

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.06.2015**Potassium Hydroxide,0.5N****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Potassium Hydroxide,0.5N**Manufacturer/Supplier Article number:** PH9301SS**Recommended uses of the product and restrictions on use:** Laboratory**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

Flammable Liquids Cat. 2.

Signal word: Danger**Hazard statements:**

Highly flammable liquid and vapour.

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 away from heat/sparks/open flames/hot surfaces. No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/light/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

Keep container tightly closed.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire, use agents recommended in section 5 for extinction.

Store in a well ventilated place. Keep cool.

Dispose of contents and container to an approved waste disposal plant.

Other Non-GHS Classification: None**SECTION 3: Composition/information on ingredients****Ingredients:**

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Potassium Hydroxide,0.5N		
Ingredients:		
CAS 64-17-5	Ethanol	96.13 %
CAS 1310-58-3	Potassium Hydroxide, ACS	3.87 %
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. If breathing is difficult give oxygen. Seek medical attention if cough or respiratory irritation develops.

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. Remove contact lens(es) if able to do so during rinsing. Rinse or flush exposed eye gently using water for 15-20 minutes. Consult a physician if irritation persists.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Dilute mouth with water or milk after rinsing. Immediately get medical assistance.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

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 keep containers cool.

Unsuitable extinguishing agents:

Water may be ineffective on fire.

Special hazards arising from the substance or mixture:

Flashback along vapor trail may occur. Vapors are heavier than air. Be aware of vapor accumulating in low-lying areas. Remove sources of ignition. Vapor may explode if ignited in an enclosed area.

Advice for firefighters:**Protective equipment:**

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

Additional information (precautions):

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation.

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Prevent from reaching drains, sewer or waterway.

Methods and material for containment and cleaning up:

Refer to Section 8. Wear protective eyewear, gloves, and clothing. Absorb with suitable material and place in chemical waste container. Ventilate area of spill. Dispose of empty containers as unused product. Refer to Section 13.

Reference to other sections: None**SECTION 7: Handling and storage****Precautions for safe handling:**

Wear protective eyewear, gloves, and clothing. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Refer to Section 8.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from heat and sources of ignition. Provide ventilation for containers. Keep container tightly closed. Store with like hazards.

SECTION 8: Exposure controls/personal protection**Control parameters:**64-17-5, Ethanol, ACGIH TLV: 1880 mg/m³.
64-17-5, Ethanol, OSHA PEL: 1900 mg/m³.**Appropriate engineering controls:**

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Ensure adequate ventilation to ensure the Lower Explosive Limit (LEL) and Occupational Exposure Limits (OEL) are not reached.

Respiratory protection:

Use suitable respiratory protective device when high concentrations are present. If exposure limit is exceeded, a full-face respirator with organic cartridge may be worn.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Wear protective clothing.

Eye protection:

Safety glasses with side shields or goggles.

General hygienic measures:

Wash hands before breaks and at the end of work. Perform routine housekeeping to prevent dust generation. Before re-wearing, wash contaminated clothing. 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 liquid	Explosion limit lower: Explosion limit upper:	3.3 (Ethanol) 19.0 (Ethanol)
Odor:	Alcohol	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	Not determined	Relative density:	Not determined
Melting/Freezing point:	approx -110°C	Solubilities:	Infinite.
Boiling point/Boiling range:	approx 77°C	Partition coefficient (n-octanol/water):	Not determined

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Flash point (closed cup):	Approx 55F	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Flammable	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity**Reactivity:**

Flammable vapor may form explosive mixtures with air.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None known. None under normal processing.

Conditions to avoid:

Incompatible materials. Excess heat and ignition sources. No smoking. Avoid accumulation of static charge.

Incompatible materials:

Strong oxidizers, heat, sparks, open flames, platinum, sodium, bromine pentafluoride, potassium dioxide, acetyl bromide, & acetyl chloride.

Hazardous decomposition products:

Carbon oxides (CO, CO₂). Acrid and irritating fumes.

SECTION 11: Toxicological information**Acute Toxicity:****Dermal:**

64-17-5 Ethanol LD-50 15800 mg/kg (rabbit).

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information.

Reproductive Toxicity: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information:

No additional information.

SECTION 12: Ecological information**Ecotoxicity:**

Aquatic Tox., Ethanol has a slight acute and chronic toxicity to aquatic life.

Persistence and degradability: No additional information.

Bioaccumulative potential: No additional information.

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Aqueous solution has high mobility in soil.

Other adverse effects: No additional information.**SECTION 13: Disposal considerations****Waste disposal recommendations:**

Do not dispose of down drain or into waterways.

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 Liquids, Corrosive, n.o.s. (Potassium Hydroxide Solution, Ethanol Solution).**Hazard Class:** 3, 8**Packing Group:** II.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**Non Bulk:****RQ (if applicable):** None**Proper shipping Name:** Flammable Liquids, Corrosive, n.o.s. (Potassium Hydroxide Solution, Ethanol Solution).**Hazard Class:** 3, 8**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, Fire

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

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 lbs.

Proposition 65 (California):

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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:

64-17-5 Ethanol.

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: 2-0-0**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.
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).