

Section 1 Chemical Product and Company Identification

Product Identifier	Isopropyl Alcohol
Product Number	IS-PRO1049
General Use	Used to clean counters and dies
Company Address	UEI Systems®, a UEI Group Company 9090 Nieman Road Overland Park, KS 66214 USA
Phone	+1 800 221 9059 or +1 913 541 0503
Emergency Contact Number	CHEMTREC – Available 24 hours/day, 7 days/week Domestic North America: +1 800 424 9300 International: +1 703 527 3887

Section 2 Hazards Identification

GHS Classification

Hazard Class	Hazard Category	Route of Exposure
Flammable Liquids	2	–
Skin Irritation	3	–
Eye Irritation	2A	–
Specific to Target Organ Toxicity (Single Exposure)	3	–

GHS Labeling Contains

Isopropyl Alcohol (67-63-0) Water (7732-18-5)



Danger

Hazard Statements Highly flammable liquid and vapor
Causes serious eye irritation
May cause drowsiness or dizziness

Precautionary Statements Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/ equipment.
Use only non-sparking tools
Take precautionary measures against static discharge
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash skin thoroughly after handling
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection

Section 2 Hazards Identification, continued

- Response** **If on skin (or hair):** Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Call a **Poison Center** or doctor/ physician if you feel unwell.
 If eye irritation persists: Get medical advice/attention.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- Storage** Store in a well-ventilated place. Keep cool.
 Keep container tightly closed.
 Store locked up
- Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 Hazardous Ingredients / Identity Information

Hazardous Components	CAS No.	%
Isopropyl Alcohol	67-63-0	70
Water	7732-18-5	30

Section 4 First Aid Measures

- In all cases, call a physician immediately.**
- Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes
- Inhalation** Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
- Skin Contact** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap.
- Ingestion** **Do not induce vomiting!** Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water.

Section 5 Firefighting Measures

- Extinguishing Media** Flammable in the presence of a source of ignition when the temperature is above the flash point. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool containers with water.
- Firefighting Equipment/Instructions** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
- Specific Hazards Arising from the Chemical** Emits toxic fumes (carbon oxides) under fire conditions. (See also Stability and Reactivity section).

Section 6 Accidental Release Measures

- Personal Precautions** Wear chemical safety glasses or goggles.
- Environmental Precautions** Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements
- Methods for Cleaning Up** Neutralize spill. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

Section 7 Handling and Storage

- Handling Precautions** See Section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.
- Storage Requirements** Store in cool, dry well ventilated area. Keep away from incompatible materials (see Section 10 for incompatibilities).

Section 8 Component Exposure Limits

Occupational Exposure Controls

Component	Exposure Limit	Basis	Entity
Isopropyl Alcohol	200 ppm 492 mg/m ³	TLV	ACGIH
	400 ppm 984 mg/m ³	STEL	ACGIH
	400 ppm 980 mg/m ³	PEL	OSHA
	400 ppm 980 mg/m ³	REL	NIOSH
	500 ppm 1225 mg/m ³	STEL	NIOSH

- Eye Protection** Wear chemical safety glasses or goggles
- Inhalation** Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
- Skin Protection** Wear nitrile or rubber gloves, apron or lab coat
- Other Recommendations** Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

Section 9 Physical and Chemical Properties

Appearance/Odor	Clear, colorless liquid/Alcohol-like	Odor Threshold	Highest known value 22 ppm
pH	Neutral	Boiling Point	180.5° F (82.5° C)
Melting Point	-127.3° F (-88.5° C)	Solubility (H₂O)	Easily soluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone
Flammability Class	Flammable	Density	0.84 (water = 1)
Specific Gravity	Solid material	Decomposition Temperature	No data available
Evaporation Rate	No data available	Lower Flammability Limit	2%
Auto Ignition	750° F (399° C)	Upper Flammability Limit	12.7%
Flash Point	Closed cup: 64.9° F (18.3° C)	Vapor Pressure	No data available
Vapor Density	No data available		

Section 10 Chemical Stability and Reactivity

Stability	Stable
Possible Hazardous Reactions	Will not occur
Conditions to Avoid	Heat, flames and sparks; extremes of temperature and direct sunlight
Incompatibility	Aluminum, acids, oxidizing agents, halogenated compounds, acid anhydrides
Hazardous Decomposition/ By-Products	Carbon oxides

