

## Isopropyl Alcohol

### SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<b>Trade name</b>	Isopropyl Alcohol		
<b>Synonyms</b>	Dimethyl carbinol, Isopropanol		
<b>Use</b>	Industrial use		
<b>Company</b>	Sasol Chemicals (USA) LLC (an affiliate of Sasol Chemicals North America LLC)		
<b>Address</b>	900 Threadneedle Ste 100 Houston TX 77079		
<b>Telephone</b>	CHEMTREC North America Transportation Emergency (24-hr)	(800) 424-9300	
	CHEMTREC World Wide	(703) 527-3887	
	Other Emergencies (24-hr)	(337) 494-5142	
	MSDS and Product Information (8:00am-4:30pm CST)	(281) 588-3491	
	Health and Safety Information (7:30am-4:00pm CST)	(281) 588-3492	
<b>E-mail address</b>	SasolElectronicSDS@us.sasol.com		

### SECTION 2 HAZARDS IDENTIFICATION

#### GHS Hazards

Flammable liquids	Category 2
Eye irritation	Category 2A
Specific target organ toxicity - single exposure	Category 3 (Narcotic effects)

#### LABEL ELEMENTS

##### Hazard symbols

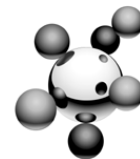


**Signal word** Danger

**Hazard statements** H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

#### Precautionary statements

**Prevention** P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.



## Isopropyl Alcohol

---

P280 Wear protective gloves/ eye protection/ face protection.

P264 Wash skin thoroughly after handling.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P271 Use only outdoors or in a well-ventilated area.

**Response** P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337 + P313 If eye irritation persists: Get medical advice/ attention.  
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

**Storage** P403 + P405 + P235 Store locked up in a well-ventilated place. Keep cool.

### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

---

<u>Components</u>	<u>CAS-No.</u>	<u>Weight percent</u>
2-Propanol	67-63-0	100

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

### SECTION 4 FIRST AID MEASURES

---

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.

**Inhalation** Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately.

**Ingestion** If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

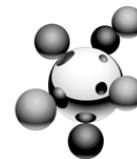
### SECTION 5 FIREFIGHTING MEASURES

---

#### FLAMMABLE PROPERTIES

**Fire/explosion** Vapours may form explosive mixture with air. Flash back possible over considerable distance. Use water spray to disperse the vapors. NFPA Class IB flammable liquid.

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.



## Isopropyl Alcohol

---

**Protective equipment and precautions for firefighters** In the event of fire, wear self-contained breathing apparatus.

**Further information** Keep containers and surroundings cool with water spray. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

---

**Methods and materials for containment and cleaning up** Evacuate personnel to safe areas. Remove all sources of ignition. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system.

### SECTION 7 HANDLING AND STORAGE

---

**Safe handling advice** Ensure all equipment is electrically grounded before beginning transfer operations. Keep away from heat and sources of ignition.

**Storage/Transport pressure** Ambient

**Load/Unload temperature** Ambient

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

---

#### ENGINEERING MEASURES

Air contaminant levels should be controlled below the PEL or TLV for this product (see Exposure Guidelines). Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment.

#### PERSONAL PROTECTIVE EQUIPMENT

**Eyes** Chemical resistant goggles must be worn., Face-shield

**Skin** Wear suitable protective clothing, gloves and eye/face protection.

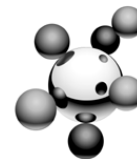
**Inhalation** Respiratory protection is normally not required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Use NIOSH approved respiratory protection.

#### EXPOSURE GUIDELINES

<u>Components</u>	<u>Exposure limit(s)</u>
<b>2-Propanol</b>	OSHA PEL 400 ppm 980 mg/m <sup>3</sup> ACGIH TLV (8-hour) 200 ppm ACGIH STEL 400 ppm

PEL= Permissible Exposure Limits  
TLV= Threshold Limit Value

TWA= Time Weighted Average (8 hr.)  
STEL= Short Term Exposure Limit (15 min.)



