Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.08.2015

Potassium Hydroxide, 0.10 N in Isopropanol

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Potassium Hydroxide, 0.10 N in Isopropanol

Manufacturer/Supplier Article number: PH9279SS

Recommended uses of the product and restrictions on use: Laboratory Chemicals

Manufacturer Details:

AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331
1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour)
+1(800)255-3924
+1(813)248-0585 (International)

SECTION 2: Hazards identification

Classification of the substance or mixture:

Flammable
Flammable liquids, category 2

Irritant
Eye irritation, category 2A
Specific target organ toxicity following single exposure, category 3

Corrosive
Skin corrosion, category 1A

Flammable liq. 2.
Stot SE. 3.
Skin corr. 1A.
Eye Irrit. 2A.

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapour.
May cause drowsiness or dizziness.
Causes severe skin burns and eye damage.

Precautionary statements:

If medical advice is needed have product container or label at hand.
Keep out of reach of children.
Read label before use.
Keep container tightly closed.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash skin thoroughly after handling.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/light/…/equipment.

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Use only non-sparking tools.
Take precautionary measures against static discharge.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing dust/fume/gas/mist/vapors/spray.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Immediately call a POISON CENTER or doctor/physician.
Specific treatment (see supplemental first aid instructions on this label).
In case of fire, use agents recommended in section 5 for extinction.
IF IN 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 advice/attention.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Call a POISON CENTER or doctor/physician if you feel unwell.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Wash contaminated clothing before reuse.
Store in a well ventilated place. Keep container tightly closed.
Store in a well ventilated place. Keep cool.
Store locked up.
Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:		
CAS 67-63-0	Isopropanol	>99.19 %
CAS 1310-58-3	Potassium Hydroxide	<0.81 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists.

After skin contact:

Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

After swallowing:

Induce vomiting. Dilute mouth with water or milk after rinsing. Immediately get medical assistance.

Most important symptoms and effects, both acute and delayed:

Shortness of breath. Irritation. Nausea. Headache. Drowsiness or Dizziness. Vomitting. Central nervous system

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depression, prolonged or repeated exposure can cause. Overexposure may cause mild, reversible liver effects. Aspiration may lead to: Lung edema, Pneumonia. Kidney - Irregularities - Based on Human Evidence.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Water spray can be used to dilute spills to nonflammable mixtures.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture: None

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not inhale gases, fumes, dust, mist, vapor, and aerosols.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Keep away from ignition sources. Protect from heat. Ensure that dust-handling systems (exhaust ducts, dust collectors, vessels, and processing equipment) are designed to prevent the escape of dust into the work area.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Should not be released into environment.

Methods and material for containment and cleaning up:

Use spark-proof tools and explosion-proof equipment. Have fire extinguishing agent available in case of fire. Always obey local regulations. Refer to Section 13. Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. Remove all sources of ignition. Contain spill then collect. Do not flush to sewer. Absorb with a noncombustible absorbent material such as sand or earth and containerize for disposal. Ventilate area of spill.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke, or use personal products when handling chemical substances. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Empty containers retain product residue and can be dangerous.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Store securely in flammable storage area away from sources of ignition. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Keep container tightly closed. Protect from freezing and physical damage. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection

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Control parameters: 67-63-0, Isopropanol, ACGIH: 400 ppm STEL; 200 ppm TWA.
67-63-0, Isopropanol , NIOSH: 500 ppm STEL; 1225 mg/m³ STEL.
67-63-0, Isopropanol , NIOSH: 400 ppm TWA; 980 mg/m³ TWA.
1310-58-3, Potassium hydroxide, C 2 mg/m³ USA. ACGIH (TLV).
1310-58-3, Potassium hydroxide, C 2 mg/m3 USA. NIOSH.
1310-58-3, Potassium hydroxide, C 2 mg/m³ USA. OSHA.

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present.

