



COLUMBUS CHEMICAL INDUSTRIES INC.

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Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (as Used on Label and List)

n-Propanol

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Section I

Manufacturers /Distributor Address Number Street City State and Zip Code

Columbus Chemical Industries, Inc.

N4335 Temkin Road

Columbus, WI 53925-0008

Emergency Telephone Number

CHEMTREC 1-800-424-9300

Telephone Number for Information

920-623-2140

Date Prepared

10-21-2004

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Table with 6 columns: Hazardous Components (Specific Chemical Identity, Common Name(s)), CAS #, OSHA PEL, ACGIH TLV, Other Limits Recommended, % (optional). Row 1: n-Propanol\*, 71-23-8, 492 ppm, STEL:614ppm, Not Available, >95%

\*SYNONYMS: 1-Propanol, Propyl alcohol

Section III - Physical/Chemical Characteristics

Table with 4 columns: Property, Value 1, Property, Value 2. Rows: Boiling Point (97 °C (207 °F)), Specific Gravity (0.8050), Vapor Pressure (15 mmHg), Melting Point (-126 °C (-195°F)), Vapor Density (2.07), Evaporation Rate (Not Available)

Solubility in Water

Complete.

Appearance and Odor

Opaque, colorless liquid with alcohol odor.

Section IV Fire and Explosion Hazard Data

Table with 4 columns: Flash Point (Method Used), Flammable Limits (% by volume), LEL, UEL. Row 1: 23 °C / 74 °F; (Tag. cc). Autoignition Temp: 412 °C (775 °F), (% by volume), 2.2%, 13.7%

Extinguishing Media

Carbon dioxide, dry chemical powder, water spray, appropriate foam.

Special Fire Fighting Procedures

In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions. Vapors may travel long distances along the ground to an ignition source and flash back. Container explosion may occur under fire conditions. Emits toxic fumes under fire conditions.

**Section V Reactivity Data**

|           |          |   |                     |   |
|-----------|----------|---|---------------------|---|
| Stability | Unstable |   | Conditions to Avoid | Heat, ignition sources, fire, oxidizing agents. |
|           | Stable   | X |                     |   |

**Incompatibility Materials to Avoid**

Oxidizing agents, acids

**Hazardous Decomposition or Byproducts**

Carbon monoxide, carbon dioxide.

**Hazardous Polymerization****Conditions to Avoid**

|  |                |  |                |
|--|----------------|--|----------------|
|  | May Occur      |  | Not Applicable |
|  | Will Not Occur |  |                |

**Section VI Health Hazard Data**

| Routes of Entry | Inhalation ? | Skin ? | Ingestion ? |
|-----------------|--------------|--------|-------------|
|                 | Yes          | Yes    | Yes         |

**Health Hazards (Acute and Chronic)**

SKIN: May cause irritation and may be harmful if absorbed through the skin. EYE CONTACT: May cause eye irritation.

INHALATION: Can cause irritation, edema, central nervous effects and inflammation. INGESTION: Central nervous system effects including somnolence and hallucinations. Blood pressure lowering.

| Carcinogenicity | NTP | IARC Monographs | OSHA REGULATED? |
|-----------------|-----|-----------------|-----------------|
|                 | No  | No              | No              |

**Signs and Symptoms of Exposure.**

Headache, nausea, vomiting, dizziness, drowsiness, unconsciousness, delirium, weakness, hallucinations, blood pressure decrease, disorientation, lung irritation, chest pains, gastrointestinal disturbances, difficulty breathing, eye irritation, skin irritation.

**Medical Conditions Generally Aggravated by Exposure** Persons with preexisting central nervous system (CNS) disease, neurological conditions, skin disorders, bladder or liver or kidney dysfunction, or chronic respiratory diseases should avoid exposure.

**Emergency and First Aid Procedures** INGESTION: If swallowed, wash out mouth with water, call a physician. Do not leave victim unattended. EYES: In case of contact, immediately flush with large amounts of water for at least 15 minutes. Call physician. INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call physician. SKIN: Immediately wash skin with soap and large amounts of water.

**Section VII Precautions for Safe Handling and Use**

**Steps to be Taken in Case Material is Released or Spilled** Evacuate area. Wear NIOSH/MSHA-approved respirator, chemical-resistant goggles, rubber boots, apron and heavy rubber gloves. Contain spill with dikes, sand or noncombustible absorbent material. Sweep up and place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

**Waste Disposal Method** Dispose in accordance with all Federal, state, and local regulations.

**Precautions to be Taken in Handling and Storing** Keep in tightly closed plainly-labelled containers, stored in a cool, dry, ventilated area. Protect against physical damage. Keep away from heat, sparks and flame. Maintain adequate ventilation. Ground all equipment containing this material. Hygroscopic material.

**Other Precautions** Containers, even when empty, will retain residue and vapors which can ignite with explosive force. Always obey hazard warnings and handle empty containers as if they were full. **FLAMMABLE!**

**Section VII Control Measures**

**Respiratory Protection (Specify Type)** NIOSH/MSHA-approved respirator with organic vapor cartridge.

|             |                      |              |         |                       |
|-------------|----------------------|--------------|---------|-----------------------|
| Ventilation | Local Exhaust        | Necessary.   | Special | Eyewash nearby.       |
|             | Mechanical (General) | Recommended. | Other   | Safety shower nearby. |

**Protective Gloves** Compatible chemical-resistant gloves. **Eye Protection** Chemical Safety goggles.

**Other Protective Clothing or Equipment** Rubber boots, fire-retardant garments and face shield.

**Work /Hygienic Practices** Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area. Avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing. Wash thoroughly after handling. Avoid breathing vapor.

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