According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.06.2017

Potassium Hydroxide, 0.10 N in Isopropanol

SECTION 1: Identification

Product identifier

Product name: Potassium Hydroxide, 0.10 N in Isopropanol **Product code:** PH9279SS

Recommended use of the product and restriction on use Relevant identified uses: Laboratory chemicals

Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

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

Emergency telephone number: United States ChemTel 800-255-3924 1-813-248-0585

SECTION 2: Hazard identification

GHS classification:

Flammable liquids, category 2 Eye irritation, category 2A Specific target organ toxicity - single exposure, category 3, central nervous system Skin corrosion, category 1A

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H225 Highly flammable liquid and vapor

- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness

H315+H320 Causes skin and eye irritation.

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

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P233 Keep container tightly closed P240 Ground/bond container and receiving equipment P241 Use explosion-proof electrical/ventilating/light/equipment P242 Use only non-sparking tools P243 Take precautionary measures against static discharge P280 Wear protective gloves/protective clothing/eye protection/face protection P264 Wash skin thoroughly after handling P261 Avoid breathing dust/fume/gas/mist/vapors/spray P271 Use only outdoors or in a well-ventilated area P235 Keep cool. P260 Do not breathe dust/fume/gas/mist/vapors/spray. P303+P361+P353 If on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower P370+P378 In case of fire: Use agents recommended in section 5 for extinction P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing P304+P340+P312 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell P303 IF ON SKIN (or hair): P353 Rinse skin with water/shower P361 Remove/Take off immediately all contaminated clothing. P370 In case of fire: P378 Use ... for extinction P305 IF IN EYES: P313 Get medical advice/attention P337 If eye irritation persists: P338 Remove contact lenses if present and easy to do. Continue rinsing P351 Rinse cautiously with water for several minutes P337+P313 If eye irritation persists get medical advice/attention P304 IF INHALED: P312 Call a POISON CENTER or doctor/physician if you feel unwell. P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P301 IF SWALLOWED: P310 Immediately call a POISON CENTER or doctor/physician. P321 Specific treatment (see ... on this label). P330 Rinse mouth P331 Do NOT induce vomiting. P363 Wash contaminated clothing before reuse P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P405 Store locked up P403+P233 Store in a well ventilated place. Keep container tightly closed P403 Store in a well ventilated place. P403+P235 Store in a well ventilated place. Keep cool. P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification Name Weight %

According to Canadian Hazardous Products Regulations and WHMIS 2015

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CAS number: 1310-58-3	Potassium hydroxide	<0.81
CAS number: 67-63-0	Isopropanol	>99.19

Additional Information: None

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

Not determined or not available.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Move exposed individual to fresh air Immediately call a POISON CONTROL CENTER or seek medical attention

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention Immediately remove all contaminated clothing Wash affected area with soap and water Immediately call a POISON CONTROL CENTER or seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention Remove contact lens(es) if able to do so during rinsing Seek medical attention if irritation persists or if concerned Immediately call a POISON CONTROL CENTER or seek medical attention

After ingestion:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists Immediately call a POISON CONTROL CENTER or seek medical attention Do not induce vomiting Rinse mouth and then drink plenty of water

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not available.

Delayed symptoms and effects:

Not determined or not available.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not available.

Notes for the doctor:

Not determined or not available.

SECTION 5: Fire-fighting measures

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.06.2017

Extinguishing media

Suitable extinguishing media:

Use dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors Vapors can flow to distant ignition sources and flashback Liquid is volatile and may generate an explosive atmosphere

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Beware of vapors accumulating to form explosive concentrations Vapors can accumulate in low areas

Environmental precautions:

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

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing Use spark-proof tools and explosion-proof equipment

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor. Use only non-sparking tools. Take precautionary measures against electrostatic discharges.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

Keep container tightly sealed.

Keep away from all ignition sources: open flames, hot surfaces, direct sunlight, spark sources. Store locked up.

