

Material Safety Data Sheet

According to ISO/DIS 11014

Reviewed On: October 18, 2007

1. IDENTIFICATION OF SUBSTANCE									
<p>Trade name: GenVault 1M KCl (1M Potassium chloride)</p> <p>Application/preparation of the substance: Laboratory chemical</p> <p>Manufacturer/supplier: GenVault Corporation 6190 Corte del Cedro Carlsbad, CA 92011 U.S.A. 1-760-268-5200 1-888-436-0755 (in U.S.A.)</p> <p>Information in case of emergency: Contact GenVault, 1-760-268-5200</p>									
2. COMPOSITION / DATA ON COMPONENTS									
<p>Chemical Characterization:</p> <table border="0"> <tr> <td>CAS: 7447-40-7</td> <td>KCl</td> <td>Potassium chloride</td> <td>1M</td> </tr> <tr> <td colspan="4" style="text-align: center;">≥6.8 to ≤7.4% in water - SARA 313: No</td> </tr> </table>		CAS: 7447-40-7	KCl	Potassium chloride	1M	≥6.8 to ≤7.4% in water - SARA 313: No			
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3. HAZARD IDENTIFICATION									
<p>Hazard description:</p> <p>Information concerning to particular dangers for man and environment:</p> <p>Inhalation: May be harmful if mist inhaled. May cause respiratory tract irritation.</p> <p>Skin: May be harmful if absorbed through skin. May cause skin irritation.</p> <p>Eyes: May cause eye irritation</p> <p>Ingestion: May be harmful is swallowed.</p> <p>Classification system:</p> <p>NFPA ratings (scale 0-4) Health = 0 Flammability = 0 Reactivity = 0</p> <p>HMIS ratings (scale 0-4) Health = 0 Flammability = 0 Reactivity = 0</p> <p>For additional information on toxicity, please refer to Section 11.</p>									
4. FIRST AID MEASURES									
<p>After inhalation Remove to fresh air. If breathing becomes difficult, call a physician.</p> <p>After skin contact: Immediately wash skin with soap and copious amounts of water. Remove</p>									

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contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reusing.

After eye contact: Check for and remove any contact lens. Immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

After swallowing: Wash out mouth with water provided person is conscious. Call a physician. Do not induce vomiting unless directed to do so by medical personnel.

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents: Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

Protective equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific hazard(s): Emits toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Procedure(s) and Personal Safety Precaution(s): Use proper personal protective equipment as indicated in Section 8.

Measures for environmental protection: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Measures for cleaning/collecting: Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling:

Information for safe handling: Do not ingest. Avoid inhalation of spray mist. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

Information about protection against explosions and fires: Keep container tightly closed.

Storage:

Requirements to be met by storerooms and receptacles: Keep container tightly closed in a dry, cool and well-ventilated area.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION GEAR

Components with limit values that require monitoring at the workplace:

Exposure limits:

Contains no substances with occupational exposure limit values.

OSHA Vacated PELs: Potassium chloride. No OSHA Vacated PELs are listed for this chemical.

Engineering controls: Safety shower and eye bath. Mechanical exhaust required.

Personal protective equipment:

Protection of the hands: Use appropriate protective gloves to prevent skin exposure.

Eye protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166. Safety glasses with side-shields recommended.

Skin protection: Recommended: lab coat

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General protective and hygienic measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Immediately remove all soiled and contaminated clothing. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Keep away from foodstuffs and beverages. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Respiratory protection: Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriated government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

General information:**Form:** Liquid**Color:** Clear**Odor:** Odorless**Change in condition:****Melting point/melting range:** N/A**Boiling point/boiling range:** N/A**Flash point:** N/A**Ignition temperature:** N/A**Explosion limits:****Lower:** N/A**Upper:** N/A**Freezing point:** N/A**Vapor pressure at 20°C (68°F):** N/A**Density at 20°C (68°F):** N/A**SG/Density:** 1.044 g/cm³**Solubility in / miscibility with water:** Soluble.**Solvent content:****Organic solvents:** N/A**Water:** N/A**Solids content:** N/A

N/A = not available

10. STABILITY AND REACTIVITY

Stability: This product is stable under normal temperatures and pressures.**Thermal decomposition / conditions to be avoided:** Avoid strong oxidizing agents.**Dangerous reactions:** Avoid strong oxidizing agents. Hazardous polymerization has not been reported.**Dangerous products of decomposition:** Potassium oxide, hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

Acute toxicity:**LD50 / LC50 values relevant for classification:** not available

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Trade Name 1M KCl**Carcinogenicity:** CAS# 7447-40-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.**Epidemiology:** No information available.**Teratogenicity:** No information available.**Reproductive Effects:** No information available.**Mutagenicity:** No information available.**Neurotoxicity:** No information available.**Primary irritant effect:****On the lungs:** May be harmful if mist inhaled. Material is irritating to mucous membranes and upper respiratory tract.**On the skin:** May be harmful if absorbed through the skin. May cause skin irritation.**On the eye:** May cause eye irritation.**Ingestion:** May be harmful if swallowed.**Sensitization:** No data available**Chronic exposure:** No data available.**Signs and symptoms of exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

Appropriate method of disposal of substance or preparation:

Contact a permitted professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14. TRANSPORT INFORMATION

DOT regulations: Proper shipping name: None**Hazard class:** -**Land transport:** This substance is considered to be non-hazardous for land transport.**IMDG:** Not listed as dangerous goods.**Air transport : IATA:** This substance is considered to be non-hazardous for air transport.

15. REGULATIONS

SARA listed: No**Canada regulatory information:** WHMIS classification : This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.**DSL:** No**NDSL:** No**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

This material not listed as a Hazardous Substance under the CWA.

This material not listed as a Priority Pollutant under the CWA.

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This material not listed as a Toxic Pollutant under the CWA.

TSCA: CAS#7447-40-7 is listed on the TSCA inventory.

OSHA: This material not considered highly hazardous by OSHA.

State: CAS #7447-40-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65: California No Significant Risk Level: This material is not listed.

Product related hazard information:

Safety phrases: Avoid contact with skin and eyes.

16.

Label requirements: MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED.

Intended for R&D use only. Not for drug, household, or other uses.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.