



Material Safety Data Sheet

DAIREN CHEMICAL CORP.

n-Propyl Alcohol

1. Product and company Information

Version: 1.2 Number:

Product Name: n-Propyl Alcohol

Product Number:

Manufacturer /Supplier Name/Address/Telephone:

Taipei Head Office / 9th Floor, No. 301, Song Kiang Road 104, Taipei, Taiwan/ 886-2-25020238

Ta-Fa Factory /19-2 Hua-Hsi Road, Ta-Fa Industrial District, Kaohsiung, Taiwan / 886-7-7881165

Emergency Contact (Phone/Fax):

Taipei Head Office / 886-2-25020238/ 886-2-25099619

Ta-Fa Factory / 886-7-7881165 / 886-7-7871710

2. Hazards Identification

GHS Classification : Flammable Liquids (2), Acute Toxicity--Oral(4), Serious Eye Damage /Eye Irritation (1), Aspiration Hazard(2), Specific target organ systemic toxicity single exposure(3)

Symbol :



Signal word : Danger

Hazard statement :

Highly flammable liquid and vapor.

Harmful if swallowed.

Causes serious eye damage.

May cause drowsiness and dizziness.

May be harmful if swallowed and enters airways.

Preventive measure :

Keep away from ignition sources— No smoking.

Kept in a cool, ventilated place.

IF IN EYES: Rinse cautiously with water for several minutes. Immediately call a doctor.

Use personal protective equipment as required.

Wear eye/face protection.

Do not breathe dust/fume/gas/mist/vapours/spray.

3. Composition/Information on Ingredients

Name: n-Propyl Alcohol

CAS Number: 71-23-8

Concentration Wt.% : 99.5%

4. First Aid Measures

Specific procedures for each route of exposure:

General advice: Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a specialist.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes.

Remove contaminated clothing and shoes. Wash clothing before reuse. Call a specialist.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Lifting lower and upper eyelids occasionally. Get medical attention immediately.

Ingestion: Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Major symptoms and reactions: May cause central nervous system depression.

Protection for people giving first aid: Wear adequate personal protective equipment.

Advice to doctors: Treat ingestion with gastric lavage and saline catharsis. Metabolite acetone may be detected in urine.

5. Fire Fighting Measures

Suitable extinguishing media: Water spray, Alcohol-resistant foam, Chemical dry powder, Carbon dioxide (CO₂).

Possible hazard during extinction: Flammable liquid and vapor. Vapor is heavier than air and may spread long distances. Distant ignition and flashback are possible.

Special extinction procedure: Cool containers / tanks with spray water.

Special protection for firefighters: Wear chemical protective equipment and self-contained breathing apparatus.

6. Accidental Release

Personal precaution: Restrict access to area until completion of clean-up. Wear adequate personal protective equipment.

Environmental precaution: Extinguish or remove all ignition sources. Ventilate area. Prevent material from entering sewers or confined spaces.

Methods for cleaning up: Stop or reduce leak if safe to do so. Contain spill with earth, sand, or similar stable, noncombustible material. Small spills: Soak up with absorbent material which does not react with spilled chemical. Put material in suitable, covered, labeled containers. Flush area with water. Large spills: Contact fire and emergency services and supplier for advice.

7. Handling and Storage

Handling: Ground drums and bond transfers (Grounding clips must contact bare metal). Keep material away from sparks, flames, and other ignition sources. Post "NO SMOKING" signs in area of use. Have emergency equipment (for fire, spills, leak, etc.) readily available.

Storage: Store in a cool, dry, well-ventilated area, out of direct sunlight. Store away from heat, ignition sources and incompatible materials. Protect from damage. Inspect periodically for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area.

8. Exposure Controls, Personal Protection

Engineering control: Ensure adequate ventilation.

Control indicators:

TWA/STEL/Ceiling for an 8-hour day:

TWA: 200 ppm

STEL: 250 ppm

Ceiling: No Data Available

Bio-indicator: No Data Available

Personal protection equipment:

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection: Protect glove.

Eye protection: Tightly fitting safety goggles.

