

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Name: Potassium Spring

Product Number: All applicable American Elements product codes, e.g. K-M-02-SPG , K-M-03-SPG , K-M-04-SPG , K-M-05-SPG

CAS #: 7440-09-7

Relevant identified uses of the substance: Scientific research and development

Supplier details: American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551 Fax: +1 310-208-0351

Emergency telephone number:

+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Substances and mixtures, which in contact with water, emit flammable gases(Category 1), H260 Skin corrosion(Category 1A), H314 Serious eye damage(Category 1), H318 Carcinogenicity(Category 1A), H350

GHS Label elements, including precautionary statements Pictogram



GHS02 GHS08 GHS05 Signal word Danger Hazard statement(s) H260 In contact with water releases flammable gases which may ignite spontaneously. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H350 May cause cancer. Precautionary statement(s) P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire. P231 + P232 Handle under inert gas. Protect from moisture. P260 Do not breathe dust or mist. P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P281 Use personal protective equipment as required. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 + P310 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. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P335 + P334Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages. P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. P402 + P404 Store in a dry place. Store in a closed container. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant. Hazards not otherwise classified (HNOC) or not covered by GHS Reacts violently with water. May form explosive peroxides.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: K Molecular weight: 39.10 g/mol Hazardous components Component Potassium CAS-No. 7440-09-7 EC-No. 231-119-8 Index-No. 019-001-00-2 Classification Water-react.1; Skin Corr.1A; Eye Dam.1; H260, H314 Concentration >=90-<=100%

Paraffin oils CAS-No. 8012-95-1 EC-No. 232-384-2 Classification Carc.1A; H350 Concentration >=1-<5%

SECTION 4. FIRST AID MEASURES

Description of first aid measures General advice Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital. If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media Suitable extinguishing media Dry powder Special hazards arising from the substance or mixture Carbon oxides, Potassium oxides Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary. Further information No data available

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing Vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8. Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Methods and materials for containment and cleaning up Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal. Reference to other sections For disposal see section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid formation of dust and aerosols.

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition -No smoking.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Never allow product to get in contact with water during storage.

Handle and store under inert gas.

Storage class (TRGS 510): Hazardous materials, which set free flammable gases upon contact with water

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute. Control parameters Components with limit values that require monitoring at the workplace: None. Additional information: No data Exposure controls Personal protective equipment Follow typical protective and hygienic practices for handling chemicals. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties Appearance Form: Solid Colour: grey Odor No data available Odor Threshold No data available bН No data available Melting point/freezing point Melting point/range: 64 °C (147 °F) Initial boiling point and boiling range 774 °C (1,425 °F) at 1,013 hPa (760 mmHg) Flash point No data available Evaporation rate No data available Flammability (solid, gas) No data available Upper/lower flammability or explosive limits No data available Vapor pressure 0.12 hPa (0.09 mmHg) at 260 °C (500 °F) Vapor density No data available Relative density 0.860 g/cm3 Water solubility No data available Partition coefficient: n-octanol/water No data available Auto-ignition temperature

No data available Decomposition temperature No data available Viscosity No data available Explosive properties No data available Oxidizing properties No data available Other safety information No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity No data available Chemical stability Stable under recommended storage conditions. Possibility of hazardous reactions Reacts violently with water. Conditions to avoid Exposure to moisture Incompatible materials Oxidizing agents, Strong oxidizing agents, Carbon oxides, Reacts violently with water., Reacts with water to generate Hydrogen gas. Hazardous decomposition products Other decomposition products-No data available In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity No data available Inhalation: No data available Dermal: No data available No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available Carcinogenicity IARC: 1-Group 1: Carcinogenic to humans(Paraffin oils) NTP: Known to be human carcinogen The reference note has been added by TD based on the background information of the NTP.

(Paraffin oils) OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity No data available No data available Specific target organ toxicity -single exposure No data available Specific target organ toxicity -repeated exposure No data available Aspiration hazard No data available Additional Information **RTECS:** Not available Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

SECTION 12. ECOLOGICAL INFORMATION

Toxicity No data available Persistence and degradability No data available Bioaccumulative potential No data available Mobility in soil No data available Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted Other adverse effects No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contact a licensed 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.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT (US) UN number: 2257 Class: 4.3 Packing group: I Proper shipping name: Potassium Reportable Quantity (RQ): Poison Inhalation Hazard: No IMDG UN number: 2257 Class: 4.3 Packing group: I EMS-No: F-G, S-N Proper shipping name: POTASSIUM IATA UN number: 2257 Class: 4.3 Packing group: I Proper shipping name: Potassium IATA Passenger: Not permitted for transport

SECTION 15. REGULATORY INFORMATION

SARA 302 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. SARA 311/312 Hazards Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard Massachusetts Right To Know Components Potassium CAS-No. 7440-09-7 **Revision Date** 1993-04-24 Paraffin oils 8012-95-1 2007-03-01 Pennsylvania Right To Know Components Potassium CAS-No. 7440-09-7 **Revision Date** 1993-04-24 Paraffin oils 8012-95-1 2007-03-01 New Jersey Right To Know Components Potassium CAS-No. 7440-09-7

Revision Date 1993-04-24 Paraffin oils 8012-95-1 2007-03-01 California Prop. 65 Components WARNING! This product contains a chemical known to the State of California to cause cancer. Paraffin oils

SECTION 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.