Protection of skin: Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Perform routine housekeeping. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear hazy colorless liquid	**Explosion limit lower**: **Explosion limit upper**:	2% 12.7%
Odor:	Alkaline	**Vapor pressure at 20°C**:	Approx. 33 at 20°C
Odor threshold:	Not available	**Vapor density**:	Not available
pH-value:	Not available	**Relative density**:	Not available
Melting/Freezing point:	Approx -88°C	**Solubilities**:	Infinite solubility.
Boiling point/Boiling range:	Approx. 82°C	**Partition coefficient (n-octanol/water)**:	Not available
Flash point (closed cup):	Appox 12.0°C	**Auto/Self-ignition temperature**:	Approx 425.0°C
Evaporation rate:	3.0	**Decomposition temperature**:	Not available
Flammability (solid, gaseous):	Flammable	**Viscosity**:	a. Kinematic: Not available b. Dynamic: Not available
Density at 20°C:	Not available		

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

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Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials. Heat, flames, and sparks.

Incompatible materials:

Strong oxidizing agents, heat, sparks, open flame. Will attack some forms of rubber, plastics, and coatings. May generate hydrogen gas with reaction of metallic aluminum.

Hazardous decomposition products:

Acrid and irritating fumes, toxic oxides of carbon, decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LD50 Dermal - Rabbit - 12,800 mg/kg 67-63-0.

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

Skin - Rabbit Result : Mild skin irritation 67-63-0.

Skin - Rabbit Result : Severe skin irritation - 24 h 1310-58-3.

Serious eye damage/irritation:

Eyes - Rabbit Result: Eye irritation - 24 h 67-63-0.

Eyes - Rabbit Result: Corrosive to eyes 1310-58-3.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity:

Inhalation, Oral - May cause drowsiness or dizziness.

Reproductive Toxicity: No additional information.

STOT-single and repeated exposure:

67-63-0: Inhalation, Oral - May cause drowsiness or dizziness.

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity:

67-63-0 , LC50 - Pimephales promelas (fathead minnow) - 9,640.00 mg/l - 96 h.
67-63-0, EC50 - Daphnia magna (Water flea) - 5,102.00 mg/l - 24 h.
67-63-0, Immobilization EC50 - Daphnia magna (Water flea) - 6,851 mg/l - 24 h.
67-63-0, EC50 - Desmodesmus subspicatus (green algae) - > 2,000.00 mg/l - 72 h.
67-63-0, EC50 - Algae - > 1,000.00 mg/l - 24 h.
1310-58-3, Toxicity to fish LC50 - Gambusia affinis (Mosquito fish) - 80 mg/l - 96 h.

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Persistence and degradability: No additional information.

Bioaccumulative potential: No additional information.

Mobility in soil:

Aqueous solution has high mobility in soil.

Other adverse effects:

Isopropanol has acute toxicity with effects of death in animals and low growth rates and death in plants. Chronic toxic effects, may be shortened life span, lower fertility, reproductive problems, and changes in appearance and/or behavior in animals.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Neutralize with dilute acid solutions. Have fire extinguishing agent available in case of fire. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product.

SECTION 14: Transport information

US DOT

UN Number:
ADR, ADN, DOT, IMDG, IATA 2924

Limited Quantity Exception: None

Bulk:
RQ (if applicable): None
Proper shipping Name: Flammable Liquid s, Corrosive , N . O . S ., (Isopropanol Solution).
Hazard Class: 3
Packing Group: II.
Marine Pollutant (if applicable): No additional information.
Comments: None

Non Bulk:
RQ (if applicable): None
Proper shipping Name: Flammable Liquid s, Corrosive , N . O . S ., (Isopropanol Solution).
Hazard Class: 3
Packing Group: II.
Marine Pollutant (if applicable): No additional information.
Comments: None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute,Chronic,Fire

SARA Section 313 (Specific toxic chemical listings):

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67-63-0 Isopropanol.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

1310-58-3 Potassium Hydroxide 1000 lb.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL) :

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0
HMIS: 2-0-0
GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG	International Maritime Code for Dangerous Goods.
PNEC.	Predicted No-Effect Concentration (REACH).
CFR	Code of Federal Regulations (USA)
SARA	Superfund Amendments and Reauthorization Act (USA).
RCRA.	Resource Conservation and Recovery Act (USA).
TSCA.	Toxic Substances Control Act (USA).
NPRI	National Pollutant Release Inventory (Canada).
DOT	US Department of Transportation.

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IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service (division of the American Chemical Society).
NFPA	National Fire Protection Association (USA).
HMIS	Hazardous Materials Identification System (USA).
WHMIS	Workplace Hazardous Materials Information System (Canada).
DNEL	Derived No-Effect Level (REACH).