



SAFETY DATA SHEET

N-PROPANOL

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: N-PROPANOL

Recommended use: Chemical for industry

Manufacturer/Supplier: **MODERN CHEMICAL Co.Ltd.**
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2. HAZARDS IDENTIFICATION

Label elements

Pictogram



Signal word

Danger

Hazard statement(s):

- 1.) Highly flammable liquid and vapour.
- 2.) Harmful if swallowed.
- 3.) May cause drowsiness or dizziness.
- 4.) Suspected of damaging fertility or the unborn child.
- 5.) Cause serious eye damage.

Precautionary statement(s):

- 1.) If contact with eyes, flush with plenty of water before seek for medical attention.
- 2.) Wear eye protect or face protect equipment.
- 3.) Don't to lead vomiting.



- 4.) Keep container tightly closed.
- 5.) Keep away from source of ignition. - No smoking.
- 6.) Avoid contact with skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: 1-Propanol, n-Propyl alcohol, 1-Hydroxy propane, Ethyl carbinol, NPA, Propanol, Propyl alcohol, 1-Propyl alcohol.

Ingredients	% (w/w)	CAS NO.
N-PROPANOL	100	71-23-8

4. FIRST AID MEASURES

General advice: Use appropriate protective equipment to take first aid in a safety area.

Inhalation: Move to fresh air in case of accidental inhalation of vapors. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision.

Skin contact: Remove contaminated clothing. Wash affected area thoroughly with soap and water at least 15 minutes. Cleaning and dry polluted clothing and shoes before use again.

Eye contact: If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention.

Ingestion: Taking a huge amount of swallow. Immediately hospitalize.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use water spray, alcohol – resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media:

No data available

Specific hazards arising from Chemicals:

If the fire takes place, endanger by the serious fire. When vapour is heavier than the air, it will be transmitted to the distant place ; it will produce the flash back phenomenon while there is igniting source. The vapour/air mixture temperature is higher than flashing point, it will cause explosible.

Special protective equipment for fire-fighters:

Use a proved/certified respirators or equivalent gloves.



6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep unnecessary away from spill area. Keep ventilates area of spill.

Environmental precautions: Keep away from heat, flames, sparks and other sources of ignition. To move all sources of ignition.

Methods and Material for Containment and Clean Up:

Eliminate all sources of ignition. Make use of water smoke to reduce the vapour.

Small spill: Absorb with DRY earth, sand or other non-combustible material, and handing to throw away in container. Large spill: Discard handing with after dike.

7. HANDLING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Keep container tightly closed. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Do not empty into drains.

Conditions for Safe Storage & Unsuitable Materials:

Keep tightly closed at room temperature in a dry, cool and well ventilated place. Keep away from heat and sources of ignition. Keep out of direct sunlight and away from incompatible material. Store in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: No data available.

Appropriate Engineering Controls: If the concentration of material exceeds the lower limit of explodes, the ventilation facilities must be explosion-proof type.

Individual Protection Measures

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Required when vapor/aerosols are generated. Filter for vapors of organic compounds.

Hand protection: Use chemical resistant gloves to prevent hand contact.

Eye protection: Goggles giving complete protection to eyes.

Skin and body protections: Chemical resistant apron protective clothing.

Hygiene measures: Take off the clothes of pollution as quickly as possible after the work. Forbid smoking or diet in the workplace. After dealing with this thing, must wash hands completely. Keep the working place clean.



9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, Colourless ,Alcohol like	Evaporation rate : N/A
Melting Point : -127 °C	Specific gravity : 0.8040-0.8150 g/cm ³ at 20 °C
pH : N/A	Solubility in water : Slightly
Boiling point: 95-120 °C	Viscosity : N/A
Vapour pressure : 14 - 15 mbar at 20 °C	Vapour density : 2.1 g/L
Lower explosion limits: 1.2 - 2.2 %Vol	Upper explosive limit: 13.5 – 13.7 %Vol
Auto-ignition temperature: 292 – 412 °C	Flash point: 23 - 24 °C
Odour threshold: 30 ppm	Flammability (solid, gas): no data available
Decomposition temperature: N/A	Solubility in other solvents: Methanol, Ether, Acetone, Benzene, Solvent.
n-octanol/water partition coefficient (log P_{ow}): N/A	

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable under recommended storage conditions.

Reactions:

Erosion: Membrane, Plastics, Rubber

Possibility of Hazardous Reactions:

Alkali, Alkali metal, Strong Oxidant, Potassium tert-butoxide, Aldehyde, Barium chlorate, Chloric acid, Hypochlorite, Ethylene oxide, Hydrogen peroxide+Sulfuric acid, Nitrogen dioxide, Dinitrogen tetroxide, Hexamethylene Diisocyanate, Methyl isocyanate, Lithium aluminum hydride, Perchloric acid (hot), Persulfurous acid.

Conditions to avoid:

Heat, flames, Mars, other ignite in the source and Strong oxidizers

Materials to avoid:

Metal, Oxidizing agent, Flammable material, Alkali, Metal salt.

Hazardous decomposition products:

Carbon dioxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

LD50 (Oral, rat): 1870 mg/kg

LC50 (Inhalation, rat): 48 mg/m³

LD50 (Dermal, rabbit): 5040 mg/kg

Sensitization:

After inhalation; Irritations of mucous membranes, coughing and dyspnoea, drowsiness. After skin contact: Slight irritations. After eyes contact: slight irritations. Risk of serious damage to eyes. After swallowing;



Rapid absorption. Headache, dizziness, inebriation, unconsciousness, narcosis. Risk of aspiration upon vomiting. After uptake of large quantities: Respiratory paralysis, coma.

Chronic toxicity:

Repeat or expose for a long time may cause the skin degenerate, the skin dry, cracked, skin inflammation, even corrode. Repeat or long-term eyes contact may cause the conjunctivitis. And research points out that it will cause serious liver damaging, hematopoiesis tissue hyperplasia, malignant liver tumour and leukaemia to test the big mouse for a long time.

Further toxicological information:

No data available.

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish: LC50 - P.promelas: 3000 - 4000 mg/l- 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna: 364.4 mg/l- 48 h

Toxicity to algae: No data available.

Toxicity Bacterial: No data available.

Biodegradability Remarks: No data available.

Bioaccumulative Potential: It is expected that the organism compress of organism in water is low.

Mobility: It is expected that highly moving in the soil.

Affected in any other way: No data available

13. DISPOSAL CONSIDERATIONS

Material Disposal: There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding law and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste or burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

Container Disposal: Disposal in compliance with official regulations. Handle contaminated packaging as hazardous waste in the same way of the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.



14. TRANSPORT INFORMATION

ADR/ADNR

UN-No: 1274 Class: 3 Packing group: II

Proper shipping name: n-PROPANOL

IMGD

UN-No: 1274 Class: 3 Packing group: II

Ems: F-E S-D Marine pollutant: No

Proper shipping name: n-PROPANOL

IATA

UN-No: 1274 Class: 3 Packing group: II

Proper shipping name: n-PROPANOL

15. REGULATORY INFORMATION

Application Regulation:

Labor Safety and Health Law.

Dangerous Chemical Material Symbol Act.

Fire Services Act.

16. Other Information

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