

Supplied By: Tower Products, Inc., 2703 Freemansburg Ave. \* Easton, PA 18045

Information Phone: 610-253-6206

**For Chemical Spill Emergency - Call 1-800-424-9300**

### SECTION 1: PRODUCT INFORMATION

Product Name: **ISOPROPYL ALCOHOL 99%**

D.O.T. Designation: Isopropyl Alcohol, 3, UN1219, PGII

U.N. Designation: Isopropyl Alcohol, 3.3, UN1219, PGII

### SECTION 2: HAZARDOUS COMPONENTS/IDENTITY INFORMATION

Hazardous Component	CAS No.	% WT	OSHA PEL	ACGIH TLV-TWA	OTHER RATINGS	OSHA STEL
Isopropanol, Anhydrous	67-63-0	100%	400ppm	400ppm	500ppm (ACGIH STEL)	500ppm

### SECTION 3: PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 180 degrees F (82.2 degrees C) @ 760 mmHg.

Specific Gravity: (Water =1) 0.78 at 60 degrees F.

Vapor Pressure: 33.0 mmHg @ 68 degrees F.

Vapor Density: (Air = 1) 2.070

Solubility in Water by weight: 100%

Appearance & Odor: Clear liquid, slight ethanol/acetone like odor

Maximum VOC Content: 6.58 lbs. per gallon (789 grams per liter)

Maximum VOC% : 100%

### SECTION 4: FIRE AND EXPLOSION DATA

Flash Point (Tag Closed Cup Method): 53 degrees F., 1.6 degrees C.

Explosive Limit (For Product): LEL 2.0 UEL: 12.7

**Extinguishing Media:** Apply alcohol-type or all-purpose-type foam by manufacturer's recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires.

**Special Fire-fighting Procedures:** Use water spray to cool fire-exposed containers and structures. Use water spray to disperse vapors, re-ignition is possible. Use self-contained breathing apparatus and protective clothing.

**Unusual Fire and Explosion Hazards:** Vapors form from this product and may travel or be moved by air currents and ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharges or other ignition sources at locations distant from product handling point. Vapors from this material may settle in low or confined areas or travel a long distance to an ignition source and flash back explosively. This material may produce a floating fire hazard. Use proper bonding and grounding during product transfer as per NFPA 77 "Other Precautions" in Section IX.

### SECTION 5: REACTIVITY DATA

**WARNING: Spontaneous combustion may occur when solvent soaked combustible materials (paper, cotton, wool, etc.) are allowed to stand in confined areas.**

Stability: Stable

Incompatibility: Avoid contact with acetaldehyde, acids, chlorine, ethylene oxide, isocyanates, strong oxidizing agents. Do not use with aluminum equipment at temperatures above 120 degrees F.

Hazardous Decomposition or Byproducts: Burning can produce carbon monoxide and/or carbon dioxide. Carbon monoxide is highly toxic if inhaled, carbon dioxide in sufficient concentrations can act as an asphyxiant.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Keep away from heat, sparks and flame.

### SECTION 6: HEALTH HAZARD DATA

Routes of Entry: Inhalation, Skin Absorption, Eye

**Health Hazards:** Acute overexposure may lead to headaches, nausea, chest discomfort and unconsciousness.  
**Eye Contact:** Causes irritation, experienced as stinging and discomfort or pain. Corneal injury may occur.  
**Skin Contact:** May cause minor irritation with itching and possible slight local redness. Prolonged or repeated contact may cause defatting and drying of the skin.  
**Skin Absorption:** Exposure to small quantities is not expected to cause adverse health effects. Widespread or prolonged exposure may result in the absorption of harmful amounts of material, particularly in infants, leading to signs and symptoms as described for ingestion.  
**Ingestion:** Slightly toxic. May cause dizziness, faintness, drowsiness, decreased awareness and responsiveness, lack of coordination, abdominal discomfort, nausea, vomiting and diarrhea.  
**Inhalation:** Vapor causes irritation of the respiratory tract, with coughing and chest discomfort. High concentrations of vapor may cause central nervous system depression, with weakness, drowsiness and loss of consciousness.  
**Carcinogenicity (NTP, IARC, OSHA):** The components of this product have not shown any evidence of carcinogenicity.

