

Safety Data Sheet

2-Propanol, 70%



Section 1

Product Description

Product Name: 2-Propanol, 70%
Recommended Use: Science education applications
Synonyms: Isopropanol, Isopropyl Alcohol, IPA
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



Highly flammable liquid and vapor. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

GHS Classification:

Flammable Liquid Category 2, Serious Eye Damage/Eye Irritation Category 2, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

Section 3

Composition / Information on Ingredients

Chemical Name	CAS #	%
2-Propanol	67-63-0	70
Water	7732-18-5	30

Section 4

First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5

Firefighting Procedures

Extinguishing Media: Use dry chemical, CO₂ or appropriate foam.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Vapors may travel back to ignition source. Closed Containers exposed to heat may explode.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6

Spill or Leak Procedures

Safety Data Sheet

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

Section 7

Handling and Storage

Handling:	Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting.../ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Storage:	Keep container tightly closed. Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed in a cool, well-ventilated place.
Storage Code:	Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

Section 8

Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>	<u>OSHA PEL</u>
	<u>(TWA)</u>	<u>(TWA)</u>
	<u>(STEL)</u>	<u>(STEL)</u>
2-Propanol	200 ppm TWA 400 ppm STEL	400 ppm TWA; 980 mg/m ³ TWA N/A

Control Parameters

Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Personal Protective Equipment (PPE):

Respiratory Protection:

Lab coat, apron, eye wash, safety shower. No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section 11. A respirator is not normally required.

Respirator Type(s):

NIOSH approved air purifying respirator with organic vapor cartridge and HEPA filter. Wear chemical splash goggles when handling this product. Have an eye wash station available.

Eye Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Skin Protection:

Nitrile

Section 9

Physical Data

Formula: CH₃CHOHCH₃

Molecular Weight: 60.10 (2-Propanol)

Appearance: Colorless Liquid

Odor: Strong Alcohol Odor

Odor Threshold: No data available

pH: No data available

Melting Point: -89 C

Boiling Point: 83 C

Flash Point: 18 C

Flammable Limits in Air: 2.0 - 12.7% (2-Propanol)

Vapor Pressure: 31.5 mmHg at 20 °C

Evaporation Rate (BuAc=1): 2.3

Vapor Density (Air=1): 2.07 (2-Propanol)

Specific Gravity: approx 0.80 at 20 °C

Solubility in Water: Soluble

Log Pow (calculated): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

Percent Volatile by Volume: 70%

Section 10

Reactivity Data

Reactivity:

Not generally reactive under normal conditions.

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

Sparks, open flame, other ignition sources, and elevated temperatures.

Safety Data Sheet

Incompatible Materials: Acids, Strong oxidizing agents, Strong reducing agents, Metals, Peroxides, Epoxides, Isocyanates, Water-reactive materials

Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry:	Inhalation and ingestion.			
Symptoms (Acute):	Central Nervous System Depression, Respiratory disorders			
Delayed Effects:	No data available			
Acute Toxicity:				
Chemical Name: 2-Propanol	CAS Number: 67-63-0	Oral LD50: Oral LD50 Rat 5045 mg/kg Oral LD50 Mouse 3600 mg/kg	Dermal LD50:	Inhalation LC50: INHALATION LC50 Rat 16000 ppm
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
Carcinogenicity:				
Chemical Name: 2-Propanol	CAS Number: 67-63-0	IARC: Listed	NTP: Not listed	OSHA: Not listed
Chronic Effects:				
Mutagenicity:	No evidence of a mutagenic effect.			
Teratogenicity:	No evidence of a teratogenic effect (birth defect).			
Sensitization:	No evidence of a sensitization effect.			
Reproductive:	No evidence of negative reproductive effects.			
Target Organ Effects:				
Acute:	Central Nervous System			
Chronic:	No information available			

Section 12

Ecological Data

Overview:	This material is not expected to be harmful to the ecology.
Mobility:	This material is expected to have high mobility in soil. It absorbs weakly to most soil types.
Persistence:	Dissolved into water, Biodegradation, Evaporation into atmosphere
Bioaccumulation:	Bioconcentration is not expected to occur.
Degradability:	No data
Other Adverse Effects:	No data
Chemical Name: 2-Propanol	CAS Number: 67-63-0
Water	Eco Toxicity: 96 HR LC50 LEPOMIS MACROCHIRUS > 1400000 µG/L 96 HR LC50 PIMEPHALES PROMELAS 11130 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA 13299 MG/L 72 HR EC50 DESMODESMUS SUBSPICATUS > 1000 MG/L 96 HR EC50 DESMODESMUS SUBSPICATUS > 1000 MG/L
7732-18-5	

Section 13

Disposal Information

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

Waste Disposal Code(s): Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name:

Air - IATA Proper Shipping Name:

Safety Data Sheet

UN1219
ISOPROPANOL
Class 3
P.G. II

UN1219
ISOPROPANOL
Class 3
P.G. II

Section 15

Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
2-Propanol	67-63-0	Isopropyl alcohol	No	No	No	No

Section 16

Additional Information

Revised: 09/03/2014

Replaces: 09/03/2014

Printed: 04-21-2015

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.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health