

### SECTION 1: Identification

#### 1.1. Identification

Product form	: Substance
Substance name	: Isopropyl Alcohol (2-Propanol)
CAS-No.	: 67-63-0
Product code	: LC15750
Formula	: C <sub>3</sub> H <sub>8</sub> O
Synonyms	: 1-methylethanol / 1-methylethyl alcohol / 2-hydroxypropane / dimethyl carbinol / ethyl carbinol / hydroxypropane / IPA / i-propanol / isoethylcarbinol / propan-2-ol / sec-propanol

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Disinfectant Solvent
------------------------------	---------------------------

#### 1.3. Supplier

LabChem Inc  
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court  
Zelienople, PA 16063 - USA  
T 412-826-5230 - F 724-473-0647  
[info@labchem.com](mailto:info@labchem.com) - [www.labchem.com](http://www.labchem.com)

#### 1.4. Emergency telephone number

Emergency number	: CHEMTREC: 1-800-424-9300 or 011-703-527-3887
------------------	--

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flammable liquids Category 2	H225	Highly flammable liquid and vapour
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Specific target organ toxicity (single exposure) Category 3	H335	May cause respiratory irritation

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapour  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation

Precautionary statements (GHS-US)

: P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P261 - Avoid breathing mist, vapors, spray.  
P264 - Wash exposed skin thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear eye protection, face protection, protective clothing, protective gloves.  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

# Isopropyl Alcohol (2-Propanol)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

lenses, if present and easy to do. Continue rinsing  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P370+P378 - In case of fire: Use dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>) to extinguish  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents/container to comply with local, state and federal regulations  
P235 - Keep cool.  
If inhaled: Remove person to fresh air and keep comfortable for breathing

### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None.

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Isopropyl Alcohol (2-Propanol) (Main constituent)	(CAS-No.) 67-63-0	100	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

First-aid measures after eye contact : Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Give activated charcoal. Call Poison Information Centre ([www.big.be/antigif.htm](http://www.big.be/antigif.htm)). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Doctor: gastric lavage.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.

Symptoms/effects after skin contact : Dry skin.

Symptoms/effects after eye contact : Irritation of the eye tissue.

Symptoms/effects after ingestion : AFTER ABSORPTION OF LARGE QUANTITIES: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Body temperature fall. Slowing respiration.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available



# Isopropyl Alcohol (2-Propanol)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Polyvalent foam. Alcohol-resistant foam. BC powder. Carbon dioxide.  
Unsuitable extinguishing media : Solid water jet ineffective as extinguishing medium.

#### 5.2. Specific hazards arising from the chemical

- Fire hazard : DIRECT FIRE HAZARD. Highly flammable. Gas/vapor flammable with air within explosion limits. INDIRECT FIRE HAZARD. May be ignited by sparks. Gas/vapor spreads at floor level: ignition hazard.  
Explosion hazard : DIRECT EXPLOSION HAZARD. Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD. may be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".  
Reactivity : Upon combustion: CO and CO<sub>2</sub> are formed. Violent to explosive reaction with (strong) oxidizers. Prolonged storage/in large quantities: may form peroxides.

#### 5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat.  
Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Protective goggles. Protective clothing. Large spills/in enclosed spaces: compressed air apparatus. See "Material-Handling" to select protective clothing.  
Emergency procedures : Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosion-proof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Do not breathe gas, fumes, vapor or spray.  
Emergency procedures : Stop leak if safe to do so. Ventilate area. If a major spill occurs, all personnel should be immediately evacuated and the area ventilated.

#### 6.2. Environmental precautions

- Prevent spreading in sewers.

#### 6.3. Methods and material for containment and cleaning up

- For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.  
Methods for cleaning up : Take up liquid spill into absorbent material, e.g.: dry sand/earth/vermiculite or powdered limestone. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

#### 6.4. Reference to other sections

- No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Observe normal hygiene standards. Keep container tightly closed. Measure the concentration in the air regularly. Work under local exhaust/ventilation.



# Isopropyl Alcohol (2-Propanol)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Incompatible products : Ammonia. Strong acids. Strong oxidizers.  
Incompatible materials : Direct sunlight. Heat sources. Sources of ignition.  
Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.  
Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. strong acids. (strong) bases. amines. halogens.  
Storage area : Store in a cool area. Store in a dry area. Ventilation at floor level. Fireproof storeroom. Provide for an automatic sprinkler system. Provide for a tub to collect spills. Provide the tank with earthing. May be stored under nitrogen. Meet the legal requirements.  
Special rules on packaging : SPECIAL REQUIREMENTS: closing. with pressure relief valve. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.  
Packaging materials : SUITABLE MATERIAL: stainless steel. monel steel. carbon steel. copper. nickel. bronze. glass. Teflon. polyethylene. polypropylene. zinc. MATERIAL TO AVOID: steel with rubber inner lining. aluminium.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Isopropyl Alcohol (2-Propanol) (67-63-0)		
ACGIH	ACGIH TWA (ppm)	200 ppm (2-propanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	400 ppm (2-propanol; USA; Short time value; TLV - Adopted Value)
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	400 ppm
IDLH	US IDLH (ppm)	2000 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	980 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	1225 mg/m <sup>3</sup>
NIOSH	NIOSH REL (STEL) (ppm)	500 ppm

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Safety glasses. Gloves. Protective clothing. Face shield. High gas/vapor concentration: gas mask with filter type A.



#### Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: butyl rubber. nitrile rubber. viton. polyethylene/ethylenevinylalcohol. GIVE GOOD RESISTANCE: neoprene. GIVE LESS RESISTANCE: PVC. neoprene/natural rubber. GIVE POOR RESISTANCE: natural rubber. polyethylene. PVA

#### Hand protection:

Gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

# Isopropyl Alcohol (2-Propanol)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Protective clothing

### Respiratory protection:

Wear gas mask with filter type A if conc. in air  
> exposure limit

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: Colourless
Odor	: Alcohol odour Stuffy odour Mild odour
Odor threshold	: 3 - 610 ppm 8 - 1499 mg/m <sup>3</sup>
pH	: No data available
Melting point	: -88 °C
Freezing point	: No data available
Boiling point	: 82 °C (1013 hPa)
Critical temperature	: 235 °C
Critical pressure	: 47600 hPa
Flash point	: 12 °C
Relative evaporation rate (butyl acetate=1)	: 2.3
Relative evaporation rate (other=1)	: 21
Flammability (solid, gas)	: No data available
Vapor pressure	: 44 hPa (20 °C)
Vapor pressure at 50 °C	: 60.2 hPa (25 °C)
Relative vapor density at 20 °C	: 2.1
Relative density	: 0.79
Relative density of saturated gas/air mixture	: 1.05
Specific gravity / density	: 785 kg/m <sup>3</sup>
Molecular mass	: 60.1 g/mol
Solubility	: Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in oils/fats. Soluble in chloroform. Water: Complete Ethanol: Complete Ether: Complete Acetone: soluble
Log Pow	: 0.05 (Weight of evidence approach; Other; 25 °C)
Auto-ignition temperature	: 399 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: 2.5316 mm <sup>2</sup> /s (25 °C)
Viscosity, dynamic	: 0.002 Pa.s (25 °C)
Explosion limits	: 2 - 13 vol % 50 - 335 g/m <sup>3</sup>
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

Minimum ignition energy	: 0.65 mJ
Specific conductivity	: 5.8 µS/m
Saturation concentration	: 106 g/m <sup>3</sup>
VOC content	: 100 %
Other properties	: Gas/vapour heavier than air at 20°C. Clear. Volatile.



# Isopropyl Alcohol (2-Propanol)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Upon combustion: CO and CO<sub>2</sub> are formed. Violent to explosive reaction with (strong) oxidizers. Prolonged storage/in large quantities: may form peroxides.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

May react violently with oxidants.

#### 10.4. Conditions to avoid

Direct sunlight. High temperature. Incompatible materials. Open flame. Sparks.

#### 10.5. Incompatible materials

Ammonia. Strong acids. Strong oxidizers.

#### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Not classified

Isopropyl Alcohol (2-Propanol) (67-63-0)	
LD50 dermal rabbit	12870 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 16.4; Rabbit)
LC50 inhalation rat (mg/l)	73 mg/l/4h (Rat)
ATE US (oral)	5045 mg/kg body weight
ATE US (dermal)	12870 mg/kg body weight
ATE US (vapors)	73 mg/l/4h
ATE US (dust, mist)	73 mg/l/4h

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

Isopropyl Alcohol (2-Propanol) (67-63-0)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified  
Specific target organ toxicity – single exposure : May cause respiratory irritation.  
Specific target organ toxicity – repeated exposure : Not classified  
Aspiration hazard : Not classified  
Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.  
Symptoms/effects after skin contact : Dry skin.  
Symptoms/effects after eye contact : Irritation of the eye tissue.  
Symptoms/effects after ingestion : AFTER ABSORPTION OF LARGE QUANTITIES: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Body temperature fall. Slowing respiration.  
Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.



# Isopropyl Alcohol (2-Propanol)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 12: Ecological information

#### 12.1. Toxicity

- Ecology - general : Not classified as dangerous for the environment according to the criteria of Directive 67/548/EEC. Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
- Ecology - air : Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Not included in the list of substances which may contribute to the greenhouse effect (Regulation (EC) No 842/2006). TA-Luft Klasse 5.2.5.
- Ecology - water : Ground water pollutant. Not harmful to fishes (LC50(96h) >1000 mg/l). Not harmful to invertebrates (Daphnia). Not harmful to algae (EC50 (72h) >1000 mg/l). Inhibition of activated sludge.

