

# SAFETY DATA SHEET

N-Propyl Alcohol  
Product ID: OR1602  
Revised: 07-29-2016  
Replaces: 12-30-2014

**CHEMICAL DISTRIBUTION**  
**SOLUTIONS**

## 1. IDENTIFICATION

**Product Identifier:** N-Propyl Alcohol  
**Other Identifiers:** Propyl Alcohol; Propanol; 1-Propanol; Ethyl Carbinol; 1-Propyl Alcohol  
**CAS Number:** 71-23-8  
**Recommended Use:** Solvent  
**Restrictions on Use:** No data available.

**Chemical Distribution Solutions**  
1125 Oak St. Ste. 303  
Conway, AR 72032  
(501) 978-1111

**EMERGENCY RESPONSE NUMBERS:**  
24 Hour Emergency #: (800) 424-9300 CHEMTREC

## 2. HAZARD(S) IDENTIFICATION

**GHS Classification(s):** Serious Eye Damage/Eye Irritation Category 1  
Flammable Liquid Category 3  
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

**GHS Label Elements:**

**GHS Hazard Symbols:**



**Signal Word:** Danger  
**Hazard Statements:** Flammable liquid and vapour.  
Causes serious eye damage.  
May cause drowsiness or dizziness.

**Precautionary Statements:**

**Prevention:** Keep away from heat, sparks, open flames and hot surfaces. – No smoking.  
Ground and bond container and receiving equipment.  
Use explosion-proof electrical, ventilating, and lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Avoid breathing dust, gas, mist, vapors or spray.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
In case of fire: Use Alcohol foam., Carbon dioxide., Dry chemical., Water spray. to extinguish.

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

Store in a secure manner.

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

**Hazards Not Otherwise Classified:** None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances/Mixtures:

<u>Chemical or Common Name/Synonyms</u>	<u>CAS Number</u>	<u>% by Wt.</u>
N-Propyl Alcohol	71-23-8	100 %

Note: Any chemical identity and/or exact percentage not expressly stated is being withheld as a trade secret or is due to batch variation.

### 4. FIRST-AID MEASURES

#### Description of Necessary Measures:

**Eye Contact:** If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Remove contact lens if easy to do. In case of irritation from airborne exposure, move to fresh air. Get medical attention, if symptoms persist.

**Skin Contact:** If on skin: Immediately flush skin with plenty of water while removing contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops or persists, get medical attention. Wash with soap and water. Discard footwear which cannot be decontaminated.

**Inhalation:** If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

**Ingestion:** If swallowed: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

#### Most Important Symptoms/Effects, Acute and Delayed:

**Eye Contact:** May cause moderate to severe irritation. Liquid or vapor may cause: burning sensation. pain. watering. change of vision. corneal inflammation. burns.

**Skin Contact:** May cause mild irritation. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Prolonged and repeated exposure may cause: redness. scaling. cracking.

**Skin Absorption:** May be absorbed through skin.

**Inhalation:** May cause moderate to severe irritation. Harmful if inhaled. May irritate: nose. throat. respiratory tract. May cause: coughing. chest pain. nasal discomfort and discharge. hoarseness. difficulty breathing. dizziness. nausea. headache. drowsiness.

**Ingestion:** May cause mild to severe irritation. May be harmful if swallowed. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea. central nervous system depression. dizziness. headache. stupor. incoordination. unconsciousness. Aspiration into the lungs may occur during ingestion or vomiting, resulting in severe pulmonary injury.

**Indication of Immediate Medical Attention and Special Treatment Needed:** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Alcohol foam. Carbon dioxide. Dry chemical. Water spray. Water may be ineffective but should be used to cool fire-exposed structures and vessels.

**Specific Hazards Arising from the Chemical:**

**N-Propyl Alcohol**  
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**Fire and Explosion Hazards:** FLAMMABLE LIQUID. Vapors are heavier than air. Vapors may settle in low or confined areas, or travel long distances along the ground or surface to an ignition source where they may ignite, flashback, or explode. Keep away from heat, sparks, flames or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment). **PROCESS HAZARD:** Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into hot equipment under a vacuum, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Vapors may form explosive mixture with air. Prevent buildup of vapors or gases to explosive concentrations.

**Hazardous Combustion Products:** Carbon dioxide. Carbon monoxide. Unidentifiable organic materials.

**Special Protective Equipment and Precautions for Fire-Fighters:** Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. Water spray can be used to reduce intensity of flames and to dilute spills to a nonflammable mixture. Run-off from fire control may cause pollution.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, Emergency Procedures:** FLAMMABLE LIQUID. Eliminate all sources of ignition. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

**Methods and Materials for Containment and Clean Up:** If fire potential exists, blanket spill with alcohol-type aqueous film-forming foam or use water spray to disperse vapors. Keep upwind of leak or spill. Keep out of low areas. Contain spill, place into drums for proper disposal. Soak up residue with non-flammable absorbent material. Place in non-leaking containers for immediate disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death. Launder contaminated clothing before reuse. Air-dry contaminated clothing in a well ventilated area before laundering. Always open containers slowly to allow any excess pressure to vent. Take precautionary measures against static discharges. Follow OSHA Regulations for flammable and combustible liquids and for airborne contaminants.

**Conditions for Safe Storage, Including any Incompatibilities:** FLAMMABLE LIQUID. Store in a cool, well ventilated area away from all sources of ignition and out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment. Store in accordance with local/national regulations.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### OSHA Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
N-Propyl Alcohol	200 ppm TWA; 500 mg/m <sup>3</sup> TWA

### ACGIH Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
N-Propyl Alcohol	100 ppm TWA; (Skin)

**N-Propyl Alcohol**  
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**Engineering Controls:** General room ventilation is required. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

**Individual Protection Measures:**

**Eye/Face Protection:** Wear chemical safety goggles while handling this product. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Wear a full-face respirator, if needed.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Impervious. Chemical-resistant.

**Respiratory Protection:** Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved air-purifying respirator with: Organic vapor cartridge. NIOSH-Approved Supplied Air Respirator (SAR). NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

**Other Protective Equipment:** Eye-wash station. Safety shower. Protective clothing. Impervious clothing.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift. Food, beverages, and tobacco products should not be carried, stored or consumed where this material is in use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid.

**Color:** Clear. Colorless.

**Odor:** Mild alcohol odor.

**Odor Threshold:** 2.6 ppm

**pH:** N.A.

**Freezing Point (deg. F):** ~ -197

**Melting Point (deg. F):** N.D.

**Initial Boiling Point or Boiling Range:** 207 °F

**Flash Point:** 73.4 °F

**Flash Point Method:** CC.

**Evaporation Rate (nBuAc = 1):** 1

**Flammability (solid, gas):** N.D.

**Lower Explosion Limit:** N.A.

**Upper Explosion Limit:** N.A.

**Vapor Pressure (mm Hg):** 19.29 mbar (20 Deg. C)

**Vapor Density (air=1):** 2.1

**Specific Gravity or Relative Density:** 0.804 @ 20 C

**Solubility in Water:** Complete

**Partition Coefficient (n-octanol/water):** N.D.

**Autoignition Temperature:** 700 - 775 Deg. F.

**Decomposition Temperature:** N.D.

**Viscosity:** 2.0 mPa.s @ 25 C

**% Volatile (wt%):** N.D.

**VOC (wt%):** N.D.

**VOC (lbs/gal):** N.D.

**Fire Point:** N.D.

## 10. STABILITY AND REACTIVITY

**N-Propyl Alcohol**  
**Product ID: OR1602**

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal conditions.

**Conditions to Avoid:** Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid other ignition sources.

**Incompatible Materials:** Strong oxidizing agents. Halogenated compounds. Acids.

**Hazardous Decomposition Products:** Carbon dioxide. Carbon monoxide. Unidentifiable organic materials.

## 11. TOXICOLOGICAL INFORMATION

**Routes of Exposure:** Eyes. Ingestion. Inhalation. Skin. Absorption.

**Symptoms/Effects: Acute, Delayed and Chronic:**

**Eye Contact:** May cause moderate to severe irritation. Liquid or vapor may cause: burning sensation. pain. watering. change of vision. corneal inflammation. burns.

**Skin Contact:** May cause mild irritation. Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Prolonged and repeated exposure may cause: redness. scaling. cracking.

**Skin Absorption:** May be absorbed through skin.

**Inhalation:** May cause moderate to severe irritation. Harmful if inhaled. May irritate: nose. throat. respiratory tract. May cause: coughing. chest pain. nasal discomfort and discharge. hoarseness. difficulty breathing. dizziness. nausea. headache. drowsiness.

**Ingestion:** May cause mild to severe irritation. May be harmful if swallowed. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea. central nervous system depression. dizziness. headache. stupor. incoordination. unconsciousness. Aspiration into the lungs may occur during ingestion or vomiting, resulting in severe pulmonary injury.

**Numerical Measures of Toxicity:**

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
N-Propyl Alcohol	Rat: 3830 mg/kg	Rabbit: 4049 mg/kg	4H Rat: > 13548 ppm

**Cancer Information:**

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

**Medical Conditions Aggravated by Exposure to Product:** Central nervous system disorders. Eye disorders. Respiratory system disorders. Skin disorders. Liver disorders.

**Other:** None known.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicological Information:** Toxicity to fish: LC50 (Pimephates promelas (fathead minnow)) 96 hours: > 100 mg/l, flow through test

Toxicity to aquatic invertebrates: EC50 (Daphnia magna (water flea)) 48 hours: > 100 mg/l, static test

Toxicity to algae: Ec50 (Pseudokirchneriella subcapitata (green algae)) 48 hours: >100 mg/l

Chronic toxicity to aquatic invertebrates: NOEC (Daphnia magna (water flea)) 21 d: > 100 mg/l; semi-static test: OECD Test Guideline 211

**Chemical Fate Information:** Readily biodegradable

OECD Test Guideline 301D (15d): > 60%

No Bioaccumulation is to be expected (log Pow <= 4)

No mobility in soil data

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This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

## 13. DISPOSAL CONSIDERATIONS

**Hazardous Waste Number:** D001

**Disposal Method:** Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

## 14. TRANSPORT INFORMATION

**DOT (Department of Transportation):**

**Identification Number:** UN1274  
**Proper Shipping Name:** Propyl Alcohol, Normal  
**Hazard Class:** 3  
**Packing Group:** III  
**Label Required:** FLAMMABLE

## 15. REGULATORY INFORMATION

**TSCA Inventory Status:** All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

**SARA Title III Section 311/312 Category Hazards:**

<u>Immediate (Acute)</u>	<u>Delayed (Chronic)</u>	<u>Fire Hazard</u>	<u>Pressure Release</u>		<u>Reactive</u>		
Yes	No	Yes	No	No			
<b>Regulated Components:</b>	<b>CAS</b>	<b>CERCLA</b>	<b>SARA</b>	<b>SARA</b>	<b>U.S.</b>	<b>WI</b>	<b>Prop</b>
<b>Component</b>	<b>Number</b>	<b>RQ</b>	<b>EHS</b>	<b>313</b>	<b>HAP</b>	<b>HAP</b>	<b>65</b>

No components found.

**\*Prop 65 - May Contain the Following Trace Components:**

None.

## 16. OTHER INFORMATION

**Hazard Rating System**

**Health:** 3  
**Flammability:** 3  
**Reactivity:** 0

\* = Chronic Health Hazard

**NFPA Rating System**

**Health:** 3  
**Flammability:** 3  
**Reactivity:** 0  
**Special Hazard:** None

**SDS Abbreviations**

**N.A. = Not Applicable**  
**N.D. = Not Determined**  
**HAP = Hazardous Air Pollutant**  
**VOC = Volatile Organic Compound**  
**C = Ceiling Limit**  
**N.E./Not Estab. = Not Established**

**N-Propyl Alcohol**  
**Product ID: OR1602**

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**SDS Prepared by:** csh

**Reason for Revision:** Changes made throughout the SDS.

**Revised:** 07-29-2016

**Replaces:** 12-30-2014

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