Skin and body protection: Overall and boot

Hygiene considerations: Wash hands before breaks and immediately after handling the product.

9. Physical , Chemical Properties

Appearance: Colorless Liquid

Odour: Wine-like odor

Odour threshold: 30 PPM

Melting point/freezing point: -127°C

pH value: No Data Available

Boiling point/range: 97.4°C

Flammability (solid, gas): No Data Available

Flash Point: 23°C (CC)

Decomposition temperature: No Data Available

Auto-ignition temperature: 440°C

Explosion Limits: 2.1% ~13.5%

Vapor Pressure: 21 mmHg @ 25°C

Vapor Density(air=1): 2.07

Relative density(H₂O=1): 0.804

Water Solubility: Completely soluble

n-octanol/water (log Kow): 0.25

Evaporation rate: 1.3 (BUAC=1)

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Possible hazard under special conditions: No Data Available

Conditions to be avoided: Heat, Flames, Ignition sources and Incompatibles.

Material to be avoided: Strong oxidizing agents.

Hazardous Decomposition Material: Carbon dioxide and carbon monoxide may form when heated to decomposition.

11. Toxicological Information

Acute toxicity:

Inhalation: Vapors have a mild narcotic effect and act as an upper respiratory tract irritant. Symptoms may include irritation of the eyes, nose, and throat, drowsiness, headache, and incoordination. Excessive exposures may lead to narcosis and central nervous system depression.

Skin contact: May cause skin irritation. Skin absorption may occur with symptoms paralleling those from inhalation exposure.

Eyes contact: Vapors are irritating to the eyes. Splashes may cause severe irritation, with stinging, tearing, redness and pain.

Ingestion: May cause nausea, vomiting, drowsiness, gastrointestinal pain, cramps and diarrhea. Large doses may cause death.

Animal data:

LC₅₀ (test-animal, route of absorption): 48 mg/m³ (mouse, inhalation)

LD₅₀ (test-animal, route of absorption): 1870 mg/kg (rat, oral)

LD₅₀ (test-animal, route of absorption): 4060 mg/kg (rabbit, skin)

Local effects: No Data Available.

Sensitization: No Data Available.

Effects of long-term exposure: Prolonged or repeated skin contact may cause dermatitis.

Special reactions: No Data Available.

12. Ecological Information

Ecotoxicity effects:

LC₅₀ (Fish) : 1~ 10 mg/l / 96 hours(Fish).

EC₅₀ : No Data Available.

Bioconcentration factor(BCF) : No Data Available.

Persistence and degradability:

Half-life(atmosphere) : No Data Available.

Half-life(Water) : 1 ~ 10 days.

Half-life(Groundwater) : No Data Available.

Half-life(Soil) : No Data Available.

Bioaccumulative potential: This material is not expected to significantly bioaccumulate.

Mobility in soil: This material is expected to leach into groundwater.

Other adverse effects : When released into the soil, this material is expected to readily biodegrade.
When released into water, this material is expected to readily biodegrade.

13. Disposal Considerations

Waste disposal:

Dispose of as special waste in compliance with local and national regulations. Store material for disposal as indicated in storage condition. Disposal by controlled incineration may be acceptable.

14. Transport Information

UN number: 1274

UN Proper Shipping Name: N-PROPANOL

Transport hazard class : 3

Packing Group: II

marine pollutant(Yes/No) : No

Special transportation method and attention: No Data Available.

15. Regulatory Information

Appropriate regulations: (Taiwan)

Labor Safety and Health Facilities Regulations, Road Traffic Safety Regulations, Industrial Waste Storage and Disposal Regulations, and Facility Standards.

16. Other Information

Reference: Industrial Technology Research Institute (Taiwan) ,Council of labor Affairs, Executive Yuan, Taiwan (GHS in Taiwan)

This data sheet is produced by:

Name: Dairen Chemical Corporation Ta-Fa Factory

Address/Telephone: 19-2 Hua-Hsi Road, Ta-Fa Industrial District, Kaohsiung ,Taiwan

886-7-7881165

Date: 2008/8/29

(This data sheet was produced using most accurate researched information, users are responsible for their own safety.)