

# NETWORK ISOPROPYL ALCOHOL 99%

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Photo Systems, Inc.

Product Name: **ISOPROPYL ALCOHOL**

Product Number: **23000**

Date Prepared: 09/04/2007

Customer Information Phone Number:

1-800-521-4042

**CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300**

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS</u>	<u>OHSA PEL</u>	<u>ACGIH TLV</u>	<u>Weight %</u>
ISOPROPYL ALCOHOL	67-63-0	400 ppm TWA	400 ppm TWA	99 -100

## 3. HAZARDOUS IDENTIFICATION

Emergency Overview: **FLAMMABLE! Vapors are heavier than air and may travel to reach ignition sources causing flash fire.**

### POTENTIAL HEALTH EFFECTS

Eye Contact: Mist or vapor may cause irritation experienced as stinging and discomfort or pain. Corneal injury may occur.

Inhalation: Vapor may irritate respiratory tract, with coughing and chest discomfort. High concentrations of vapor may cause weakness, drowsiness, CNS depression, and loss of consciousness.

Ingestion: Slightly toxic. Swallowing can cause dizziness, faintness, decreased awareness and responsiveness, lack of coordination, abdominal discomfort, nausea, vomiting, and diarrhea.

Skin Contact: Exposure to small quantities is not expected to cause adverse health effects. May cause irritation and allergic skin reaction. Prolonged or repeated contact leads to drying of skin.

Signs And Symptoms Of Exposure: Eye irritation, respiratory irritation, dermatitis, difficulty breathing, nausea, vomiting, headaches, skin irritation, mucus membrane irritation, intoxication, drowsiness, dizziness, loss of consciousness.

## 4. FIRST AID MEASURES

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Do not use eye ointment. Get immediate medical attention.

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

Ingestion: If swallowed, Call a physician or poison control center immediately. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Skin Contact: Remove contaminated clothing. Wash skin with soap and water. Wash contaminated clothing before re-use. Get medical attention if irritation or allergic reaction develops.

Aggravated Medical Conditions: Pre-existing skin disorders such as dermatitis may be aggravated by overexposure.

Supplemental Health Information: None of the components in this product is listed by IARC, NTP, or OSHA as carcinogen.

## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES

Flash Point: 53° F                      Flash Point Method: Tag Closed Cup                      Auto ignition: 750° F  
LEL: 2.0                                      UEL: 12.0

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

Special Fire-Fighting Procedures: Water may be ineffective. Water fog and spray may be used to keep fire-exposed containers and adjacent structures cool. Use water spray to disperse vapors; re-ignition is possible. NEVER use water jet directly on the fire because it may spread the fire to a larger area. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves and rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance. Cover pooling liquid with foam. Burning liquid will float on water. Notify appropriate authorities if liquid(s) enter sewer/waterways.

Unusual Fire And Explosion Hazards: **FLAMMABLE!** Keep container tightly closed. Isolate from oxidizers, heat, and open flames. Vapors form from this product and may travel to be ignited by pilot lights, other flames, sparks, static, and other ignition sources distant from product handling. Vapors may pool and flash back explosively. Flames may be invisible.

Combustion Products: Carbon dioxide, carbon monoxide

## 6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Spilled Or Released: Review fire and explosion hazards and safety precautions before proceeding with cleanup. Release can cause an immediate fire or explosion hazard. Use appropriate personal protective equipment. **Eliminate all ignition sources.** Avoid sparks, flames, heat, and smoking. For large spills, water mist or spray may be used to reduce or disperse vapors and to dilute spill to nonflammable mixture. All equipment use when handling this material must be grounded. Avoid contact with skin and eyes. Stop leak if possible without risk. Ventilate. Stop the spillage. Dike the spill. Prevent liquid from entering sewers, waterways or low areas. Absorb small spillage in inert material. Soak up with sawdust, sand, or other absorbent material. Use clean, non-sparking tools to collect absorbed material. Remove non-usable solid material and/or contaminated soil for disposal in an approved and permitted landfill. Large spills should be collected for disposal.

## 7. HANDLING AND STORAGE

Precautions To Be Taken In Handling And Storage: **FLAMMABLE!** Avoid contact with eyes. Use only with adequate ventilation. May cause dizziness and drowsiness. A spill or leak can cause an immediate fire/explosion hazard. Keep away from heat, sparks, and open flame. Static electricity and formation of sparks must be prevented. Vapor forms from this product and may travel or be moved by air currents and ignited by ignition sources near or distant from the product handling point and may flashback explosively. Keep in cool, dry, ventilated Class II liquid storage and closed containers. Protect from light, including direct sun rays. Ground container and transfer equipment to eliminate static electric sparks. Store isolated from oxidizing materials. Continue all label precautions.

Storage: small quantities of peroxides may form on prolonged storage. Exposure to light and/or air significantly increases the rate of peroxide formation. If evaporated to a residue, the mixture of peroxides and isopropanol may explode when exposed to heat or shock. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. If peroxide formation is suspected, do not open or move container. Do not allow to evaporate to near dryness. Distill with caution. Addition of water or appropriate reducing materials will lessen peroxide formation.

Other Precautions: Empty containers retain product residue 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. Rinse well. This material should be stored in separate safety cabinet or room.

Any use of this product in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

### PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following represents the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

Respiratory Protection: Provide adequate general and local exhaust ventilation. In high vapor concentrations, use an air-purifying respirator with appropriate, government approved (where applicable), air purifying filter, canister or canister.

Ventilation: General mechanical room ventilation is expected to be satisfactory where this product is stored and handled in closed equipment. Special local ventilation is needed at points where vapors may be expected to escape into the workplace air.

Protective Gloves: Impervious gloves recommended, PVC, neoprene, nitrile, vinyl.

Eye Protection: Safety glasses with side shields (or goggles) or goggles and splash shield.

Other Protective Clothing or Equipment: Avoid skin contact. It is recommended that fire-retardant garments be worn when working with flammable or combustible liquids. If splashing or spraying is expected, chemical-resistant protective clothing should be worn.

Work/Hygienic Practices: Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet. If contact occurs, immediately remove soaked clothing and wash.

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use explosive-proof equipment.

Exposure Guidelines: See Section 2.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance And Odor: Clear liquid with alcohol odor.	Solubility In Water: Complete
Boiling Point: 82.2° C	Vapor Pressure: 33 mm Hg @ 20°C
Specific Gravity: 0.786	Melting Point: Not applicable
Evaporation Rate: 7.7 (ethyl ether)	Freezing Point: -88.8° C
Ph: Not applicable	Vapor Density: 2.07 (air=1)
	Percent Volatile: 100
	Molecular Weight: 60.1
	Pounds Per Gallon: 6.57

Other Properties: V.O.C. is 786.0g/L or 100%, or 6.57 lb/gal.

## 10. STABILITY AND REACTIVITY

Stability: Stable

Conditions To Avoid: Keep away from extreme heat, open flame, and strong oxidizing conditions.

Incompatibility: acids, aldehydes, alkalis, amines, chlorinated hydrocarbons, ethylene oxide, halogens, isocyanates, strong acids, strong oxidizing agents.

Hazardous Decomposition Or By Products: Carbon dioxide and carbon monoxide.

Hazardous Polymerization: Will Not Occur

## 11. TOXICOLOGICAL INFORMATION

## 12. ECOLOGICAL INFORMATION

## 13. DISPOSAL CONSIDERATIONS

Discharge, treatment or disposal may be subject to Federal, State (provincial in Canada) or local laws. Incinerate in a 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.

## 14. TRANSPORT INFORMATION

DOT Shipping Name: ISOPROPANOL

Hazard Class: 3

UN No.: 1219

Packing Group: II

Guide No: 129

## 15. REGULATORY INFORMATION

TSCA: All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SARA TITLE III:

CALIF. PROP. 65: NONE

CARCINOGENICITY: NONE OF THE COMPONENTS IN THIS CHEMICAL IS LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

### SCAQMD Rule 443.1

Photochemically Reactive: No

Maximum Grams of VOC per Liter: 786 gm/L

Vapor Pressure: 33 mm Hg@ 20°C

## 16. OTHER INFORMATION (HMIS)

Health: 1

Flammability: 3

Reactivity: 0

Protective: B

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for the injuries from the use of the product described herein.