Safety Data Sheet according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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1 Identification
· Product identifier
 Trade name: <u>Potassium Chloride, 4M,</u> Product code: PC4001-P
 Recommended use and restriction on use Recommended use: Laboratory chemicals Restrictions on use: No relevant information available.
 Details of the supplier of the Safety Data Sheet Manufacturer/Supplier: AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 USA Tel +1 (717)632-1291 Toll-Free: (866)632-1291 info@aquaphoenixsci.com Distributor: AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291
Emergency telephone number: ChemTel Inc. (800)255-3924 (North America) +1 (813)248-0585 (International)
2 Hazard(s) identification
[•] Classification of the substance or mixture Eye Irrit. 2B H320 Causes eye irritation.
 Label elements GHS label elements GHS classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms: None. Signal word: Warning Hazard statements: H320 Causes eye irritation. Precautionary statements: P264 Wash thoroughly after handling. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention.
• Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:

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7732-18-5	Water		70.20%
7447-40-7	Potassium chloride	Eye Irrit. 2B, H320	29.80%

4 First-aid measures

[•] Description of first aid measures

- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

• After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

- Most important symptoms and effects, both acute and delayed:
- Causes eye irritation.

May cause gastro-intestinal irritation if ingested.

- · Danger: No relevant information available.
- · Indication of any immediate medical attention and special treatment needed:

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

• Extinguishing media

- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- For safety reasons unsuitable extinguishing agents: No relevant information available.
- Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- [•] Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device. Wear fully protective suit.

6 Accidental release measures

[•] Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

For large spills, wear protective clothing.

Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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Dispose of the collected material according to regulations.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

[·] Handling

- · Precautions for safe handling: Use only in well ventilated areas.
- · Information about protection against explosions and fires: No special measures required.

[•] Conditions for safe storage, including any incompatibilities

- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with acids.

- Further information about storage conditions:
- Keep containers tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

Control parameters

· Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

• Exposure controls

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- Engineering controls: Provide adequate ventilation.
- Breathing equipment: Not required under normal conditions of use.
- Protection of hands:



Protective gloves

Material of gloves

Latex, nitrile or neoprene gloves are recommended. Nitrile rubber, NBR Neoprene gloves Butyl rubber, BR Natural rubber, NR Sensibilization by the components in the glove materials is possible.

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· Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

· Body protection: Protective work clothing

Limitation and supervision of exposure into the environment

No relevant information available.

Physical and chemical proper		
Information on basic physical a	nd chemical properties	
· Appearance:		
Form:	Liquid	
Color:	Colorless	
· Odor:	Odorless	
· Odor threshold:	Not determined.	
[·] pH-value:	Not applicable.	
 Melting point/Melting range: 	Not determined.	
Boiling point/Boiling range:	105-110 °C (221-166 °F)	
· Flash point:	The product is not flammable.	
P	Not applicable.	
· Flammability (solid, gaseous):	Product is not flammable.	
• Auto-ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
Oxidizing properties:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
· Density at 20 °C (68 °F):	1.26 g/cm³ (10.51 lbs/gal)	
Relative density:	Not determined.	
· Vapor density:	Not applicable.	
· Evaporation rate:	Not applicable.	
· Solubility in / Miscibility with		
Water at 20 °C (68 °F):	330 g/l	
· Partition coefficient (n-octanol/wate	5	
Viscosity		
Dynamic:	Not applicable.	
_ ,	Not determined.	
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Kinematic:

Other information

Not applicable. Not determined. No relevant information available.

10 Stability and reactivity

· Reactivity: No relevant information available.

• Chemical stability: Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

• **Possibility of hazardous reactions** Toxic fumes may be released if heated above the decomposition point.

Reacts with strong acids.

· Conditions to avoid Excessive heat.

· **Incompatible materials** No relevant information available.

[•] Hazardous decomposition products

Under fire conditions only:

Chlorine compounds

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 8725 mg/kg (rat)

Primary irritant effect:

• On the skin: Based on available data, the classification criteria are not met.

· On the eye: Irritating effect.

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

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

• NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

• Acute effects (acute toxicity, irritation and corrosivity): Irritating to eyes.

• Repeated dose toxicity: No relevant information available.

· Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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- · Carcinogenicity: Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

[·] Toxicity

- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- Mobility in soil: No relevant information available.
- [•] Additional ecological information

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Other adverse effects No relevant information available.

13 Disposal considerations

[•] Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· Uncleaned packagings

- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information		
[·] UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.	
 UN proper shipping name DOT, ADR/RID/ADN, IMDG, IATA 	Not regulated.	
 Transport hazard class(es) 		
· DOT, ADR/RID/ADN, IMDG, IATA · Class	Not regulated.	
 Packing group DOT, ADR/RID/ADN, IMDG, IATA 	Not regulated.	
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Environmental hazards	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Anne MARPOL73/78 and the IBC Code	ex II of Not applicable.
Regulatory information	
Safety, health and environmental i mixture United States (USA) SARA	regulations/legislation specific for the substan
· Section 302 (extremely hazardous subs	tances):
None of the ingredients are listed.	
Section 313 (Specific toxic chemical list	tings):
None of the ingredients are listed.	
TSCA (Toxic Substances Control Act)	
7447-40-7 Potassium chloride	
Proposition 65 (California)	
Chemicals known to cause cancer:	
None of the ingredients are listed.	
· Chemicals known to cause developmen	ntal toxicity for females:
None of the ingredients are listed.	
Chemicals known to cause developmen	ntal toxicity for males:
None of the ingredients are listed.	
Chemicals known to cause developmen	ntal toxicity:
None of the ingredients are listed.	-
None of the ingredients are listed.):
• EPA (Environmental Protection Agency)	•
6	
EPA (Environmental Protection Agency)	h on Cancer):

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods

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DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent OSHA: Occupational Safety & Health Administration Eye Irrit. 2B: Serious eye damage/eye irritation - Category 2B · Sources Website, European Chemicals Agency (echa.europa.eu) Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/ overview/home.do) Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org) Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6 Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers