



Print Date: 10/05/2004

Material Safety Data Sheet

Potassium hydroxide solutions, 10% - 55% W/V, 0.1N - 1.0N

Section 1 - Chemical Product and Company Identification

MSDS Name:

Potassium hydroxide solutions, 10% - 55% W/V, 0.1N - 1.0N

Catalog Numbers:

LC19200, LC19220, LC19240, LC19250, LC19260, LC19270, LC19300, LC19320, LC19350

Synonyms:

Company Identification:

LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(412) 826-5230

CHEMTREC Phone Number:

800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
1310-58-3	Potassium hydroxide	1-55

10%
20%
30%
45%
50%

30%

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless

Danger! Corrosive. Causes eye and skin burns. Causes digestive and respiratory tract burns.

Target Organs: None.

Potential Health Effects

Eye:

Causes severe eye burns. May cause irreversible eye injury. Contact may cause ulceration of the conjunctiva and cornea. Eye damage may be delayed. Causes redness, pain, and irritation.

Skin:

May cause deep, penetrating ulcers of the skin. Causes severe burns with delayed tissue destruction.



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Ingestion:

May cause circulatory system failure. May cause perforation of the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death.

Inhalation:

Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Palpitation, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema may result from inhalation exposure.

Chronic:

Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis.

Section 4 - First Aid Measures

Eyes:

Get medical aid at once. Immediately flush eyes with water lifting upper/lower lids occasionally until chemical is gone (15-20min.)

Skin:

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

Ingestion:

Do NOT induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once. Medical personnel may do esophagoscopy, irrigate injured area with 1% acetic acid to neutralize alkali.

Inhalation:

Get medical aid at once. Move victim to fresh air immediately. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Use water with caution and in flooding amounts. Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials.

Extinguishing Media:

Use extinguishing media most appropriate for the surrounding fire. DO NOT USE WATER!

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 7732-18-5: Not published.

CAS# 1310-58-3: Not published.



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Explosion Limits:

Lower: Upper:

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

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. Use with adequate ventilation. Do not allow water to get into the container because of violent reaction. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Store in a cool, dry area. Store in a tightly closed container. Keep away from strong acids. Keep away from water. Keep away from metals.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Potassium hydroxide	None of the components are on this list.	2 mg/m ³ TWA	None of the components are on this list.

OSHA Vacated PELs

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.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.



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Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: clear, colorless
Odor: No information found.
pH: No information found.
Vapor Pressure: No information found.
Vapor Density: No information found.
Evaporation Rate: No information found.
Viscosity: No information found.
Boiling Point: > 212°F (> 100.00°C)
Freezing/Melting Point: < 32°F (< 0.00°C)
Decomposition Temperature: No information found.
Solubility in water: Soluble.
Specific Gravity/Density: >1
Molecular Formula: KOH
Molecular Weight: 56.10

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials

Acids - organic materials - acrolein - nitro compounds - halogens - acid anhydrides - phosphorus - potassium - metals.

Hazardous Decomposition Products

Hydrogen gas, oxides of potassium.

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.
CAS# 1310-58-3: TT2100000.

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 1310-58-3:
Oral, rat: LD50 = 273 mg/kg.



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Carcinogenicity:

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

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

Epidemiology:**Teratogenicity:****Reproductive:****Mutagenicity****Neurotoxicity**

Section 12 - Ecological Information

Ecotoxicity:

cfr. DOSE

Environmental:

No information found.

Physical:

No information found.

Other:

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: POTASSIUM
HYDROXIDE
SOLUTION

Hazard Class: 8

UN Number: UN1814

Packing Group: PG II

Section 15 - Regulatory Information

US Federal

TSCA

CAS# 7732-18-5 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)