

# Material Safety Data Sheet

## n-Propyl acetate

### Section 1 - Chemical Product

**MSDS Name:** n-Propyl acetate

**Synonyms:** Acetic acid n-propyl ester; 1-Acetoxypropane.

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
109-60-4	n-Propyl acetate	90+	203-686-1

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: APHA: 15 max liquid. Flash Point: 10 deg C.

**Danger!** Flammable liquid and vapor. Causes eye, skin, and respiratory tract irritation. Breathing vapors may cause drowsiness and dizziness. Repeated exposure may cause skin dryness or cracking.

**Target Organs:** Blood, central nervous system, respiratory system, eyes, skin.

#### Potential Health Effects

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation. May be harmful if absorbed through the skin. Repeated or prolonged exposure may cause drying and cracking of the skin.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. May cause central nervous system depression.

**Inhalation:** Causes respiratory tract irritation. May cause narcotic effects in high concentration. May be harmful if inhaled. Inhalation of vapors may cause drowsiness and dizziness.

**Chronic:** Prolonged or repeated skin contact may cause defatting and dermatitis. Chronic exposure may cause blood effects.

### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Containers may explode in the heat of a fire. Flammable liquid and vapor.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide. Water may be ineffective.

**Flash Point:** 10 deg C ( 50.00 deg F)

**Autoignition Temperature:** 450 deg C ( 842.00 deg F)

**Explosion Limits, Lower:** 1.8 vol %

**Upper:** 8 vol %

**NFPA Rating:** (estimated) Health: 2; Flammability: 3; Instability: 1

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

## Section 7 - Handling and Storage

**Handling:** Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Take precautionary measures against static discharges. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
n-Propyl acetate	200 ppm TWA; 250 ppm STEL	200 ppm TWA; 840 mg/m3 TWA 1700 ppm IDLH	200 ppm TWA; 840 mg/m3 TWA

**OSHA Vacated PELs:** n-Propyl acetate: 200 ppm TWA; 840 mg/m3 TWA

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** clear, colorless - APHA: 15 max

**Odor:** odor of pears

**pH:** Not available.

**Vapor Pressure:** 33 mbar @ 20 deg C

**Vapor Density:** 3.5 (air=1)

**Evaporation Rate:** Not available.

**Viscosity:** 0.58 mPa @ 20 deg C

**Boiling Point:** 102 deg C @ 760 mmHg

**Freezing/Melting Point:** -95 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Soluble.

**Specific Gravity/Density:** 0.880

**Molecular Formula:** C5H10O2

**Molecular Weight:** 102.13

## Section 10 - Stability and Reactivity

**Chemical Stability:** Moisture sensitive.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat, exposure to moist air or water.

**Incompatibilities with Other Materials:** Strong oxidizing agents, acids, bases.

**Hazardous Decomposition Products:** Carbon monoxide, carbon monoxide, carbon dioxide.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 109-60-4: AJ3675000

**LD50/LC50:**

CAS# 109-60-4:

Draize test, rabbit, eye: 500 mg/24H Mild;  
Oral, mouse: LD50 = 8300 mg/kg;  
Oral, rabbit: LD50 = 6640 mg/kg;  
Oral, rat: LD50 = 9370 mg/kg;  
Skin, rabbit: LD50 = >20 mL/kg;

**Carcinogenicity:**

CAS# 109-60-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** Fish: Fathead Minnow: 60mg/L; 96H; No data available.

**Environmental:** Terrestrial: Expected to have high mobility in soil. Volatilization is expected from moist soil surfaces. Aquatic: Not expected to adsorb to suspended solids and sediment in water. Expected to volatilize from water surfaces. Atmospheric: Expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; half-life estimated to be about 5 days. Expected to slightly biodegrade and bioconcentrate.

**Physical:** No information available.

**Other:** Do not empty into drains.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	<b>US DOT</b>	<b>Canada TDG</b>
<b>Shipping Name:</b>	N-PROPYL ACETATE	N-PROPYL ACETATE
<b>Hazard Class:</b>	3	3
<b>UN Number:</b>	UN1276	UN1276
<b>Packing Group:</b>	II	II
<b>Additional Info:</b>		FLASHPOINT 10 C

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 109-60-4 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 109-60-4: immediate, fire.

#### Section 313

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 109-60-4 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations****European Labeling in Accordance with EC Directives****Hazard Symbols:**

XI F

**Risk Phrases:**

R 11 Highly flammable.

R 36 Irritating to eyes.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

**Safety Phrases:**

S 16 Keep away from sources of ignition - No smoking.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 29 Do not empty into drains.

S 33 Take precautionary measures against static discharges.

**WGK (Water Danger/Protection)**

CAS# 109-60-4: 1

**Canada - DSL/NDSL**

CAS# 109-60-4 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of B2, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 109-60-4 is listed on the Canadian Ingredient Disclosure List.