Isopropyl Alcohol (2-Propanol) (67-63-0)	
LC50 fish 2	9640 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 2	13299 mg/l (EC50; Other; 48 h; Daphnia magna)
Threshold limit algae 1	> 1000 mg/l (EC50; UBA; 72 h; Scenedesmus subspicatus)

#### 12.2. Persistence and degradability

Isopropyl Alcohol (2-Propanol) (67-63-0)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No test data on mobility of the substance available.
Biochemical oxygen demand (BOD)	1.19 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.23 g O <sub>2</sub> /g substance
ThOD	2.4 g O <sub>2</sub> /g substance

#### 12.3. Bioaccumulative potential

Isopropyl Alcohol (2-Propanol) (67-63-0)	
Log Pow	0.05 (Weight of evidence approach; Other; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

#### 12.4. Mobility in soil

Isopropyl Alcohol (2-Propanol) (67-63-0)	
Surface tension	0.021 N/m (25 °C)

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

- Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery. Do not discharge into surface water. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.
- Additional information : LWCA (the Netherlands); KGA category 03. Hazardous waste according to Directive 2008/98/EC.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

- Transport document description : UN1219 Isopropyl alcohol, 3, II
- UN-No. (DOT) : UN1219
- Proper Shipping Name (DOT) : Isopropyl alcohol
- Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120



# Isopropyl Alcohol (2-Propanol)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Packing group (DOT) : II - Medium Danger  
Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202  
DOT Packaging Bulk (49 CFR 173.xxx) : 242  
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.  
DOT Packaging Exceptions (49 CFR 173.xxx) : 4b;150  
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L  
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L  
DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.  
Other information : No supplementary information available.

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Isopropyl Alcohol (2-Propanol) (67-63-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Subject to reporting requirements of United States SARA Section 313

SARA Section 311/312 Hazard Classes	Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Serious eye damage or eye irritation Health hazard - Specific target organ toxicity (single or repeated exposure)
-------------------------------------	---

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Isopropyl Alcohol (2-Propanol)	CAS-No. 67-63-0	100%
--------------------------------	-----------------	------

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

Revision date : 01/26/2018



# Isopropyl Alcohol (2-Propanol)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases: see section 16:

H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation
H335	May cause respiratory irritation

NFPA health hazard

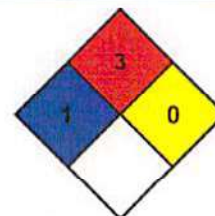
: 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

: 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

: 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

: H

H - Splash goggles, Gloves, Synthetic apron, Vapor respirator

SDS US LabChem

*Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.*



# Safety Data Sheet

## MEDLINE STERILE ALCOHOL PREP PADS

### Section 1. Identification

Product Identifier	MEDLINE STERILE ALCOHOL PREP PADS		
Synonyms	MDS090670; MDS090735; MDS090737; CUR45581 ; CUR45581RB; CUR0907375RB; MSD_SDS0050;		
Manufacturer Stock Numbers	MDS090670, MDS090735; MDS090737; CUR45581 ; CUR45581RB; CUR0907375RB		
Recommended use	N/A		
Uses advised against	N/A		
Manufacturer Contact Address	Medline Industries, Inc. One Medline Place Mundelein, IL, 60060 USA		
	Phone (800) 633-5463	Emergency Phone (800) 424-9300 CHEMTREC	Fax (847) 643-4436
	Website <a href="http://www.Medline.com">www.Medline.com</a>		

### Section 2. Hazards Identification

Classification	ACUTE TOXICITY - ORAL - Category 5 EYE DAMAGE/IRRITATION - Category 2B FLAMMABLE LIQUIDS - Category 3 SENSITIZATION - SKIN - Category 1B
Signal Word	Warning
Pictogram	Two diamond-shaped hazard pictograms side-by-side. The left one shows a flame (Flammable). The right one shows an exclamation mark (Health hazard).
Hazard Statements	Causes eye irritation Flammable liquid and vapor



	May be harmful if swallowed May cause an allergic skin reaction
<b>Precautionary Statements</b>	
<b>Response</b>	Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. In case of fire: Use appropriate media to extinguish. Wash contaminated clothing before reuse.
<b>Prevention</b>	Avoid breathing dust/fume/gas/mist/ vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Ground/bond container and receiving equipment. Keep away from heat. Keep container tightly closed. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Wash affected area thoroughly after handling. Wear protective gloves. Wear protective gloves/eye protection/face protection
<b>Storage</b>	Store in a well-ventilated place. Keep cool.
<b>Disposal</b>	Dispose of contents/container to an approved waste disposal plant.
<b>Ingredients of unknown toxicity</b>	0%
<b>Hazards not Otherwise Classified</b>	No Data Available

### Section 3. Ingredients

CAS	Ingredient Name	Weight %
67-63-0	Isopropyl alcohol	70 %

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-Aid Measures

General Advice:	Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Eye Contact:	Flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.
Skin Contact:	Immediately flush skin with plenty of water while removing contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops or persists, get medical attention. Wash with soap and water. Do not apply oils or ointments unless ordered by the physician.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if discomfort continues or if you feel unwell.
Ingestion:	If swallowed, call a physician immediately. Rinse mouth and throat thoroughly with water. Do not induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.

