

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 01.08.2015**Potassium Hydroxide Solution****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Potassium Hydroxide Solution**Manufacturer/Supplier Article number:** PH9294SS**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

**Toxic**

Acute toxicity (oral, dermal, inhalation), category 3

**Health hazard**

Specific target organ toxicity following single exposure, category 1

**Corrosive**

Skin corrosion, category 1A

Serious eye damage, category 1

Corrosive to metals, category 1

AcTox Dermal 3.

Corr. Metals 1.

Skin corr. 1A.

Eye damage 1.

Flammable liq. 2.

AcTox Oral 3.

AcTox Inhaln 3.

Stot SE. 1.

**Signal word:** Danger**Hazard statements:**

Highly flammable liquid and vapour.

May be corrosive to metals.

Toxic if swallowed.

Toxic in contact with skin.

Toxic if inhaled.

Causes damage to organs.

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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.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 Wash skin thoroughly after handling.  
 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
 Do not breathe dust/fume/gas/mist/vapors/spray.  
 Wash contaminated clothing before reuse.  
 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).  
 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 SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 IF exposed: Call a POISON CENTER or doctor/physician.  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 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:**

<b>Ingredients:</b>		
CAS 67-56-1	Methanol	90 %
CAS 1310-58-3	Potassium Hydroxide	10 %
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 attention immediately.

**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:**

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Dilute mouth

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with water or milk after rinsing. Seek medical attention immediately.

**Most important symptoms and effects, both acute and delayed:**

Shortness of breath. Irritation. Nausea. Headache.

**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:**

Dry chemical, foam, dry sand, or Carbon Dioxide. Water spray can keep containers cool.

**Unsuitable extinguishing agents:**

Water may be ineffective.

**Special hazards arising from the substance or mixture:**

Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

**Advice for firefighters:****Protective equipment:**

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

**Additional information (precautions):**

Remove all sources of ignition. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Take precautions against static discharge.

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

Use spark-proof tools and explosion-proof equipment. 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. Ensure adequate ventilation.

**Environmental precautions:**

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

**Methods and material for containment and cleaning up:**

If necessary use trained response staff or contractor. Remove all sources of ignition. Contain spillage and 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 leak or spill. Use spark-proof tools and explosion-proof equipment. Follow proper disposal methods. Refer to Section 13.

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

Use in a chemical fume hood. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Take precautions against static discharge.

**Conditions for safe storage, including any incompatibilities:**

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Keep container tightly closed. Store with like hazards. Protect from freezing and physical damage.

**SECTION 8: Exposure controls/personal protection**

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67-56-1, Methanol., ACGIH: 250 ppm STEL; 200 ppm TWA.  
 67-56-1, Methanol., NIOSH: 250 ppm STEL; 325 mg/m<sup>3</sup> STEL.  
 67-56-1, Methanol., NIOSH: 200 ppm TWA; 260 mg/m<sup>3</sup> TWA.  
 1310-58-3, Potassium hydroxide, C 2 mg/m<sup>3</sup> USA. ACGIH (TLV).  
 1310-58-3, Potassium hydroxide, C 2 mg/m<sup>3</sup> USA. NIOSH.  
 1310-58-3, Potassium hydroxide, C 2 mg/m<sup>3</sup> USA. OSHA.

**Appropriate engineering controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. 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.

**Respiratory protection:** Use in a chemical fume hood. 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.

**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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Perform routine housekeeping.

**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	Clear colorless liquid	<b>Explosion limit lower:</b> <b>Explosion limit upper:</b>	Non Explosive Non Explosive
<b>Odor:</b>	Alcohol	<b>Vapor pressure at 20°C:</b>	Approx. 128 hPa at 20°C
<b>Odor threshold:</b>	Not available	<b>Vapor density:</b>	Approx. 1.11
<b>pH-value:</b>	Not available	<b>Relative density:</b>	Not available
<b>Melting/Freezing point:</b>	Approx. -98°C	<b>Solubilities:</b>	Not available
<b>Boiling point/Boiling range:</b>	Approx. 64°C at 760 mmHg	<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>Flash point (closed cup):</b>	Approx. 12°C	<b>Auto/Self-ignition temperature:</b>	Approx. 455°C
<b>Evaporation rate:</b>	Approx. 5.2	<b>Decomposition temperature:</b>	Not available
<b>Flammability (solid, gaseous):</b>	Flammable	<b>Viscosity:</b>	a. Kinematic: Not available b. Dynamic: Not available
<b>Density at 20°C:</b>	Not available		

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

Vapours may form explosive mixture with air.

**Chemical stability:**

Stable under normal conditions.

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None under normal processing.

**Conditions to avoid:**

Excess heat, Incompatible Materials, flames, or sparks.

**Incompatible materials:**

Oxidizers, heat, sparks, open flame. Will attack some form of plastic, rubber, and coatings. May react with metallic aluminum and generate hydrogen gas.

**Hazardous decomposition products:**

Acrid and irritating fumes, toxic oxides of carbon when heated to decomposition.

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

LD50 Dermal - rabbit - 17,100 mg/kg 67-56-1.

**Chronic Toxicity:** No additional information.**Skin corrosion/irritation:** No additional information.**Serious eye damage/irritation:**

irritating to eyes and skin.

**Respiratory or skin sensitization:** No additional information.**Carcinogenicity:** No additional information.**Germ cell mutagenicity:** No additional information.**Reproductive Toxicity:**

Have occurred in experimental animals

**STOT-single and repeated exposure:** No additional information.**Additional toxicological information:**

No additional information.

**SECTION 12: Ecological information****Ecotoxicity:** No additional information.**Persistence and degradability:** No additional information.**Bioaccumulative potential:** No additional information.**Mobility in soil:** No additional information.**Other adverse effects:** No additional information.**SECTION 13: Disposal considerations****Waste disposal recommendations:**

Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Absorb with a noncombustible absorbent material such as sand or earth and containerize for disposal. Provide ventilation. Have fire extinguishing agent available in case of fire. Eliminate all sources of ignition. Use spark-proof tools and explosion-proof equipment. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and

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national hazardous waste regulations. Ensure complete and accurate classification.

**SECTION 14: Transport information****US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

UN3286

**Limited Quantity Exception:**

None

**Bulk:****RQ (if applicable):** None**Proper shipping Name:** Flammable liquid,  
toxic, corrosive, n.o.s.**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,  
toxic, corrosive, n.o.s.**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, Fire, Chronic

**SARA Section 313 (Specific toxic chemical listings):**

67-56-1 Methanol.

**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):**

67-56-1 Methanol 5000 lb.

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.

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67-56-1 Methanol.

**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:** 3-3-1**HMIS:** 3-3-1**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).