

SPI Supplies Division

Structure Probe, Inc.

206 Garfield Ave., West Chester, PA 19380-4512 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

sales@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: May 22, 2018

SPI Catalog # 02550-AA, 02550-AB

SPI Chem™ Potassium Dichromate

Section 1.1: Identification

Chemical Name/Synonyms Potassium Dichromate

Product or Trade Name SPI Chem™ Potassium Dichromate

CAS #'s 7778-50-9

Chemical Formula..... $K_2Cr_2O_7$

Section 1.2: Relevant Uses/Restrictions

Laboratory chemical used as an oxidizing agent.

Section 1.3: Supplier of the Safety Data Sheet

SPI Supplies Division

Structure Probe, Inc.

206 Garfield Ave., West Chester, PA 19380-4512 USA

Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755

sales@2spi.com

<http://www.2spi.com>

Manufacturer's CAGE: 1P573

Section 1.4: Emergency telephone number

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-741-5970

Toll-free phone: 1-(800)-424-9300 USA + Canada only

Section 2: Hazard Identification

2.1 Classification of the substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Oxidizing solids (category 2)

Acute toxicity – Oral (category 2)

Acute toxicity – Dermal (category 1)

Acute toxicity – Inhalation (gases) (category 2)

Acute toxicity – Inhalation (dusts, mists) (category 2)

Skin corrosion/Irritation (category 1)
Serious eye damage/ eye irritation (category 1)
Respiratory sensitization (category 1)
Skin sensitization (category 1)
Germ cell mutagenicity (category 1A)
Carcinogenicity (category 1A)
Reproductive toxicity (category 1A)
Specific Target Organ Toxicity – Repeated Exposure (category 1)
Acute aquatic toxicity (category 1)
Chronic aquatic toxicity (category 1)

2.2 Label elements

Pictogram



Signal Word: Danger

Hazard statements:

H270 May intensify fire; oxidizer
H300 Fatal if swallowed
H310 Fatal in contact with skin
H330 Fatal if inhaled
H314 Causes severe skin burns and eye damage
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317 May cause an allergic skin reaction
H340 May cause genetic defects
H350 May cause cancer
H360 May damage fertility or the unborn child
H372 Causes damage to organs through prolonged or repeated exposure
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash face, hands, and any exposed skin thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P262 Do not get in eyes, on skin, or on clothing.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P271 Use only outdoors or in a well-ventilated area.
P284 Wear respiratory protection.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P285 In case of inadequate ventilation, wear respiratory protection.
P272 Contaminated work clothing should not be allowed out of the workplace.
P210 Keep away from heat/ sparks/ open flames/ hot surfaces. – No smoking.
P220 Keep/Store away from clothing/combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P370 + P378 IN CASE OF FIRE: Use water to extinguish. **Do not use dry chemicals or foams.**
CO₂ or Halon may provide limited control.

P305 + P331 + 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.

P363 Wash contaminated clothing before reuse.

P302 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

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.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P330 Rinse mouth.

P331 Do NOT induce vomiting.

P405 Store locked up.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/ container to an approved waste disposal plant.

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

Classification of the Substance:

Oxidizing solids (category 2)

Acute toxicity – Oral (category 2)
Acute toxicity – Dermal (category 1)
Acute toxicity – Inhalation (gases) (category 2)
Acute toxicity – Inhalation (dusts, mists) (category 2)
Skin corrosion/Irritation (category 1)
Serious eye damage/ eye irritation (category 1)
Respiratory sensitization (category 1)
Skin sensitization (category 1)
Germ cell mutagenicity (category 1A)
Carcinogenicity (category 1A)
Reproductive toxicity (category 1A)
Specific Target Organ Toxicity – Repeated Exposure (category 1)
Acute aquatic toxicity (category 1)
Chronic aquatic toxicity (category 1)

GHS Labeling:

Pictograms:



Signal word: Danger

Hazard statements:

H270 May intensify fire; oxidizer
H300 Fatal if swallowed
H310 Fatal in contact with skin
H330 Fatal if inhaled
H314 Causes severe skin burns and eye damage
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

