



## Material Safety Data Sheet Potassium hydroxide solutions in IPA

### Section 1 - Chemical Product and Company Identification

**MSDS Name:**

Potassium hydroxide solutions in IPA

**Catalog Numbers:**

LC19530, LC19550

**Synonyms:**

None

**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

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
67-63-0	Isopropyl alcohol	balance
1310-58-3	Potassium hydroxide	0.56 - 2.8

### Section 3 - Hazards Identification

#### Emergency Overview

**Appearance:** Clear, colorless solution

**Warning!** Flammable liquid. Keep away from heat, sparks, and flame. May cause irritation with possible injury by all exposure routes. May cause CNS depression.

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

#### Potential Health Effects

**Eye:**

Irritation, lacyramation, possible burns with permanent corneal damage.

**Skin:**

May cause redness, pain, and irritation. Narcosis with nausea, vomiting, hypotension, and inhalation symptoms.

**Ingestion:**

Preceding symptoms plus abdominal pain, uremia, diuresis, oliguria and coma. Death may occur from respiratory paralysis. Severe pain to mouth, throat, abdomen with vomiting, diarrhea, hematemesis, anorexia, dizziness, collapse, coma and death. Survivors may experience perforation (gastric, esophageal), severe pain, rigidity and hypotension; penetrating burns may continue for



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several days.

#### **Inhalation:**

Dizziness, incoordination, headache, stupor, nausea, hematemesis, hypotension, anemia, narcosis, areflexia, depressed respiration, leading to coma in severe cases. Coughing, sore throat, dyspnea, pulmonary edema.

#### **Chronic:**

Prolonged inhalation may cause bronchial irritation, coughing, and bronchial pneumonia. Conjunctivitis and corneal erosion can occur from eye exposure. May cause dermatitis.

## Section 4 - First Aid Measures

#### **Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once. Cover burns with loose sterile non-medicated bandages.

#### **Skin:**

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Cover burns with a dry sterile bandage (secure, not tight).

#### **Ingestion:**

Get medical aid at once. Do not induce vomiting. If vomiting occurs, keep head lower than hips to prevent aspiration into lungs. Give conscious non-convulsive victim large quantities of water to dilute the alkali.

#### **Inhalation:**

Give artificial respiration if necessary. Get medical aid. Move victim to fresh air. Keep victim warm, at rest.

#### **Notes to Physician:**

Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

#### **General Information:**

Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Vapors heavier than air, may travel considerable distance and flash back from source of ignition. Avoid vapors. Move container if possible, avoid breathing vapors or dust. Dangerous fire/negligible explosion hazard when exposed to heat or flame. Vapor-air mixtures explosive above flash point.

#### **Extinguishing Media:**

For small fires, use dry chemical, carbon dioxide, water spray or regular foam.

#### **Autoignition Temperature:**

No information found.

#### **Flash Point:**

No information found.

#### **NFPA Rating:**

CAS# 67-63-0: health-1; flammability-3; instability-0

CAS# 1310-58-3: health-3; flammability-0; instability-1

#### **Explosion Limits:**

Lower: not available      Upper: not available



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### Section 6 - Accidental Release Measures

**General Information:**

Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Shut off ignition source; avoid vapors. Isolate and ventilate spill area. Absorb with inert material (sand, diatomaceous earth), scoop into non-metallic container, and label "Corrosive" for later disposal. Label reclaimed spill material as flammable. Area may be washed down with flooding amounts of water - do not allow vapors to accumulate in drains, sewers, low level enclosures or wells.

### Section 7 - Handling and Storage

**Handling:**

Ground and bond containers when transferring material.

**Storage:**

Protect from heat and incompatibles. Store capped as a flammable liquid in safety cabinet or vault that is ventilated.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**

Provide local exhaust or general dilution ventilation.

**Exposure Limits:**

Chemical Name:	ACGIH	NIOSH	OSHA
Isopropyl alcohol	200 ppm TWA 400ppm STEL	400 ppm TWA 2000 ppm IDLH	400 ppm TWA 980 mg/m3 TWA
Potassium hydroxide	None of the components are on this list.	2 mg/m3 TWA	None of the components are on this list.

**OSHA Vacated PELs:**

Isopropyl alcohol: 400 ppm TWA; 980 mg/m3 TWA

Potassium hydroxide: None

**Personal Protective Equipment****Eyes:**

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

**Skin:**

Wear appropriate protective gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**

Follow OSHA's respiratory protection program in 29 CFR 1910.134 or European Standard EN 149 whenever exposure limits are exceeded or if irritation or other symptoms are experienced.



