

MATERIAL SAFETY DATA SHEET

2-PROPANOL
CAROLINA BIOLOGICAL

Revised: 10/13/09
Replaces: 06/18/08
Printed: 03/06/10

1. PRODUCT DESCRIPTION

Product Name: 2-Propanol
Product Code(s): 88-4890, 88-4892, 88-4865
Size: 500ml, 4L, 20L
Chemical Name: Alcohols
CAS Number: See section 2
Formula: CH₂CHOHCH₃
Synonyms: Isopropyl Alcohol; Isopropanol; IPA; Sec-Propanol;
Dimethylcarbinol
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal Hazardous Components: 2-Propanol(CAS#67-63-0)99-100%
TLV and PEL units: ACGIH-TLV: 400 ppm (STEL) 200 ppm (TWA)
OSHA-PEL : 400 ppm (TWA)

3. HAZARD IDENTIFICATION

Emergency Overview: Highly flammable. Keep container tightly closed.
Keep away from sources of ignition- No smoking.

Potential Health Effects:

Eyes: Vapors may cause irritation; eye splash causes severe irritation,
possibly eye damage.

Skin: May cause irritation with redness and pain.

Ingestion: May cause gastrointestinal discomfort. May cause drowsiness
or unconsciousness. Large amounts (8 oz or more) may be fatal.

Inhalation: May cause irritation to respiratory tract.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Eyes - Flush with water for at least 15 minutes, raising and lowering
eyelids occasionally. Get medical attention immediately.

Skin - Thoroughly wash exposed area for at least 15 minutes. Remove
contaminated clothing. Launder contaminated clothing before reuse. Get
medial attention if irritation persists.

Ingestion - If swallowed, if conscious, give plenty of water. Get
immediate medical help. Never give anything by mouth to an unconscious
person.

Inhalation - Remove to fresh air. Give oxygen if breathing is
difficult; give artificial respiration if breathing has stopped. Keep
person warm and quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): (TCC)53F;(TOC)63F

NFPA Rating: Health: 1
Fire: 3
Reactivity: 0

Extinguisher Media:

Use dry chemical, CO₂ or appropriate foam.

Flammable Limits in Air % by Volume: 12.7 upper, 2.0 lower

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Autoignition Temperature: 399°C(750°F)

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Vapors are heavier than air and may flow along surfaces to distant ignition sources and flash back. Closed containers exposed to heat may explode. Contact with strong oxidizers may cause fire.

6. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Keep container tightly closed. Store in a cool, dry, well-ventilated, flammable liquid storage area, away from oxidizing materials.

Other Precautions: Bond and ground containers when transferring liquid. Wash hands thoroughly after handling.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type):

A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust:	Yes
Mechanical(General):	Yes
Special:	No
Other:	No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

9. PHYSICAL DATA

Molecular Weight:	60.10
Melting Point:	-88.5°C to -89.5°C
Boiling Point:	82.5°C(179°F)
Vapor Pressure:	42 hPa at 20°C
Vapor Density(Air=1):	2.07
Specific Gravity(H2O=1):	0.7861 at 20°C
Percent Volatile by Volume:	99%
Evaporation Rate(BuAc=1):	2.3
Solubility in Water:	Miscible
Appearance and Odor:	Clear colorless liquid with characteristic alcohol odor.

10. REACTIVITY DATA

Stability: Stable

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Conditions to Avoid: Heat, flame, other sources of ignition
Incompatibility(Materials to Avoid): Strong oxidizing agents, aluminum, strong acids, nitric acid, sulfuric acid, halogens, active halogen compounds, amines and ammonia, aldehydes.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide
Hazardous Polymerization: Will not occur

11. TOXICITY DATA

Toxicity Data: Oral Rat LD50: 5045 mg/kg
Oral Mouse LD50: 3600 mg/kg

Effects of Overexposure:
Acute: See section 3
Chronic: None

Conditions Aggravated by Overexposure: Irritation of the skin and eyes. Rapid absorption to the skin. Irritation of nose throat, headache, nausea.

Target Organs: Eyes, skin respiratory system, lungs, central nervous system, liver, kidneys.

Primary Route(s) of Entry: Inhalation, ingestion, skin contact, eye contact, absorption.

12. ECOLOGICAL DATA

EPA Waste Numbers: D001

13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.
Always contact a permitted waste disposer (TSD) to assure compliance.

14. TRANSPORT INFORMATION

Description: Isopropanol, 3, UN1219, II

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory
Hazard Category for SARA Section 311/312 Reporting: Acute, Chronic, Fire

Product or Components	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals		CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33
		Yes	No		
2-Propanol	No	Yes	No	No	No

16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Abstracts Service Number

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CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act
DOT.....U.S. Department of Transportation
IARC.....International Agency of Research on Cancer
mppcf.....million particles per cubic foot
N/A.....Not Available
NTP.....National Toxicology Program
OSHA.....Occupational Safety and Health Administration
PEL.....Permissible Exposure Limit
ppm.....parts per million
RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act