

# SAFETY DATA SHEET

# Isopropyl Alcohol 99%

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MANUFACTURER:** Griffin Bros. Inc.  
P.O. Box 7719  
Salem, OR 97303

**INFORMATION PHONE:** (800) 456-4743

For Medical and Chemical Emergencies **CHEMTREC: 1-800-424-9300**

**PRODUCT NAME:** ISOPROPYL ALCOHOL  
**PRODUCT NUMBER:** G-IPA99  
**DATE PREPARED:** 06/12/07  
**LAST REVISION:** 11/04/2014

**USES:** Used as an organic solvent to remove bugs, sap, tar, and other contaminants from glass and painted surfaces.

**USE RESTRICTIONS:** None known

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW:

**GHS CLASSIFICATION:** Flammable Liquids (Category 2) Skin: (Category 4) Eyes: (Category 2b) Acute Toxicity Oral: (Category 5)  
Acute Toxicity Inhalation: (Category 5)

**Target Organs:** Cardiovascular system, Gastrointestinal tract, Kidney, Liver, Nerves

### GHS Label elements, including precautionary statements

**SIGNAL WORD:** Danger

**PICTOGRAM:**



### HAZARD STATEMENT(S):

H225: Highly flammable liquid and vapour  
H303: May be harmful if swallowed  
H316: Causes mild skin irritation  
H319: Cause serious eye irritation  
H336: May cause drowsiness or dizziness

### PRECAUTIONARY STATEMENT(S):

P102: Keep out of reach of children  
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P261: Avoid breathing dust/fumes/gas/mist/vapors.  
P312: Call a POISON CENTER or doctor/ physician if you feel unwell.  
P240: Ground/bond container and receiving equipment.  
P337+P313: If eye irritation persists: Get medical attention.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P303+P361+P353: IF ON SKIN: (or hair): Remove immediately all contaminated clothing. Rinse skin with water.  
P370+P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
P501: Dispose of contents and container to an approved waste disposal plant.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Range Wt. %
2-PROPANOL	67-63-0	99 - 100%

## 4. FIRST AID MEASURES

**EYE CONTACT:** Immediately flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**INGESTION:** Rinse mouth with water. Immediately have victim drink several glasses of water to dilute. If vomiting does occur, have victim lean forward to prevent aspiration. NEVER give anything by mouth to an unconscious person. Seek medical attention.

**SKIN CONTACT:** Wash with soap and water. Change contaminated clothing. Get medical attention if irritation develops or persists.

**AGGRAVATED MEDICAL CONDITIONS:** Pre-existing eye, skin or respiratory conditions.

**SUPPLEMENTAL HEALTH INFORMATION:** The effects of long-term, low-level exposure to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposures.

## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES

**FLASH POINT:** 12°C (53 °F)

**FLASH POINT METHOD USED:** CC

**AUTOIGNITION:** 399 °C (750 °F)

**LEL:** 2.31% (V)

**UEL:** 12.75% (V)

**EXTINGUISHING MEDIA:** Use dry chemical foam, carbon dioxide, or water spray when fighting fires involving this material-

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear full protective clothing and a NIOSH-approved self-contained breathing apparatus with full-face piece operated in a pressure positive mode.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Extinguish all nearby sources of ignition. Vapors may travel to source of ignition and flash back. Product is flammable.

**COMBUSTION PRODUCTS:** No data available

## 6. ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:** Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains. Contain spill, then collect with an electrically protected vacuum cleaner or by wet-brushing and put the material into a convenient waste disposal container. Keep container closed.

## 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store below 120 degrees F. Follow all SDS/label precautions even after container is emptied because it may retain product residues. Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. Keep container tightly closed in a cool, dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**OTHER PRECAUTIONS:** Keep away from children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### EXPOSURE GUIDELINES:

Chemical Name	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
2-PROPANOL	400ppm	n/a	200ppm	400ppm

### PERSONAL PROTECTIVE EQUIPMENT

<b>RESPIRATORY PROTECTION:</b>	Wear a NIOSH/MSHA approved respirator appropriate for vapor concentration at point of use.
<b>PROTECTIVE GLOVES:</b>	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>VENTILATION:</b>	Local exhaust sufficient to keep exposure below TLV.
<b>WORK / HYGENIC PRACTICES:</b>	Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet.
<b>ENGINEERING CONTROLS:</b>	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
<b>EYE PROTECTION:</b>	Safety glasses with side shields (or goggles).
<b>OTHER PROTECTIVE EQUIP:</b>	Boots, apron, lab coat or coveralls of impervious material, safety shower, eyewash.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>PHYSICAL STATE:</b> Liquid	
<b>APPEARANCE AND ODOR:</b> Clear Colorless liquid. Alcohol Scent.	
<b>SOLUABILITY IN WATER:</b> Complete	
<b>BOILING POINT:</b> 83 °C (181 °F)	<b>EVAPORATION RATE:</b> 1.7
<b>FREEZE POINT:</b> -190 °C (-130 °F)	<b>MOLECULAR WEIGHT:</b> 60.1 g/mol
<b>VAPOR PRESSURE:</b> 4.4 kPa at 20 °C (68 °F)	<b>VAPOR DENSITY:</b> (AIR=1) 1.05
<b>RELATIVE DENSITY:</b> 0.858 g/cm <sup>3</sup> at 25 °C (77 °F)	
<b>SPECIFIC GRAVITY (H<sub>2</sub>O=1):</b> 0.790 to 0.80	<b>POUNDS PER GALLON:</b> 6.548 to 6.580 lbs./gal
<b>MELTING POINT:</b> N/A	<b>OTHER PROPERTIES:</b> No data available