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### Section 9 - Physical and Chemical Properties

<b>Physical State:</b>	Clear liquid- may develop turbidity on standing
<b>Color:</b>	Colorless
<b>Odor:</b>	Acetone/ethanol odor
<b>pH:</b>	Alkaline
<b>Vapor Pressure:</b>	No information found.
<b>Vapor Density:</b>	No information found.
<b>Evaporation Rate:</b>	No information found.
<b>Viscosity:</b>	No information found.
<b>Boiling Point:</b>	No information found.
<b>Freezing/Melting Point:</b>	No information found.
<b>Decomposition Temperature:</b>	No information found.
<b>Solubility in water:</b>	Miscible
<b>Specific Gravity/Density:</b>	0.9 - 1.0
<b>Molecular Formula:</b>	No information found.
<b>Molecular Weight:</b>	No information found.

### Section 10 - Stability and Reactivity

**Chemical Stability:**

Stable under normal temperatures and pressures.

**Conditions to Avoid:**

Incompatible materials, excess heat, sources of ignition, exposure to air.

**Incompatibilities with Other Materials:**

Acids, oxidizing agents, phosgene, nitroform, trinitromethane, 2-butanone, hydrogen peroxides, oxygen, oleum, metal alkyls.

**Hazardous Decomposition Products:**

Oxides of carbon, oxides of potassium.

**Hazardous Polymerization:**

Has not been reported

### Section 11 - Toxicological Information

**RTECS:**

CAS# 67-63-0: NT8050000.

CAS# 1310-58-3: TT2100000.

**LD50/LC50:**

CAS# 67-63-0:

Oral, mouse: LD50 = 3600 mg/kg

Oral, rabbit: LD50 = 6410 mg/kg

Oral, rat: LD50 = 5045 mg/kg

Skin, rabbit: LD50 = 12800 mg/kg.

CAS# 1310-58-3:

Oral, rat: LD50 = 273 mg/kg.



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### **Carcinogenicity:**

CAS# 67-63-0:

ACGIH: Not listed.

California: Not listed.

NIOSH: Not listed.

NTP: Not listed.

OSHA: Not listed.

IARC: Group 3 (Not classifiable)

CAS# 1310-58-3: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

### **Epidemiology:**

Potassium hydroxide-- severe eye, skin, mucous membrane irritant; corrosive to eye, skin, mucous membrane, respiratory tract.

Carcinogenicity: isopropanol-- none classified by OSHA, IARC, NTP. Isopropanol manufactured by the strong acid process is listed in group 1 by IARC. Workers manufacturing isopropanol by this process showed increased sinus and laryngeal cancer.

### **Teratogenicity:**

### **Reproductive:**

### **Mutagenicity:**

See entry in RTECS for more information.

### **Neurotoxicity:**

## Section 12 - Ecological Information

No information found.

## Section 13 - Disposal Considerations

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

## Section 14 - Transport Information

### **US DOT**

**Shipping Name:** LC19550  
Flammable liquid, n.o.s.  
(Isopropanol)  
**Hazard Class:** 3  
**UN Number:** UN1993  
**Packing Group:** PG II

**LC19530**  
Flammable liquid, corrosive, n.o.s.  
(Isopropanol, potassium hydroxide)  
3 (8)  
UN2924  
PG II



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### Section 15 - Regulatory Information

#### US Federal

##### TSCA:

CAS# 67-63-0 is listed on the TSCA Inventory.  
CAS# 1310-58-3 is listed on the TSCA Inventory.

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

CAS# 1310-58-3: final RQ = 1000 pounds (454 kg)

##### CERCLA/SARA Section 313:

This material contains Isopropyl alcohol (CAS# 67-63-0, >97%), 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 components are on this list.

#### 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.

Potassium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Florida,

Pennsylvania, Minnesota, Massachusetts.

##### California Regulations:

#### European/International Regulations

##### Canadian DSL/NDSL:

CAS# 67-63-0 is listed on Canada's DSL List.  
CAS# 1310-58-3 is listed on Canada's DSL List.

##### Canada Ingredient Disclosure List:

CAS# 67-63-0 is listed on Canada's Ingredient Disclosure List.  
CAS# 1310-58-3 is listed on Canada's Ingredient Disclosure List.

### Section 16 - Other Information

MSDS Creation Date: November 29, 1998

Revision Date: October 2, 2009

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