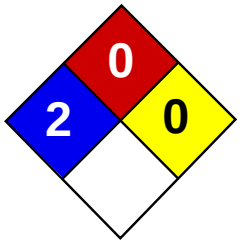

Material Safety Data Sheet
Potassium Dichromate, 0.025 N MSDS

Section 1: Chemical Product and Company Identification

Product Name: Potassium Dichromate, 0.025 N

Catalog Codes: SLP4438

CAS#: Mixture.

RTECS: Not applicable.

TSCA: TSCA 8(b) inventory: Water; Potassium dichromate

CI#: Not available.

Synonym: Potassium Dichromate, 0.025 N Solution

Chemical Name: Not applicable.

Chemical Formula: Not applicable.

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Water	7732-18-5	99.9
Potassium dichromate	7778-50-9	0.12

Toxicological Data on Ingredients: Potassium dichromate: ORAL (LD50): Acute: 25 mg/kg [Rat]. 190 mg/kg [Mouse]. DERMAL (LD50): Acute: 14 mg/kg [Rabbit].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, . Slightly hazardous in case of inhalation (lung sensitizer).

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH [Potassium dichromate]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Potassium dichromate]. Mutagenic for bacteria and/or yeast. [Potassium dichromate]. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to blood, kidneys, lungs, liver, upper respiratory tract, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances: Non-explosive in presence of open flames and sparks, of shocks.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Reacts explosively with hydrazine, and anydrous hydroxylamine. (Potassium dichromate)

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
Potassium dichromate CEIL: 0.1 (mg(CrO3)/m) from OSHA (PEL) [United States] TWA: 0.05 (mg(Cr)/m) from ACGIH (TLV) [United States]Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Not available.

Taste: Not available.

Molecular Weight: Not applicable.

Color: Not available.

pH (1% soln/water): Neutral.

Boiling Point: The lowest known value is 100°C (212°F) (Water).

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: The only known value is 1 (Water = 1) (Water).

Vapor Pressure: The highest known value is 2.3 kPa (@ 20°C) (Water).

Vapor Density: The highest known value is 0.62 (Air = 1) (Water).

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility: Easily soluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Reacts violently or ignites with ethylene glycol above 100 deg. C Other Incompatibles: combustible, organic, or other readily oxidizable materials such as paper, wood, sulfur, aluminum, iron, tungsten, sulfuric acid + acetone, born, glycol, sulfur, plastics (Potassium dichromate)

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact.

Toxicity to Animals:
LD50: Not available. LC50: Not available.

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: Classified A1 (Confirmed for human.) by ACGIH [Potassium dichromate]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Potassium dichromate]. Mutagenic for bacteria and/or yeast. [Potassium dichromate]. Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, upper respiratory tract, skin, eyes.

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant, permeator), of ingestion, . Slightly hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation (lung sensitizer, lung corrosive).

Special Remarks on Toxicity to Animals:
Lowest Published Lethal Dose: LDL [Man] - Route: Oral; Dose: 143 mg/kg LDL [Child] - Route: Oral; Dose 26 mg/kg (Potassium dichromate)

Special Remarks on Chronic Effects on Humans:
Passes through the placental barrier in animal. May cause adverse reproductive effects and birth defects (teratogenic). May affect genetic material (mutagenic) (Potassium dichromate)

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: It causes skin irritation. It can be absorbed by the skin and cause systemic effects Eyes: Causes eye irritation. Inhalation: Causes respiratory tract irritation. Inhalation mist can also cause irritation of the nose and eyes. Symptoms may include sneezing, rhinorrhea, throat erythema, disharge, or crusting Ingestion: Causes gastrointestinal irritation. Symptoms may include adbominal and esophageal pain, nausea, vomiting, hypermotility, diarrhea, respiratory distress, cyanosis.. It may also affect the cardiovascular system (cardiovascular shock, peripheral vascular collapse, urinary system (kidney damage - nephritis with glycosuria, acute tubular necrosis, renal failure), liver (elevated liver enzyme levels, hepatits, hepatic failure), behavior/central nervous system/nervous system (somnolence, ataxia, vertigo, muscle cramps). It may also affect the blood and cause anemia, methemglobinemia (characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis with bluish skin, rapid heart rate and chocolate-brown colored blood), thrombocytopenia. Chronic Potential Health Effects: Skin: Repeated or prolonged skin contact can produce eczemateous allergic contact dermatitis. Inhalation: Repeated or prolonged inhalation can cause chronic rhinitis, coughing, dyspnea, wheezing, substernal pain, asthma, perforation of the nasal septum, and mucous membrane injury. Ingestion: Hexavalent chromium has been reported to cause liver and kidney damage with chronic exposure. Chronic ingestion may also affect the blood and cause anemia, methemglobinemia (characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis with bluish skin, rapid heart rate and chocolate-brown colored blood), thrombocytopenia, and may affect metabolism (weight loss). Prolonged exposure may also cause erosion and discoloration of teeth. (information has been extrapolated from Potassium Dichromate, solid, and modified)

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation:
Dangerous to aquatic life in high concentrations. Chromium probably occurs as the insoluble (CrIII) oxide (Cr2O3.nH2O) in the soil, as the organic matter in the soil is expected to reduce any soluble chromate to insoluble chromic oxide (Cr2O3). Chromium in the soil can be transported to the atmosphere by way of aerosol formation. Chromium is also transported from the soil through runoff and leaching of water. Most of the chromium in surface waters may be present in particulate from as sediment. Some of the particulate chromium would remain as suspended matter and ultimately be deposited in the sediments. Chromium present usually as (CrIII) in the soil and is characteriszed by its lack of mobility, except in cases where Cr(VI) is involved. Chromium (VI) of natural origin is rarely found. (Potassium dichromate)

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Potassium dichromate California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Potassium dichromate Connecticut hazardous material survey.: Potassium dichromate Illinois chemical safety act: Potassium dichromate New York release reporting list: Potassium dichromate Rhode Island RTK hazardous substances: Potassium dichromate Pennsylvania RTK: Potassium dichromate Massachusetts RTK: Potassium dichromate Massachusetts spill list: Potassium dichromate New Jersey: Potassium dichromate New Jersey spill list: Potassium dichromate Louisiana spill reporting: Potassium dichromate TSCA 8(b) inventory: Water; Potassium dichromate TSCA 6 final risk management: Potassium dichromate TSCA 8(a) IUR: Potassium dichromate SARA 313 toxic chemical notification and release reporting: Potassium dichromate 0.12% CERCLA: Hazardous substances.: Potassium dichromate: 10 lbs. (4.536 kg);

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):
R20- Harmful by inhalation. R46- May cause heritable genetic damage. R49- May cause cancer by inhalation. S2- Keep out of the reach of children. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S46- If swallowed, seek medical advice immediately and show this container or label. S53- Avoid exposure - obtain special instructions before use.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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