- H317 May cause an allergic skin reaction
- H340 May cause genetic defects
- H350 May cause cancer
- H360 May damage fertility or the unborn child
- H372 Causes damage to organs through prolonged or repeated exposure
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P264 Wash face, hands, and any exposed skin thoroughly after handling.
- P270 Do not eat, drink, or smoke when using this product.
- P262 Do not get in eyes, on skin, or on clothing.
- P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
- P271 Use only outdoors or in a well-ventilated area.
- P284 Wear respiratory protection.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P285 In case of inadequate ventilation, wear respiratory protection.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P210 Keep away from heat/ sparks/ open flames/ hot surfaces. – No smoking.
- P220 Keep;/Store away from clothing/combustible materials.
- P221 Take any precaution to avoid mixing with combustibles.
- P370 + P378 **IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams.**
CO₂ or Halon may provide limited control.
- P305 + P331 + 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.
- P363 Wash contaminated clothing before reuse.
- P302 + P361 + P353 **IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.**
Rinse skin with water/ shower.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
- 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.**
- P301 + P310 **IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.**
- P330 Rinse mouth.
- P331 Do NOT induce vomiting.
- P405 Store locked up.
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other Hazards: None

Hazardous Material Information System USA

- Health 4
- Fire Hazard 0
- Reactivity 3
- Personal Protection

NFPA Rating (estimated)

- Health 4
- Flammability..... 0
- Reactivity 3
- Special Hazard OX

Section 3: Composition

3.1 Substances:

Section 4: First Aid Measures

4.1 Description of first aid measures:

General Advice: Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious, or corrosive. So not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Skin Contact: Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Eye Contact: Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Ingestion: Fatal if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Self-protection of the first aider:

Avoid exposure to blood or body fluids.
Wear gloves and other necessary protective clothing.
Dispose of contaminated clothing and equipment as bio-hazardous waste.

4.2 Most important symptoms and effects, both acute and delayed:

May be fatal if swallowed.
May be fatal if inhaled.
May be fatal if absorbed through the skin.
Severe skin and eye irritation or burns.
Irritating to respiratory system.
May cause allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May affect the liver.
May affect the kidneys.
Central nervous system effects.
May affect the blood.

4.3 Indication of any immediate medical attention and special treatment needed:

Notes to physician: Treat symptomatically.

Section 5: Fire Fighting Measures

5.1 Extinguishing media:

Suitable extinguishing media: Water. CO₂ may be of NO value in extinguishing fires involving oxidizers and may only provide limited control.

Unsuitable Extinguishing Media: Dry chemical. Foam. Halons.

5.2 Special hazards arising from the substance or mixture:

Hazardous combustion products: Potassium oxide; Chromium oxides

Specific hazards: Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.) The product is not flammable, but it may cause fire when in contact with other material. Contact with combustible or organic materials may cause fire. Will accelerate burning when involved in a fire. Reacts explosively with hydrazine, and anhydrous hydroxylamine. When heated to decomposition it emits toxic gases and irritating fumes of potassium oxide.

Specific methods: For large fires, flood fire area with water from a distance. Cool closed containers with flooding quantities of water until fire is out. DO NOT use combustible materials such as sawdust.

5.3 Advice for firefighters:

Special protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

6.1 Personal precautions:

- Keep people away from and upwind of spill/leak.
- Ensure adequate ventilation.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Avoid contact with skin, eyes and clothing.
- Use personal protective equipment.
- Avoid breathing dust.
- Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material.

6.2 Environmental precautions:

- Prevent further leakage or spillage if safe to do so.
- Do not let product enter drains.
- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up:

- Stop leak if you can do it without risk.
- Cover with plastic sheet to prevent spreading.
- Sweep up and shovel into suitable containers for disposal.
- Use appropriate tools to put the spilled solid in a suitable waste disposal container.
- Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill.
- Clean contaminated surface thoroughly.

6.4 Reference to other sections:

For disposal, see Section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Protective measures:

- Provide sufficient air exchange and/or exhaust in work rooms.
- Remove all sources of ignition.
- Avoid dust formation.

Keep away from incompatible materials.

