Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Ethyl Acetate NF
Commercial Name Ethyl Acetate
Product Use General solvent use.
Restrictions On Use Not available.

Product Code 50-1676

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 GHS Classifications Flammable liquids Category 2 Serious eye damage/eye irritation Category 2A Specific target organ toxicity, single exposure Category 3 narcotic effects

Signal Word DANGER

Hazard Statement(s) Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.

Pictogram(s) or Symbol(s)

Precautionary Statement(s):

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.

Response If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. 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 advice/attention. In case of fire: Use appropriate media for extinction.

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

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Ethyl Acetate NF
% By Weight 100
CAS# 141-78-6
Molecular Weight 88.11
Chemical Formula C4H8O2
Synonym(s) Not available.

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Ethyl acetate	141-78-6	100	TWA: 400 (ppm) from OSHA (PEL) [United States] TWA: 400 from ACGIH (TLV) [United States] TWA: 1400 (mg/m3) from NIOSH [United States] TWA: 400 (ppm) from NIOSH [United States] TWA: 400 (ppm) [Canada] TWA: 1440 (mg/m3) [Canada] TWA: 1400 (mg/m3) from OSHA (PEL) [United States]	ORAL (LD50): Acute: 5620 mg/kg [Rat]. 4100 mg/kg [Mouse]. 4935 mg/kg [Rabbit]. VAPOR (LC50): Acute: 45000 mg/m3 3 hours [Mouse]. 16000 ppm 6 hours [Rat].

Section 4: First-Aid Measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

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

Eye Contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. Get medical attention if symptoms occur.

Symptoms/Effects

Acute Central nervous system effects.

Delayed Not available.

Immediate Medical Attention

Provide general supportive measures and treat symptomatically. Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable Extinguishing Media

Do not use water jet as an extinguisher, as this will spread the fire.

Products of Combustion

No unusual fire or explosion hazards noted.

Firefighters Special Equipment and Precautions

Wear suitable protective equipment. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing. Use water spray to cool unopened containers. Fire fighting equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6: Accidental Release Measures

Keep unnecessary personnel away. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Wear appropriate personal protective equipment. Avoid inhalation of vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS. Absorb spillage with suitable absorbent material. For waste disposal, see section 13 of the SDS. Remove sources of ignition. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Clean surface thoroughly to remove residual contamination. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

Section 7: Handling and Storage

As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Select and use containment devices and personal protective equipment based on a risk assessment of material potency and exposure potential. Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

Section 8: Exposure Controls/Personal Protection

Exposure Limits TWA: 400 (ppm) from OSHA (PEL) [United States] TWA: 400 from ACGIH (TLV) [United States] TWA: 1400 (mg/m3) from NIOSH [United States]

Engineering Controls	For laboratory operations, use good technique and limit open handling. Control exposures to below the occupational exposure level (if available). Select and use containment devices and personal protective equipment based on a risk assessment of exposure potential. Cover all containers for solutions and slurries while being transferred.
Personal Protection	Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available. Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent. Wear lab coat. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use. Do not wear protective garments in common areas (e.g., cafeterias) or out-of-doors. Respirators are generally not required for laboratory operations. Chose respiratory protection appropriate to the task and the level of existing engineering controls. Wear appropriate thermal protective clothing, when necessary. Handling practices in this SDS are recommendations for laboratory use of reference standards. Procedures for any other uses or quantities should be determined after an appropriate assessment.

Section 9: Physical and Chemical Properties

Appearance	Liquid. Color: Colorless. Clear.
Odor	Fruity odor
Odor Threshold	18 ppm (detectable); 32 ppm (recognizable)

Melting Point	-117.4 °F (-83 °C)	**pH**	Not Available.
Freezing Point	Not available.	**Vapor Pressure**	12.43 kPa at 25 °C
Boiling Point/Range	170.6 °F (77 °C)	**Vapor Density**	3.04 (Air = 1)
Decomposition temperature	Not Available.	**Viscosity**	Not Available.
Partition Coefficient: n-octanol/water	0.6 - 0.73	**Evaporation Rate**	6.2 (butyl acetate=1)
Flash Point	24.8 °F (-4.0 °C) Closed Cup	**Autoignition temperature**	798.8 °F (426 °C)
Flammability	Not applicable.	**Flammability or Explosive Limits:**	
		Lower	2%
		Upper	11.5%

Solubility(ies)	Soluble
Other	Chemical family Ester. Dynamic viscosity 0.42 mPa.s (77 °F (25 °C)) Molecular formula C4H8O2 Molecular weight 88.11 Percent volatile 100 % Specific gravity 0.9 at 20 °C Surface tension 24 mN/m (68 °F (20 °C)) VOC 100 %

Section 10: Stability and Reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability	Material is stable under normal conditions.
Hazardous Polymerization	No dangerous reaction known under conditions of normal use.
Conditions to Avoid	Contact with incompatible materials. Sparks. Flames. Avoid temperatures exceeding the flash point.
Incompatible Materials	Strong oxidizing agents. Nitrates. Alkaline metals.
Hazardous Decomposition Products	Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions.

Section 11: Toxicological Information

RTECS Not available

Acute Toxicity
Acute Dermal LD50, Rabbit, > 20 ml/kg Inhalations LC50 Mouse 1500 mg/l, 4 Hours Rabbit 2500 mg/l, 4 Hours Rat 4000 mg/l, 4 Hours

Skin Corrosion/Irritation
Based on available data, the classification criteria are not met.

Serious Eye Damage/Irritation
Causes serious eye irritation.

Respiratory or Skin Sensitization
Knowledge about health hazard is incomplete.

Germ Cell Mutagenicity
Knowledge about mutagenicity is incomplete.

Carcinogenicity
Knowledge about carcinogenicity is incomplete.

Reproductive Toxicity
Knowledge about health hazard is incomplete. Ethyl acetate is hydrolyzed to acetic acid and ethanol in the human body. Ethanol is a known human reproductive hazard.

Routes of Entry
Inhalation.

Symptoms Related to Exposure
Narcotic effects.

Potential Health Effects
Not Available.

Target Organ(s) Knowledge about health hazard is incomplete.

Section 12: Ecological Information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistance and Degradability
No data is available on the degradability of this product.

Bioaccumulative Potential
Octanol/water partition coefficient log Kow 0.6 - 0.73

Mobility in Soil
Not Available.

Other Adverse Effects
The product contains volatile organic compounds which have a photochemical ozone creation potential.

Section 13: Disposal Considerations

Waste Disposal
Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

Disposal of Container
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Other Considerations
The waste code should be assigned in discussion between the user, the producer and the waste disposal company. D001: Waste Flammable material with a flash point <140 F

Section 14: Transport Information

DOT Classification
UN number UN1173 UN proper shipping name Ethyl acetate Class 3 Transport hazard class(es) Subsidiary risk - Packing group II Packaging exceptions 150 Packaging non bulk 202 Packaging bulk 242

Section 15: Regulatory Information

Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4): Ethyl Acetate (CAS 141-78-6) Listed. SARA 304 Emergency release notification: Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not regulated. Superfund Amendments and Reauthorization Act of 1986 (SARA): Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Hazard categories SARA 302 Extremely hazardous substance: Not listed. SARA 311/312 Hazardous chemical: Yes SARA 313 (TRI reporting): Not regulated. Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated. Safe Drinking Water Act: Not regulated. FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace: Ethyl Acetate (CAS 141-78-6): Low priority California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Other
Not available.

Section 16: Other Information

The information contained herein is based on data considered to be accurate. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. It is the user's obligation to determine the conditions of safe use of the product.