

# Material Safety Data Sheet

## Isopropyl Alcohol, 50

### Section 1 - Chemical Product and Company Identification

**MSDS Name:**

Isopropyl Alcohol, 50

**Synonyms:**

Isopropanol, 2-propanol, sec-propanol

**Company Identification:**

Multi-Tech Products Corporation  
41519 CherryStreet  
Murrieta, CA 92562

**Company Phone Number:**

(951) 834-9066

**Emergency Phone Number:**

(951) 834-9066

**CHEMTREC Phone Number:**

(800) 424-9300

### Section 2 – Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
67-63-0	Isopropyl alcohol	50

### Section 3 - Hazards Identification

#### Emergency Overview

**Appearance:** *Clear, colorless solution*

**Danger!** Flammable liquid. May form explosive peroxides. May cause respiratory and digestive tract irritation. Causes eye irritation. May cause skin irritation. May cause central nervous system depression.

**Target Organs:** *Eyes, skin, respiratory system, central nervous system*

#### Potential Health Effects

**Eye:**

Causes irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.

**Skin:**

May cause irritation with pain and stinging, especially if the skin is abraded. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. In rare cases, exposure has caused skin sensitization.

# Material Safety Data Sheet

## Isopropyl Alcohol, 50

### **Ingestion:**

May cause 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 headache, dizziness, unconsciousness and coma. Inhalation of vapor may cause respiratory tract irritation.

### **Chronic:**

Prolonged or repeated skin contact may cause defatting and dermatitis. May cause allergic skin reaction in some individuals.

## Section 4 - First Aid Measures

### **Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

### **Skin:**

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

### **Ingestion:**

Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

### **Inhalation:**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid at once.

### **Notes to Physician:**

Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

### **General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. This chemical poses an explosion hazard. Flammable liquid. May form explosive peroxides. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

### **Extinguishing Media:**

Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.

### **Autoignition Temperature:**

810°F (432°C)

### **Flash Point:**

78°F

# Material Safety Data Sheet

## Isopropyl Alcohol, 50

### NFPA Rating:

CAS# 7732-18-5: Health-0, Flammability-0, Instability-0

CAS# 67-63-0: Health-1, Flammability-3, Instability-0

### Explosion Limits:

Lower: 2.5%

Upper: 12.1%

## Section 6 - Accidental Release Measures

### General Information:

Use proper personal protective equipment as indicated in Section 8.

### Spills/Leaks:

Remove all sources of ignition. Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal.

## Section 7 - Handling and Storage

### Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

### Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 - Exposure Controls, Personal Protection

### Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations below the permissible exposure limits.

### Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	none listed	none listed	none listed
Isopropyl alcohol	200 ppm TWA; 400 ppm STEL	400 ppm TWA; 980 mg/m <sup>3</sup> TWA; 2000 ppm IDLH	400 ppm TWA; 980 mg/m <sup>3</sup> TWA

### OSHA Vacated PELs:

Isopropyl alcohol: 400 ppm TWA, 980 mg/m<sup>3</sup> 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.

# Material Safety Data Sheet

## Isopropyl Alcohol, 50

**Skin:**

Wear appropriate gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

<b>Physical State:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Solvent odor
<b>pH:</b>	No information found.
<b>Vapor Pressure:</b>	33 mm Hg @ 20°C
<b>Vapor Density:</b>	2.1 (air=1)
<b>Evaporation Rate:</b>	2.3 (n-butyl acetate=1)
<b>Viscosity:</b>	2.1 cP at 77°F
<b>Boiling Point:</b>	82°C (180°F)
<b>Freezing/Melting Point:</b>	-90°C (-130°F)
<b>Decomposition Temperature:</b>	No information found.
<b>Solubility in water:</b>	Miscible
<b>Specific Gravity/Density:</b>	0.78 – 0.92
<b>Molecular Formula:</b>	C <sub>3</sub> H <sub>8</sub> O
<b>Molecular Weight:</b>	60.0554

### Section 10 - Stability and Reactivity

**Chemical Stability:**

Under normal storage conditions, peroxidizable compounds can form and accumulate peroxides, which may explode when subjected to heat or shock.

**Conditions to Avoid:**

Incompatible materials, light, ignition sources.

**Incompatibilities with Other Materials:**

Strong oxidizers, strong acids, strong bases, amines, ammonia, chlorine, rubber, aluminum.

**Hazardous Decomposition Products:**

Carbon monoxide, carbon dioxide.

**Hazardous Polymerization:**

Has not been reported.

### Section 11 - Toxicological Information

**RTECS:**

CAS# 7732-18-5: ZC0110000.

CAS# 67-63-0: NT8050000.

# Material Safety Data Sheet

## Isopropyl Alcohol, 50

### LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 67-63-0:

Oral, mouse: LD50 = 3600 mg/kg

Oral, rabbit: LD50 = 6410 mg/kg

Oral, rat: LD50 = 5000 mg/kg

Skin, rabbit: LD50 = 12800 mg/kg,

Inhalation, rat: LC50 = 16000 ppm/8H.

### Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 67-63-0: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

### Epidemiology:

No information found

### Teratogenicity:

Studies have found no teratogenic effects in rats or rabbits.

### Reproductive:

See actual entry in RTECS for complete information.

### Mutagenicity:

See actual entry in RTECS for complete information.

### Neurotoxicity:

In rats exposed to concentrations of 1500 ppm or more, neurotoxicity was minimal, and the animals recovered within five hours.

## Section 12 - Ecological Information

### Ecotoxicity:

Acute aquatic effects: Fathead minnow: LC50 = 1000 mg/L/96 Hr. Golden orfe: LC50 = 8970 mg/L/48 Hr. Goldfish: LC50 = GT5000 mg/L/24 Hr.

### Environmental:

This chemical has a low potential to affect aquatic organisms, secondary waste treatment microorganisms, and the germination and growth of some plants. It is readily biodegradable and is not expected to persist in an aquatic environment. It is not likely to bioconcentrate.

## Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

## Section 14 - Transport Information

### US DOT

**Shipping Name:** Isopropanol

**Hazard Class:** 3

**UN Number:** UN1263 PAINT RELATED

**Packing Group:** PG III

# Material Safety Data Sheet

## Isopropyl Alcohol, 50

### Section 15 - Regulatory Information

#### US Federal

##### TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 67-63-0 is listed on the TSCA Inventory.

##### SARA Reportable Quantities (RQ):

None of the components are on this list.

##### CERCLA/SARA Section 313:

This material contains Isopropyl alcohol (CAS# 67-63-0, 50-100%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

##### OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### US State

##### State Right to Know:

Isopropyl alcohol can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

##### California Regulations:

None.

#### European/International Regulations

##### Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 67-63-0 is listed on Canada's DSL List.

##### Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 67-63-0 is listed on Canada's Ingredient Disclosure List.

### Section 16 - Other Information

Revision Date: January 1, 2011

*Information in this MSDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and Multi-Tech Products Corp. assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application.*