms of central nervous system depression.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is not required.

## 5. Fire-fighting measures

**Suitable (and unsuitable) extinguishing media:** Use water mist, alcohol-resistant foam, dry chemical, or carbon dioxide.

**Specific hazards arising from the chemical:** Highly flammable liquid and vapor. Vapors are heavier than air and may flow along surfaces to remote ignition sources and flash back. Sensitive to static discharge. Prevent buildup of vapors or gases to explosive concentrations.

**Special protective equipment and precautions for fire-Fighters:** Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

#### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Evacuate spill area and keep unprotected personnel away. Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Minimize generation of static electricity which may cause sparking. Avoid contact with eyes. Wear appropriate protective clothing. Avoid breathing vapors or mists. Ventilate area with explosion proof equipment.

Methods and materials for containment and cleaning up: Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth,) and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

## 7. Handling and storage

**Precautions for safe handling:** Avoid contact with eyes. Wear protective clothing and equipment as described in Section 8. Avoid breathing vapors or mists. Use with adequate ventilation. Wash hands with soap and water after use. Keep product away from heat,

sparks, flames and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use. Use with non-sparking tools and explosion proof equipment. Electrically bond and ground containers for transfer.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated location away from heat and open flames. Keep away from incompatible materials. Protect container from physical damage. Keep containers closed when not in use. Keep out of the reach of children.

## 8. Exposure controls/personal protection

Chemical Name	<b>Exposure Limits</b>
Ethyl Acetate	400 ppm TWA ACGIH TLV
	400 ppm TWA OSHA PEL

**Appropriate engineering controls:** A system of local and / or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Use explosion proof electrical equipment and wiring where required. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

#### **Personal protective equipment:**

**Respiratory protection:** In operations where the occupational exposure limits are exceeded, an approved respirator with applicable cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**Skin Protection:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Eye Protection:** Use chemical safety glasses or goggles where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and chemical properties

**Appearance and Physical State:** Liquid

Form: Liquid Color: Colorless Odor: Sweet, ester

Odor Threshold: 3.9 ppm pH: No data available.

**Melting Point/Freezing Point:** -83 °C **Boiling Point / Boiling Range:** 78 °C

Flash Point: -4 °C (Tag closed cup)

**Evaporation Rate: 4.1** 

Flammability (solid, gas): No data available.

**Upper / Lower Flammability or Explosive Limits:** No data available.

**Vapor pressure:** 99 mbar (20 °C)

Vapor density (air=1): 3

Specific Gravity: 0.902 (20 °C)

**Solubility(ies):** 

**Solubility in Water:** Moderate **Solubility (other):** No data available.

Partition coefficient (n-octanol/water): Pow: 5.4 log Pow: 0.73

Auto ignition Temperature: No data available.

**Decomposition Temperature:** (DTA) No exotherm to 500°C

Viscosity: Not determined.

**Explosive properties:** No data available. **Oxidizing properties:** No data available.

Other information:

**Minimum ignition temperature:** 485 °C (ASTM D2155)

## 10. Stability and reactivity

**Reactivity:** Not reactive under normal conditions of use.

**Chemical stability:** Stable under ordinary conditions of use and storage.

**Possibility of hazardous reactions:** Hazardous polymerization will not occur.

**Conditions to avoid:** Keep away from heat, sparks, flames and other sources of ignition.

**Incompatible materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Carbon Dioxide and Carbon Monoxide may form when heated to decomposition.

## 11. Toxicological information

#### **Potential Health Effects:**

**Inhalation:** Inhalation of mists or vapors may cause nose and throat irritation with the possibility of central nervous system depression. Symptoms of central nervous system depression include headache, dizziness, drowsiness, nausea and unconsciousness.

**Skin Contact:** Prolonged contact may cause skin irritation with drying and dermatitis.

**Eve Contact:** Direct contact with eyes may cause mild eye irritation.

**Ingestion:** Swallowing may cause gastrointestinal irritation and central nervous system depression with symptoms similar to those described under inhalation.

**Chronic Exposure:** None known.

**Aggravation of Pre-existing Conditions:** Persons with pre-existing eye and skin disorders or impaired respiratory function may be more susceptible to the effects of this material.

**Carcinogenicity:** None of the components of this product are listed as a carcinogen or suspected carcinogen by OSHA, IARC, and NTP.

**Reproductive Effects:** Reproductive harm is not expected from this product.

Mutagenic Effects: Not expected to cause mutagenic activity.

**Acute Toxicity:** 

Ethyl Acetate: Oral rat LD50: 5620 mg/kg, Skin rabbit LD50: >20,000 mg/kg

## 12. Ecological information

#### **Exotoxicity:**

Product	Species	<b>Test Results</b>
Ethyl Acetate	Fathead minnow	230 mg/L 96 hr LC50
	Daphnia magna	610 mg/L 48 hr EC50
	Desmodesmus subspicatus	>100 mg/L 72 hr NOEC
	Daphnia magna	2.4 mg/L 21 day NOEC

This material is not expected to be toxic to aquatic life.

**Persistence and Degradability:** Ethyl Acetate is readily biodegradable- 94% in 28 days.

Bioaccumulative Potential: This material is not expected to significantly bioaccumulate.

**Mobility in Soil:** None known.

Other adverse effects: None known.

## 13. Disposal considerations

#### Waste treatment methods:

**Disposal Methods:** Dispose of waste and residues in accordance with local authority requirements. Mix with compatible chemical which is less flammable and incinerate. Since emptied 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 this container.

## 14. Transportation Information

	UN	Proper shipping name	Hazard	Packing	Environmental
	Number		Class	Group	Hazard
US DOT	UN1173	Ethyl Acetate*	3	II	Not applicable
IMDG	UN1173	Ethyl Acetate	3	II	Not applicable
IATA	UN1173	Ethyl Acetate	3	II	Not applicable

<sup>\*</sup> Hazardous Substance (49CFR172.101): Ethyl Acetate (RQ5,000 lbs)- (5,000 lbs. product)

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

Special Precautions for User: Not applicable

## 15. Regulatory information

**US federal regulations:** 

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not Regulated.

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

This product has a Reportable Quantity (RQ) of 5,000 lbs. (based on the RQ for Ethyl Acetate of 5,000 lbs present at 100%). Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

# Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories:

**SARA 311/312** 

Refer to Section 2 for OSHA Hazard Classification.

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

#### SARA 302 Extremely hazardous substance

None

#### **International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
	in the state of th	

Australia	Australian Inventory of Chemical Substances	Yes
	(AICS)	
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

<sup>\*</sup>A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

#### 16. Other information

**Date of Current Revision:** 12/10/19 **Revision Summary:** Updated all sections.

**Date of Previous Revision:** N/A

Disclaimer - The information in the SDS is based on the data available at the time. While believed to be accurate, Corco does not claim it to be all inclusive. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. It is not intended to provide product performance or applicability information, and no express or implied warranty of any kind is made with respect to the product, the underlying product data, or the information contained herein. We will not provide advice on such matters, or be responsible for any injury or damage resulting from the use of the product described herein.