Use appropriate containment to avoid environmental contamination.

Protect from freezing and physical damage.

According to Canadian Hazardous Products Regulations and WHMIS 2015

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SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Isopropanol	67-63-0	ACGIH TLV STEL 400 ppm
	Isopropanol	67-63-0	ACGIH TLV TWA 200 ppm
	Potassium hydroxide	1310-58-3	ACGIH TLV C 2.0 mg/m ³
NIOSH	Isopropanol	67-63-0	NIOSH IDLH 2,000 ppm
	Isopropanol	67-63-0	NIOSH STEL 500 ppm, 1,225 mg/m ³
	Isopropanol	67-63-0	NIOSH TWA 400 ppm, 980 mg/m ³
	Potassium hydroxide	1310-58-3	NIOSH REL C 2.0 mg/m ³
United States (OSHA)	Isopropanol	67-63-0	OSHA PEL TWA 400 ppm, 980 mg/m³

Biological limit values:

Substance	Identifier	Determinant	Sampling time	Permissible limits
Isopropanol	67-63-0		End of shift at end of workweek.	40 mg/L

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	Clear, hazy, colorless liquid
Odor:	Alkaline

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Odor threshold:	Not determined or not available.
pH-value:	Not determined or not available.
-	
Melting/Freezing point:	Approx88 °C
Boiling point/range:	Approx. 82 °C
Flash point:	Approx. 12.0 °C
Evaporation rate:	3.0
Flammability (solid, gaseous):	Flammable
Explosion limit upper:	12.7%
Explosion limit lower:	2%
Vapor pressure:	Approx. 33 at 20 °C
Vapor density:	Not determined or not available.
Density:	Not determined or not available.
Relative density:	Not determined or not available.
Solubilities:	Infinite solubility.
Partition coefficient (n-octanol/water):	Not determined or not available.
Auto/Self-ignition temperature:	Approx. 425.0 °C
Decomposition temperature:	Not determined or not available.
Dynamic viscosity:	Not determined or not available.
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Excess heat, ignition source or flames.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met. Product data: No data available. Substance data:

According to Canadian Hazardous Products Regulations and WHMIS 2015

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Name	Route	Result
Potassium hydroxide	oral	LD50 - Rat - 333 mg/kg

Skin corrosion/irritation

Assessment: Causes severe skin burns and eye damage

Product data: No data available.

Substance data:

Name	Result
Potassium hydroxide	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data: No data available.

Substance data:

Name	Result
Isopropanol	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Isopropanol	Group 3 - Not classifiable as to its carcinogenicity to humans

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: May cause drowsiness or dizziness

Product data: No data available.

Substance data:

Name	Result
	Specific Target Organ Toxicity, Single Exposure - May cause drowsiness or dizziness.

According to Canadian Hazardous Products Regulations and WHMIS 2015

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Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available. Substance data: No data available.

Persistence and degradability

Product data: No data available. **Substance data:** No data available.

Bioaccumulative potential

Product data: No data available. **Substance data:** No data available.

Mobility in soil

Product data: No data available. Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	UN1219
UN proper shipping name	Isopropanol
UN transport hazard class(es)	3

According to Canadian Hazardous Products Regulations and WHMIS 2015

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Packing group	II
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN1219	
UN proper shipping name	Isopropanol	
UN transport hazard class(es)	3	POINT FOR
Packing group	II	
Environmental hazards	None	
Special precautions for user	None	

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1219	
UN proper shipping name	Isopropanol	
UN transport hazard class(es)	3	
Packing group	II	
Environmental hazards	None	
Special precautions for user	None	

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		
Bulk Name	None	
Ship type	None	
Pollution category	None	

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

67-63-0	Isopropanol	Listed
1310-58-3	Potassium hydroxide	Listed

Non-domestic substances list (NDSL): Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

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. The responsibility

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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: 2-3-0-0

HMIS: 2-3-0-X

Initial preparation date: 11.06.2017

End of Safety Data Sheet