

PROPANOL NORMAL 20489

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone number	1-800-ASHLAND (1-800-274-5263)

Product name	PROPANOL NORMAL
Product code	20489
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, alcoholic, Colorless

WARNING! Flammable Liquid, Toxic by inhalation, Moderate skin irritant, Severe eye irritant.

Potential Health Effects

Routes of exposure

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause severe eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

Skin contact

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts

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may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), low blood pressure, respiratory depression (slowing of the breathing rate)

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: male reproductive effects, effects on male fertility, liver damage

Carcinogenicity

n-Propanol caused an increased cancer incidence in rats when administered by injection or by placing the material into the stomach. Problems with these studies, including inadequate evaluation of the data, prevent their use in evaluating n-propanol for carcinogenicity. n-Propanol is not listed as carcinogenic by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard.

This material (or a component) has been shown to cause birth defects in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Other information

No data

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
PROPANOL, NORMAL	71-23-8	<=100%

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4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

dry chemical, alcohol-resistant foam, water spray, carbon dioxide (CO₂)

Hazardous combustion products

May form: carbon dioxide and carbon monoxide

Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Water may be ineffective for extinguishment unless used under favorable conditions by experienced fire fighters.

Flammability Class for Flammable Liquids

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Flammable Liquid Class IC Flammable Liquid Class IC

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage

Keep containers closed when not in use. Do not store near extreme heat, open flame, or sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

PROPANOL, NORMAL

71-23-8

ACGIH	time weighted average	200 ppm
ACGIH	Short term exposure limit	400 ppm
ACGIH NIC	time weighted average	100 ppm
NIOSH	Recommended exposure limit (REL):	200 ppm
NIOSH	Recommended exposure limit (REL):	500 mg/m ³
NIOSH	Short term exposure limit	250 ppm

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NIOSH	Short term exposure limit	625 mg/m ³
OSHA Z1	Permissible exposure limit	200 ppm
OSHA Z1	Permissible exposure limit	500 mg/m ³

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Eye protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).
To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory protection

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	No data
Colour	Colorless
Odour	alcoholic
Boiling point/range	207.0 °F / 97.2 °C
Melting point/range	-197 °F / -127 °C
pH	No data
Flash point	73 °F / 23 °C Closed Cup
Evaporation rate	1.30 N-Butyl Acetate

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Explosion limits	2.1 %(V) 13.5 %(V)
Vapour pressure	2.79972 kPa @ 77 °F / 25 °C
Vapour density	2.1
Density	0.805 g/cm ³ @ 68.00 °F / 20.00 °C 6.71 lb/gal @ 68 °F / 20 °C
Solubility	completely soluble in water
Partition coefficient (n-octanol/water)	No data
Autoignition temperature	775 °F / 413 °C

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

None known.

Incompatible products

Avoid contact with:, aluminum, lead, strong organic acids, strong oxidizing agents

Hazardous decomposition products

May form:, carbon dioxide and carbon monoxide

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

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LD 50 Rat: 1,870 mg/kg

Acute inhalation toxicity

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LC 50 Rat: 4,000 mg/m³, 4 h

Acute dermal toxicity

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LD 50 Rabbit: 5,040 mg/kg

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

IMDG:

UN1274, PROPANOL 3, III

IATA_P:

UN1274, n-Propanol 3, III

IATA_C:

UN1274, n-Propanol 3, III

CFR_ROAD:

UN1274, n-Propanol 3, III

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CFR_RAIL:

UN1274, n-Propanol 3, III

CFR_INWTR:

UN1274, n-Propanol 3, III

IMDG_INWTR:

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IMDG_ROAD:

UN1274, PROPANOL 3, III

IMDG_RAIL:

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Dangerous goods descriptions may not reflect package size, quantity, end-use or region-specific exceptions that can be applied to shipments. Consult shipping documents for material-specific descriptions.

15. REGULATORY INFORMATION

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

Additional regulations

US. OSHA Hazard Communication Standard: On One of the Floor Lists of the OSHA HCS (29 CFR 1910.1200).

US. High Production Volume Chemicals

US. Toxic Substances Control Act (TSCA) Section 4 - Master Testing List

SARA 313 Component(s)

OSHA Hazards

Flammable Liquid
Toxic by inhalation
Moderate skin irritant
Severe eye irritant

	Health	Flammability	Reactivity	Other
HMIS	2	3	0	
NFPA	1	3	0	

16. OTHER INFORMATION

ASHLAND
SAFETY DATA SHEET

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Version: 1.3

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).