Section 11 Toxicological Information

Acute Toxicity	
Skin LD50	18,286 mg/kg (rabbit)
Eyes	No data available
Respiratory	No data available
Ingestion LD50	5,143 mg/kg (mouse)
Carcinogenicity	
IARC	3-Group 3: Not classifiable as to its carcinogenicity to humans (Isopropyl Alcohol)
ACGIH	A4: Not classifiable as a human carcinogen (Isopropyl Alcohol)
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Signs and Symptoms of Exposure	
Skin	Irritation, redness, itchiness
Eyes	Irritation, redness, watering eyes, itchiness
Respiratory	Irritation, coughing, wheezing, dizziness, drowsiness
Ingestion	Irritation, nausea, vomiting, diarrhea, dizziness, drowsiness
Chronic Toxicity	May cause damage to the following organs: kidneys, liver, skin, central nervous system.
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Classified Reproductive system/toxin/female. Development toxin.
Respiratory/Skin Sensitization	Not Available

Section 12 Ecological Information

Ecotoxicity

Component	Species	Exposure Time	LC50/EC50/IC50
Isopropyl Alcohol (67-63-0)	<i>Pimephales promelas</i> (fathead minnow)	96 hrs	LC50 9,640 mg/l
	<i>Daphnia Magna</i> (water flea)	24 hrs	EC50 5,102 mg/l
	<i>Daphnia Magna</i> (water flea)	24 hrs	(I)EC50 6,851 mg/l
	<i>Desmodesmus subspicatus</i> (green algae)	72 hrs	EC50 >2,000 mg/l
	(green algae)	24 hrs	EC50 1,000 mg/l

Persistence/Degradability No data available

Bioaccumulative Potential No bioaccumulation is to be expected (log Pow <= 4)

Mobility in Soil No data available

Results of PBT and vPvB Assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Section 13 Disposal Considerations

Disposal Instructions Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste.

Section 14 Transportation Information

DOT (US)		IMDG		IATA	
UN number	1219	UN number	1219	UN number	1219
Class	3	Class	3	Class	3
Packing group	II	Packing group	II	Packing group	II
Proper shipping name		EMS-No	F-E, S-D	Proper shipping name	
Isopropanol		Proper shipping name		Isopropanol	
Reportable Quantity (RQ)	-	Isopropanol			
Poison Inhalation Hazard	No				

Section 15 Regulatory Information

SARA 302 Components 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:

Component	CAS-No	Revision Date
2-Propanol	67-63-07	1987-01-01

SARA 311/312 Hazards Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Right To Know Components	CAS-No	Revision Date
Massachusetts 2-Propanol	67-63-07	1987-01-01
Pennsylvania 2-Propanol	67-63-07	1987-01-01
New Jersey 2-Propanol	67-63-07	1987-01-01

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16

Other Information

UEI Systems® provides the information contained herein in good faith. It is believed to be correct. However it is not all-inclusive and should be used only as a guide. Individuals receiving this information must exercise their independent judgement in determining its appropriateness for a particular purpose. UEI Systems shall not be held liable for any damage resulting from handling or from contact with this product. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources.

Abbreviations PEL Permissible Exposure Limit
TLV Threshold Limit Value

- End Notes**
1. SARA - Signed into law in 1986, the Superfund Amendments and Reauthorization Act (SARA) is an extension of CERCLA, and is intended to encourage and support local and state emergency planning efforts. SARA provides citizens and local governments with information about potential chemical hazards, and calls for facilities that store hazardous materials to provide officials and citizens with data on the type and amount on hand at specific locations. This field states whether a material is listed or not listed in section 372.65 of SARA. EHS - This states if a material is listed or not listed in Appendix B to part 355, the SARA Extremely Hazardous Substances (EHS) section. RQ is the reportable quantity. TPQ is the Threshold Planning Quantity.
 2. RCRA - The Resource Conservation and Recovery Act enacted in 1976 and subsequently amended, controls solid-waste disposal and encourages recycling. This states whether a material is listed or not listed under this regulation. If listed the Hazardous Waste Number and waste characterization assigned by RCRA is also provided.
 3. CERCLA - Enacted in 1980 and amended thereafter, the Comprehensive Environmental Response, Compensation, and Liability Act provides for identification and cleanup of hazardous materials released on land, into the air, waterways, and groundwater. It covers areas affected by newly released materials and older leaking or abandoned dump sites. This states whether a material is listed or not listed in CERCLA Table 302.4. If listed the section(s) that it is listed under and the Reportable Quantity (RQ) are also provided.
 4. TSCA - The Toxic Substances Control Act controls the exposure to and use of raw industrial chemicals not subject to other laws. This states whether the chemical is listed or not listed under this regulation.

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