**Signs/Symptoms of Exposure:** Overexposure may lead to headaches, nausea, chest discomfort and skin and eye irritation

**Medical Conditions Aggravated by Exposure:** Skin contact may aggravate an existing dermatitis. Lung (asthma-like conditions) and kidney disorders may be aggravated by exposure.

**Emergency and First Aid Procedures:**

**For Skin Contact:** Remove contaminated clothing. Wash skin with soap and water. If irritation persists or if contact has been prolonged, obtain medical attention. Launder contaminated clothing.

**For Inhalation:** Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, oxygen may be given by qualified personnel. Obtain medical attention.

**For Eye Contact:** Immediately flush eyes thoroughly with water and continue washing for several minutes. Remove contact lenses, if worn. Obtain medical attention.

**For Ingestion:** If patient is fully conscious, contact medical facility or poison control center for advice on whether or not to induce vomiting. Obtain medical attention.

**NOTES TO PHYSICIAN:** There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

## **SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE/REGULATORY INFORMATION**

Steps to be taken in case material is released or spilled:

Extinguish and do not turn on any ignition source until area is determined to be free from fire or explosion hazard.

Wear suitable protective equipment. Avoid contact with eyes.

Small spills may be absorbed with vermiculite or other absorbent material. Larger spills should be collected for disposal.

**Waste Disposal Method:** Incinerate in furnace where permitted under Federal, State and local regulations. At very low concentrations in water, this product is biodegradable in a biological wastewater treatment plant.

**Regulatory Information:**

This information may be useful in complying with EPA Regulation 40CFR302 'CERCLA' Section 102 and EPA Regulation 40CFR 372 'SARA 313': Components present in this product at a level which could require reporting under these statutes are ...None. The ingredients of this product are on the TSCA inventory.

Product may contain components which are further regulated by state and/or local agencies-Consult Appropriate Agency.

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Precautions to be Taken in Handling and Storing: **WARNING! FLAMMABLE, CAUSES EYE IRRITATION, MAY CAUSE DIZZINESS AND DROWSINESS.** Ventilation in work area should be sufficient to maintain atmosphere with vapor level below lowest listed TLV in Section 2. If TLV's are exceeded, use supplied air equipment or respirators with proper NIOSH approved cartridges. Keep away from heat, sparks, flame. Keep containers closed when not in use. Vapors may settle in low or confined areas, or travel a long distance to an ignition source and flash back explosively. Flammable liquid-empty containers can be hazardous and contain explosive vapors. Avoid contact with eyes. Wash thoroughly after using. **DO NOT REUSE EMPTY CONTAINERS!**

HMIS RATINGS: Health Hazard: **1** Flammability: **3** Reactivity: **0** Personal Protection: **B**

### **SECTION 8: CONTROL MEASURES**

Respiratory Protection: Needed if TLV's in Section 2 are exceeded. Use a respirator with appropriate NIOSH approved cartridges or air supplied equipment.

Ventilation: Local and mechanical exhaust recommended. Avoid open electrical sources near product vapor areas.

Protective Gloves: Impervious or chemical resistant gloves (consult safety equipment supplier).

Eye Protection: Chemical splash goggles (mono goggles) are recommended to protect against potential eye contact.

Other Protective Clothing or Equipment: Safety shoes and aprons are recommended. Eye bath and safety shower.

Work and Hygiene Practices: Do not take internally. Avoid skin contact, and wash skin after using products. Do not eat, drink, or smoke in work area. Avoid contact with eyes. Keep away from children.

### **OTHER PRECAUTIONS**

PROCESS HAZARD...Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into hot equipment under a vacuum, may result in ignitions without the presence of obvious ignition sources. Published 'autoignition' or 'ignition' temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Further information is available in a technical bulletin entitled 'Ignition Hazards of Organic Chemical Vapors.'

TRANSFER HAZARD...Vapors of this product may be ignited by static sparks. Use proper bonding and grounding during liquid transfer as described in National Fire Protection Association document NFPA 77.

**FOR MORE INFORMATION, CONSULT TOWER PRODUCTS, INC.**

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