## Section 5. Fire Fighting Measures

Suitable Extinguishing Media	In case of fire, use Water spray, Carbon Dioxide (CO <sub>2</sub> ), Foam, Dry Chemical
Unsuitable Extinguishing Media	N.D.
Unusual Fire and Explosion Hazards:	N.D.
Special Fire Fighting Procedures:	N.D.

## Section 6. Accidental Release Measures

Flammable Small Spill:	Absorb with an inert dry material and place in an appropriate waste disposal container.
Flammable Large Spill:	Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with dry earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed.

## Section 7. Handling and Storage

Handling Flammable:	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/ fumes/ vapor/ spray. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.
Storage Flammable:	Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).



## Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Isopropyl alcohol	TWA: 200 ppm STEL: 400 ppm	TWA: 400 ppm STEL: 500 ppm	N/A
Personal Protective Equipment	Goggles, Gloves			
Engineering Controls:	No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety.			
Respiratory Protection:	None required under normal use conditions.			
Skin Protection:	None required for normal use. For prolonged exposure, use appropriate goggles, protective clothing and gloves.			
Eye Protection:	None required for normal use. For prolonged exposure, use appropriate goggles, protective clothing and gloves.			
Other protective equipment:	Not expected to be necessary under normal conditions of use. Where exposure cannot be adequately controlled, use appropriate protective clothing or equipment			
Work/hygienic practices:	Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.			

## Section 9. Physical and Chemical Properties

Physical State	N.D.
Color	Clear, colorless with characteristic of IPA
Odor	N.D.
Odor Threshold	N.D.
Solubility	Azeotrope
Partition coefficient Water/n-octanol	N.D.
VOC%	N/A
Viscosity	N.D.
Specific Gravity	0.878
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	70° F
FP Method	N.D.
Ph	N.D.
Melting Point	N.A.
Boiling Point	> 180° F
Boiling Range	N.D.
LEL	2
UEL	12
Evaporation Rate	7.0
Flammability	N.D.
Decomposition Temperature	N.D.
Auto-ignition Temperature	N.D.
Vapor Pressure	733
Vapor Density	> 2.0

## Section 10. Stability and Reactivity

Stability:	Stable.
Incompatibility (Materials to avoid):	N.D.
Hazardous Decomposition or Byproducts	None
Hazardous Polymerization	N.D.
Conditions to avoid	None

## Section 11. Toxicological Information

Acute Toxicity: Eye Contact	Contact may cause temporary moderate irritation
Acute Toxicity: Skin Contact	May cause mild irritation on patients with sensitive skin
Acute Toxicity: Inhalation	N.A.
Acute Toxicity: Ingestion	May be harmful if swallowed
Carcinogenicity:	None known
Chronic Toxicity:	None known

## Section 12. Ecological Information

Toxicity:	N.D.
Persistence and degradability:	N.D.
Bioaccumulative potential:	N.D.
Mobility in soil:	N.D.
Other adverse effects:	N.D.

## Section 13. Disposal

Waste Disposal:	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
-----------------	--

## Section 14. Transport Information

UN Number	N/A
UN Proper Shipping Name	Not Regulated on ground due to Exemption Letter by USDOT
DOT Classification	Not Regulated
Packing Group	Not Regulated



## Section 15. Regulatory Information

SARA 311/312: N.A.  
SARA 302: N.A.  
SARA 313: Isopropyl alcohol.  
TSCA: N.A.  
CERCLA Hazardous Substance List: N.A.  
Clean Air Act (CAA) Section 112, 112 (r): N.A.  
New Jersey Right to Know Components: Isopropyl Alcohol CAS-No. 67-63-0  
Pennsylvania Right to Know Components: 2-PROPANOL.

## Section 16. Other Information

Revision Date 03/03/2016

Legend N.A. - Not Applicable  
N.E. - Not Established  
N.D. - Not Determined

HMIS (U.S.A.): Health Hazard 1

HMIS (U.S.A.): Flammability 3

HMIS (U.S.A.): Reactivity 1

National Fire Protection Association (U.S.A.): Health Hazard 1

National Fire Protection Association (U.S.A.): Flammability 3

National Fire Protection Association (U.S.A.): Instability Hazard 1

Additional Information

The information contained herein is furnished without warranty or legal responsibility of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees