

Material Safety Data Sheet

# ISOPROPYL ALCOHOL

## Section 1 - Chemical Product and Company Identification

**SDS Name:** Isopropyl Alcohol

**Catalog Numbers:** SO-600

**Company Identification:** ROWLEY BIOCHEMICAL  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

## Section 2 - Hazards Identification

### GHS Classifications

#### HEALTH HAZARDS

H303-Acute Oral Toxicity: 5

H316-Skin Corrosion/Skin Irritation: 3

H320-Eye damage/Irritation: 2B

H361-Reproductive Toxicity: 2

H373-Specific Target Organ Toxicity, Repeated Exposure: 2

#### PHYSICAL HAZARDS

H225-Flammability: 2

#### Pictograms or Hazard symbols and Hazard statement.



Warning! May be harmful if swallowed.  
Causes mild skin irritation.  
Causes eye irritation



Warning! Suspected of damaging fertility or the unborn child. (Ingestion)  
May cause damage to organs through prolonged exposure  
(ingestion)



Danger! Highly flammable liquid and vapor.

### Precautionary Statement Prevention

**P201** Obtain special instructions before use.

**P202** Do not handle until all safety precautions have been read and understood.

**P264** Wash thoroughly after handling.

**P281** Use personal protective equipment as required.

**P305 + P351 + P338** IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**P308 + P313** If exposed or concerned, get medical advice/attention.

**P312** Call a physician if you feel unwell.

**P314** Get medical advice/attention if you feel unwell.

**P332 + P313** If skin irritation occurs, get medical advice/attention.

**P337 + P313** If eye irritation persists, get medical advice/attention.

**P405** Store locked up.

**P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

**P210** Keep away from heat, flames, and hot surfaces. No smoking.

**P233** Keep container tightly closed.

**P241** Use explosive-proof equipment.

**P242** Use only non-sparking tools.

**P243** Take precautionary measures against static discharge.

**P303 + P361 + P353** If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water.

**P403 + P235** Store in a well-ventilated place. Keep cool.

### Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
67-63-0	Isopropyl Alcohol	100

### Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

**Oral Exposure:** If Swallowing seek immediate medical advice.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

**General Information:** Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

**Flash Point:** Closed cup: 11.667<sup>o</sup> C ( 53<sup>o</sup> F)

**Autoignition Temperature:** 399<sup>o</sup>C (750.2 <sup>o</sup> F)

**Explosion Limits, Lower:**3.3 vol %

**NFPA Rating:** (estimated) Health: 2; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s):**

Wear protective gear. Eliminates all sources of ignition.

**Methods for Cleaning up:** Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal.

Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Store capped at room temperature. Keep away from incompatible materials. Protect from heat. Vapors heavier than air, may travel considerable distance and ignite or explode.

Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Isopropanol	400 ppm TWA	500 ppm TWA; 400 mg/m3 TWA 500 ppm IDLH	980 ppm TWA; 1900 mg/m3 TWA

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** clear

**Odor:** Alcohol-like

**pH:** N/A

**Vapor Pressure:** 4.4 kPa @ 20 °C

**Vapor Density:** 2.07

**Evaporation Rate:** N/A

**MW:** 60.1 g/mole

**Boiling Point:** 82.5 °C

**Solubility:** Miscible.

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat, oxidizers.

**Incompatibilities with Other Materials:** Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide.

**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 67-63-0

**LD50/LC50:**

*WARNING: THE LC50/LD50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.*

Oral, Mouse: 3,600 mg/kg

Dermal, Rabbit: 12,800 mg/kg

Inhalation, Rat: 16,000 8 hours

**Carcinogenicity:**

CAS# 67-63-0: Not listed by ACGIH, IARC: group 3 (Not classifiable as to its carcinogenicity)

to humans.) NTP, or CA Prop 65.

**Other Toxic Effects on Humans:**

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, sensitizer, permeator)

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: May cause mild skin irritation, and sensitization. Eyes: Can cause eye irritation. Inhalation: Breathing in small amounts of this material during normal handling is not likely to cause harmful effects. However, breathing large amounts may be harmful and may affect the respiratory system and mucous membranes (irritation), behavior and brain (Central nervous system depression - headache, dizziness, drowsiness, stupor, incoordination, unconsciousness, coma and possible death), peripheral nerve and sensation, blood, urinary system, and liver. Ingestion: Swallowing small amounts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. Swallowing large amounts may cause gastrointestinal tract irritation with nausea, vomiting and diarrhea, abdominal pain. It also may affect the urinary system, cardiovascular system, sense organs, behavior or central nervous system (somnolence, generally depressed activity, irritability, headache, dizziness, drowsiness), liver, and respiratory system (breathing difficulty). Chronic Potential Health Effects: May cause defatting of the skin and dermatitis and allergic reaction. May cause adverse reproductive effects based on animal data (studies).

Section 12 - Ecological Information

**Ecotoxicity:** in water ( LC50): 100,000 mg/l 96 hours

**Products of Biodegradation:** Possible hazardous short term degradation products are not likely. However, long term degradation products may arise.

Section 13 - Disposal Considerations

**Appropriate method of disposal of substance or preparation:**

Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved wasted facility.

Section 14 – Transport Information

**DOT**

Proper shipping name: Isopropyl Alcohol

UN1219

PG II

Hazard class 3: flammable liquid

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**California Prop 65**

WARNING: Isopropyl Alcohol, is a chemical known to the state of California to cause developmental reproductive toxicity.

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations****European Labeling in Accordance with EC Directives****Hazard Symbols:**

F

**Risk Phrases:**

R 11 Highly flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed

R36/38 Irritating to eyes and skin

R51 Toxic to aquatic organisms

R61 May cause harm to the unborn child

**Safety Phrases:**

S20/21 When using do not eat, drink or smoke

S2 Keep out of the reach of children

S 16 Keep away from sources of ignition - No smoking.

S 33 Take precautionary measures against static discharges.

S 7 Keep container tightly closed.

S 9 Keep container in a well-ventilated place

Section 16 - Additional Information
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**MSDS Creation Date:** 11/19/12

**Revision #1. 6/2/14 YM Cosign: CF 7/1/14**

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