Material Safety Data Sheet

N-Propyl Acetate, 99.5+%

Section 1 - Chemical Product and Company Identification

MSDS Name: N-Propyl Acetate, 99.5+% Synonyms: Acetic Acid N-Propyl Ester; 1-Propyl Acetate. Company Identification: Nanjing Rongxin Chemical Co., Ltd No.168-095, Fangshui Rd., NCIP, Nanjing, China Tel: 0086-25-68594193

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
109-60-4	N-PROPYL ACETATE	99.5+%	203-686-1

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: 14 deg C.

Warning! Flammable liquid and vapor. Causes respiratory tract irritation. Lachrymator (substance which increases the flow of tears). Causes eye and skin irritation. May cause digestive tract irritation. May cause central nervous system depression. May cause dermatitis. **Target Organs:** Central nervous system.

Potential Health Effects

Eye: Causes eye irritation. Lachrymator (substance which increases the flow of tears). May cause chemical conjunctivitis and corneal damage.

Skin: Causes skin irritation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May cause cyanosis of the extremities.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache,

dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Ingestion of large amounts may cause CNS depression.

Inhalation: Inhalation of vapor may cause respiratory tract irritation. May cause effects similar to those described for ingestion. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. Can produce delayed pulmonary edema. May cause burning sensation in the chest.

Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis. Effects may be delayed.

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. Do NOT allow victim to rub eyes or keep eyes closed.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

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. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. **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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May polymerize explosively when involved in a fire.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Use dry chemical, carbon dioxide, or alcohol-resistant foam. Do NOT use straight streams of water. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 14 deg C (57.20 deg F)

Autoignition Temperature: 450 deg C (842.00 deg F)

Explosion Limits, Lower: 2.0

Upper: 8.0

NFPA Rating: (estimated) Health: 1; Flammability: 3; Instability: 0

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. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Use with adequate ventilation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. **Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Do not store near combustible materials. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels. **Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
	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: colorless Odor: fruity odor pH: Not available. Vapor Pressure: 25 mm Hg @25C Vapor Density: 3.52 Evaporation Rate:Not available.

Viscosity: Not available.

Boiling Point: 101 deg C Freezing/Melting Point:-95 deg C Decomposition Temperature:Not available. Solubility: Slightly soluble in water Specific Gravity/Density:1.89 Molecular Formula:CH3COOCH2CH2CH3 Molecular Weight:102.0688

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat. **Incompatibilities with Other Materials:** Alkalies, nitrates, acids, strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported

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 data available. Teratogenicity: No data available. Reproductive Effects: No data available. Mutagenicity: No data available. Neurotoxicity: No data available. 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: For more information, see "HANDBOOK OF ENVIRONMENTAL FATE AND EXPOSURE DATA."

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				
	US DOT	Canada TDG		
Shipping Name:	N-PROPYL ACETATE	N-PROPYL ACETATE		
Hazard Class:	3	3		
UN Number:	UN1276	UN1276		
Packing Group:	П	11		
Additional Info:		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 depletors.

This material does not contain any Class 2 Ozone depletors.

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: F

Risk Phrases: R 11 Highly flammable.

Safety Phrases:

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

S 29 Do not empty into drains.

S 33 Take precautionary measures against static discharges.

S 9 Keep container in a well-ventilated place.

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.

Section 16 - Additional Information

MSDS Creation Date: 5/26/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.