## 10. STABILITY AND REACTIVITY

<b>STABLE:</b> Stable
<b>INCOMPATIBILITY:</b> Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids
<b>HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:</b> Oxides of Carbon
<b>HAZARDOUS POLYMERIZATION:</b> Will Not Occur
<b>CONDITIONS TO AVOID:</b> Heat, flames, and sparks. Extreme temperatures and direct sunlight.

## 11. TOXICOLOGICAL INFORMATION

**PRODUCT SUMMARY:** Long-term exposure (2 years) to Isopropyl Alcohol via inhalation at concentrations up to 5000 ppm caused no exposure related increases in tumors in animals. No data available for the teratogenicity, mutagenicity, or reproductive toxicity of this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

### ACUTE TOXICITY:

LC50 Inhalation Rat 16,000 mg/kg 8 hours
LD50 Dermal Rabbit 12,800 mg/kg
LD50 Oral Rat 5045 mg/kg Behavioral abnormalities observed such as altered sleep time and decreased activity.

### IRRITATION:

<b>Eyes:</b> Rabbit - Irritating to eyes - 24 hours
<b>Eyes (ISOPROPANOL):</b> Mildly irritating to the eye at an airborne concentration of 400 ppm, unpleasant at 800 ppm.
<b>Respiratory or Skin Sensitization:</b> No data available
<b>Skin:</b> Rabbit- mild skin irritation

**SPECIFIC TARGET ORGAN TOXICITY:** - single exposure (GHS) Inhalation - May cause drowsiness or dizziness. - Central Nervous System

**CARCINOGENICITY:** IARC: Group 3: Not classifiable as to its carcinogenicity to humans.

### OTHER HAZARDS:

#### Organ Description

**Eyes:** Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. May cause transient corneal injury

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

**Inhalation:** Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause narcotic effects in high concentration. Causes upper respiratory tract irritation. Inhalation of vapors may cause drowsiness and dizziness. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. The probable oral lethal dose in humans is 240 ml (2696 mg/kg), but ingestion of only 20 ml (224 mg/kg) has caused poisoning.

**Skin:** May cause irritation with pain and stinging, especially if the skin is abraded. Isopropanol has a low potential to cause allergic skin reactions; however, rare cases of allergic contact dermatitis have been reported. May be absorbed through intact skin. Dermal absorption has been considered toxicologically insignificant.

**CHRONIC PROLONGED EXPOSURE:** Can be irritating to mucous membranes, skin, and the respiratory system. Can cause liver and kidney damage.

## 12. ECOLOGICAL INFORMATION

### ECOTOXICITY (aquatic and terrestrial, where available)

**Acute Fish Toxicity (ISOPROPANOL):** LC50 / 96 hours Pimephales promelas: 9,640 mg/L

**Toxic to Daphnia and Other Aquatic Invertebrates:** EC50 / 24 h / Water Flea - 5,102 mg/L

**Toxicity to Aquatic Plants (ISOPROPANOL):** EC50 / 72 hours Desmodemus subspicatus > 2,000 mg/L

## 13. DISPOSAL CONSIDERATIONS

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

## 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	1219	ISOPROPANOL	3	II

**GUIDE NUMBER:** 129

## 15. REGULATORY INFORMATION

**SUMMARY:** Flammable liquid, Target Organ Effect, Irritant

### **SARA 302 Components**

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

### **SARA 313 Components**

The following components are subject to reporting levels established by SARA title III, Section 313: ISOPROPYL ALCOHOL (CAS# 67-63-0) Revision date: 1987-01-01.

### **SARA 311/312 Hazards**

Acute Health Hazard  
Chronic Health Hazard  
Fire Hazard

### **CERCLA**

No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA

**OTHER** No additional data available

## 16. OTHER INFORMATION

**HMS INFORMATION:**      **HEALTH:** 2      **FLAMMABILITY:** 3      **PHYSICAL HAZARD:** 0      **PROTECTIVE:** X  
**NFPA INFORMATION:**    **TOXICITY:** 1                    **FIRE:** 3                    **REACTIVITY:** 0                    **SPECIAL:**

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