## Isopropyl Alcohol

---

EL= Excursion Limit

WEEL= Workplace Environmental Exposure Level

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

---

<b>Appearance</b>	liquid;
<b>Colour</b>	Clear, colorless
<b>Form</b>	liquid
<b>Odour</b>	alcohol-like
<b>Odour Threshold</b>	no data available
<b>Flash point</b>	13 °C, 55 °F;
<b>Flammability</b>	Upper explosion limit: 19 %(V) Lower explosion limit: 3.3 %(V)
<b>Boiling point/boiling range</b>	82 °C, 180 °F;
<b>Melting point/range</b>	-92 °C, -134 °F;
<b>Auto-ignition temperature</b>	363 °C, 685 °F;
<b>Decomposition temperature</b>	no data available
<b>Flammability (solid, gas)</b>	no data available
<b>Vapour pressure</b>	no data available
<b>Vapour density</b>	no data available
<b>Density</b>	0.79 g/cm <sup>3</sup> @ 20 °C, 68 °F;
<b>Specific gravity</b>	no data available
<b>Water solubility</b>	completely miscible
<b>Viscosity</b>	no data available
<b>Viscosity, dynamic</b>	no data available
<b>pH</b>	7
<b>Evaporation rate</b>	no data available

## Isopropyl Alcohol

---

**Partition coefficient: n-octanol/water** no data available

**Volatile organic compounds (VOC) content** 100 %

### SECTION 10 STABILITY AND REACTIVITY

---

**Reactivity** Stable under recommended storage conditions.

**Chemical stability** No decomposition if stored and applied as directed.

**Conditions to avoid** Heat, flames and sparks. Avoid temperatures above 35°C, direct sunlight and contact with sources of heat.

**Hazardous decomposition products** None known.

**Materials to avoid** Strong acids and oxidizing agents  
Alkali metals  
Aluminium  
Amines  
Iron

**Hazardous polymerisation** Vapours may form explosive mixture with air.

### SECTION 11 TOXICOLOGICAL INFORMATION

---

**Acute dermal toxicity** LD50 rabbit: > 2,000 mg/kg  
(literature value)

**Acute inhalation toxicity** LC50 rat (8 hours): > 20 mg/l  
(literature value)

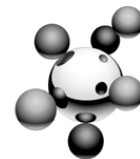
**Acute oral toxicity** LD50 rat: > 2,000 mg/kg  
(literature value)

**Skin corrosion/irritation** (rabbit)  
Not irritating, (literature value)

**Eye damage/irritation** (rabbit)  
irritating, (literature value)

**Respiratory or skin sensitization** guinea pig: not sensitizing; Buehler Test  
(literature value)

**Germ cell mutagenicity** **Genotoxicity in vitro:**  
Type: Ames test  
System: Salmonella typhimurium; with and without metabolic activation



## Isopropyl Alcohol

---

Result: In vitro tests did not show mutagenic effects.  
(literature value)

**Genotoxicity in vivo:**  
no data available

**Assessment Mutagenicity:**  
Based on available data, the classification criteria are not met.

**Reproductive toxicity** **Reproductive toxicity:**  
no data available

**Assessment Reproductive toxicity:**  
no data available

**Teratogenicity:**  
no data available

**Assessment teratogenicity:**  
no data available

**STOT - single exposure** The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

**STOT - repeated exposure** rat; Oral; 90-day;  
NOAEL: 1,730 mg/kg  
LOAEL: 3,160 mg/kg  
Based on available data, the classification criteria are not met.

**Aspiration toxicity** no data available

**Carcinogenicity** **Assessment carcinogenicity:**  
Contains no ingredient listed as a carcinogen

---

## SECTION 12 ECOLOGICAL INFORMATION

**Toxicity to fish** LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l; flow-through test  
(literature value)

**Toxicity to aquatic invertebrates** EC50 (Daphnia magna (Water flea)) 24 hours: > 100 mg/l; static test  
(literature value)

**Toxicity to algae** EC50 (Scenedesmus quadricauda (Green algae)) 7 d: > 100 mg/l; static test  
(literature value)

**Chronic toxicity to fish** no data available

**Chronic toxicity to aquatic invertebrates** no data available

**Biodegradation** Readily biodegradable.

## Isopropyl Alcohol

---

BOD5 (5 d): 53 %  
(literature value)

**Bioaccumulation** No bioaccumulation is to be expected (log Pow <= 4).

**Mobility in soil** no data available

**Other adverse effects** This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).;

---

### SECTION 13 DISPOSAL CONSIDERATIONS

---

**Waste Code** D001 - Ignitability (RQ 100 LB). This product has the RCRA characteristic of ignitability. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification.

