An ISO9001 Certified Company

Material Safety Data Sheet
Isopropyl Alcohol, 50-100% v/v

Section 1 - Chemical Product and Company Identification

MSDS Name:
Isopropyl Alcohol, 50-100% v/v
Catalog Numbers:
LC15750, LC15755, LC15760
Synonyms:
Isopropanol, 2-propanol, sec-propanol
Company Identification:
LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238
Company Phone Number:
(412) 826-5230
Emergency Phone Number:
(800) 424-9300
CHEMTREC Phone Number:
(800) 424-9300 or
011-703-527-3887

Section 2 – Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>balance</td>
</tr>
<tr>
<td>67-63-0</td>
<td>Isopropyl alcohol</td>
<td>50-100</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless solution

Danger! Highly flammable liquid and vapor. May form explosive peroxides. May cause respiratory irritation. Causes skin and eye irritation. May cause drowsiness and dizziness. May be fatal if swallowed and enters airways.

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

Potential Health Effects

Eye:
Causes eye irritation.

Skin:
Causes skin irritation.

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. Aspiration hazard.

**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.

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**Section 4 - First Aid Measures**

**Eyes:**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Skin:**
Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical attention. Wash contaminated clothing before reuse.

**Ingestion:**
Immediately call a poison center/doctor. Do NOT induce vomiting.

**Inhalation:**
Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

**Notes to Physician:**
Treat symptomatically and supportively.

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**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. 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:**
53°F (11.7°C) - for LC15750, 65°F (18°C) - for LC15755

**NFPA Rating:**
Health-1, Flammability-3, Instability-0

**Explosion Limits:**
Lower: 2.5%  Upper: 12.1%
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Section 6 - Accidental Release Measures

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Remove all sources of ignition. Use only non-sparking tools. Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in suitable containers labeled 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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>200 ppm TWA; 400 ppm STEL</td>
<td>400 ppm TWA; 980 mg/m3 TWA; 2000 ppm IDLH</td>
<td>400 ppm TWA; 980 mg/m3 TWA</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:**
Isopropyl alcohol: 400 ppm TWA, 980 mg/m3 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.

**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

- Physical State: Liquid
- Color: Colorless
- Odor: Solvent odor
- pH: No information found.
- Vapor Pressure: 33 mm Hg @ 20°C
- Vapor Density: 2.1 (air=1)
- Evaporation Rate: 2.3 (n-butyl acetate=1)
- Viscosity: 2.1 cP at 77°F
- Boiling Point: 82°C (180°F)
- Freezing/Melting Point: -90°C (-130°F)
- Decomposition Temperature: No information found.
- Solubility in water: Miscible
- Specific Gravity/Density: 0.78 – 0.92
- Molecular Formula: C₃H₈O
- Molecular Weight: 60.0554

Section 10 - Stability and Reactivity

- Chemical Stability: Stable under normal temperatures and pressures.
- 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

LD₅₀/LC₅₀:
- CAS# 7732-18-5:
  - Oral, rat: LD₅₀ = >90 mL/kg
- CAS# 67-63-0:
  - Oral, mouse: LD₅₀ = 3600 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.
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**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:** UN1219
- **Packing Group:** PG II

### 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.
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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

MSDS Creation Date: October 28, 1997
Revision Date: October 11, 2012

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