**Disposal methods** Dispose of only in accordance with local, state, and federal regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

**Empty containers.** Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

---

### SECTION 14 TRANSPORT INFORMATION

---

**DOT** UN 1219, Isopropanol, 3, II

**IATA** UN 1219, Isopropanol, 3, II

**IMDG** UN 1219, Isopropanol, 3, II

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

**Remarks** no data available

---

### SECTION 15 REGULATORY INFORMATION

---

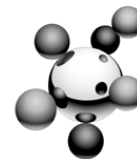
#### U.S. FEDERAL REGULATIONS

##### OSHA Hazards (HCS 1994)

Flammable liquid, Eye irritation

##### TSCA Inventory Listing Components

CAS-No.



## Isopropyl Alcohol

---

2-Propanol

67-63-0

**SARA 302 Status****Components****CAS-No.****Weight percent**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 311/312 Classification**

"Fire hazard", "Immediate (acute) health hazard"

**SARA 313 Chemical****Components****CAS-No.****Weight percent**

2-Propanol

67-63-0

100 %

**US. EPA CERCLA Hazardous Substances (40 CFR 302)****Components****Reportable Quantity****Weight percent**

none

### INTERNATIONAL REGULATIONS

**WHMIS Classification**

Class B, Division 2: Flammable liquid.

Class D, Division 2, Subdivision B: Toxic material.

**European Union**

Classification according to Regulation (EU) 1272/2008.

Flammable liquids, Category 2

Eye irritation, Category 2

Specific target organ toxicity - single exposure, Category 3 (Narcotic effects)

**Australia. Inventory of Chemical Substances (AICS)**

Listed

**Japan. Inventory of Existing and New Chemical Substances (ENCS)**

Listed

**Japan. Industrial Safety & Health Law (ISHL) Inventory**

Listed

**Canada. Domestic Substances List (DSL) Inventory**

Listed

**Canadian Non-Domestic Substance Listing (NDSL)**

Not listed

**European Inventory of Existing Commercial Chemical Substances (EINECS) Listing**

Listed

**Philippines. Inventory of Chemicals / Chemical Substances (PICCS)**

Listed

**Korea. Existing Chemicals Inventory (KECI)**

Listed

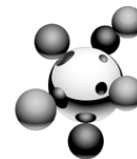
**China. Inventory of Existing Chemical Substances (IECSC)**

Listed

**Mexico. National Inventory of Chemical Substances (INSQ)**

Listed





## Isopropyl Alcohol

---

New Zealand. Inventory of Chemicals (NZIoC)	Listed
Switzerland. Inventory of Notified New Substances (CHINV)	Listed
Taiwan. National Existing Chemical Inventory (NECI)	Listed

Please note: The names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3.

### STATE REGULATIONS

#### California Prop. 65

##### Components

none

##### CAS-No.

## SECTION 16 OTHER INFORMATION

---

### HAZARD RATINGS

	<u>Health</u>	<u>Flammability</u>	<u>Physical Hazard/ Instability</u>
<b>HMIS®</b>	2	3	0
<b>NFPA</b>	2	3	0

---

THE DATA AND INFORMATION CONTAINED HEREIN ARE BEING FURNISHED FOR INFORMATIONAL PURPOSES ONLY, UPON THE EXPRESS CONDITION THAT EACH CUSTOMER SHALL MAKE ITS OWN ASSESSMENT OF APPROPRIATE USE AND APPROPRIATE SHIPPING, TRANSFER AND STORAGE MATERIALS AND PROCEDURES FOR SASOL CHEMICALS (USA) LLC'S PRODUCTS. ALTHOUGH BASED ON INFORMATION SOURCES WHICH SASOL CHEMICALS (USA) LLC CONSIDERS ACCURATE AND RELIABLE, SASOL CHEMICALS (USA) LLC MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE VALIDITY OF THIS INFORMATION, THE INFORMATION SOURCES UPON WHICH THE SAME ARE BASED, OR THE RESULTS TO BE OBTAINED, AND EXPRESSLY DISCLAIMS LIABILITIES FOR DAMAGES OR INJURIES RESULTING FROM THE USE THEREOF.

---