Advice on general hygiene conditions:

Wear personal protective equipment.
Avoid contact with skin, eyes, and clothing.
Avoid dust formation.
Do not breathe vapors / dust.
Do not ingest.
Do not smoke.
Keep away from combustible material.
Keep away from heat and sources of ignition.
Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities:

Storage conditions:

Keep container tightly closed in a dry and well-ventilated place.
Store at room temperature in the original container.
Do not store near combustible materials.
Keep away from heat and sources of ignition.
Store away from incompatible materials.
Store in a segregated and approved area.

Incompatible Materials:

Reducing agents. Combustible materials. Organic materials. Metals. Acids. Alkalis.

7.3 Specific end uses:

Laboratory chemical used as an oxidizing agent.

This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

Section 8: Exposure Controls and Personal Protection

8.1 Control parameter and Personal Protection:

Workplace exposure limits:

Potassium Dichromate CAS # 7778-50-9

OSHA: 5 ug/m³ TWA [listed as Chromium compounds]
0.1 mg/m³ Ceiling (listed as chromates)

NIOSH: 0.0002 TWA [as Cr (Chromium VI) compounds]

ACGIH: 0.05 mg/m³ TWA [as Cr]

AIHA WHEEL: None

Canada:

Alberta: 0.05 mg/m³ TWA [as Cr]

British Columbia: 0.1 mg/m³ TWA [as Cr]

Ontario: 0.05 mg/m³ TWA [as Cr]

Quebec: 0.05 mg/m³ TWA [as Cr]

Australia: 0.05 mg/m³ TWA [as Cr]

Mexico: 0.05 mg/m³ TWA [as Chromium (VI) compounds – water soluble]

Biological limit values: No information available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

Ensure adequate ventilation.

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

8.2.2 Individual protection measures:

Eye protection:

Safety glasses with side-shields or safety goggles.

Skin and body protection:

Chemical resistant apron. Long sleeved clothing. Gloves.

Respiratory protection:

Wear approved/certified or equivalent respirator with dust filter.

Hygiene measures:

Avoid contact with skin, eyes, and clothing.

When using, do not eat, drink, or smoke.

Wash hands before breaks and immediately after handling the product.

8.2.3 Environmental exposure controls:

Do not let product enter drains, the sewer, or waterways.

Avoid discharge into the environment.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance: Orange-red crystalline solid

Odor: Odorless

Odor threshold: No information available

Taste: Bitter. Metallic

pH: 4 (1% solution)

Melting point/Freezing point: 398 °C (748 °F)

Boiling point/Boiling point range: 500 °C (932 °F)

Flash Point: No data available

Evaporation rate: No information available

Flammability (solid, gas): No information available

Upper/lower flammability or explosive limits: No information available

Vapor Pressure: no information available

Vapor density: No information available

Specific gravity: 2.68

Solubility: 4.9 g/100 ml water @ 0 °C; 10.5% (w/w) @ 20 °C; 102 g/100 ml water @ 100 °C; insol. in alcohol

Partition coefficient (n-octanol/water): 5

Auto-ignition temperature: No information available

Decomposition temperature: No information available

Viscosity: No information available

Explosive properties: No information available

Oxidizing Properties: Oxidizer (category 2)

9.2 Other information:

Formula: $K_2Cr_2O_7$

Formula weight: 294.18

Section 10: Stability and Reactivity

10.1 Reactivity:

Reactive with oxidizing agents, reducing agents, combustible materials, organic materials, metals, alkalis.

Risk of explosion with Iron, Magnesium, Hydrazine and derivatives, Hydroxylamine, Ammonium nitrate, Boron, Acetic anhydride, Oxidizable substances, Reducing agents, Sulfuric acid, Silicon.

Reacts violently or ignites with ethylene glycol above 100 °C

Other Incompatibles: Combustible, organic, or other readily oxidizable materials such as paper, wood, sulfur, aluminum, iron, tungsten, boron, silicon, sulfuric acid + acetone, glycol, plastics, hydrazine, hydroxylamine.

10.2 Chemical Stability: Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization does not occur.

10.4 Conditions to avoid: Heat. Incompatible materials.

10.5 Incompatible materials: Reducing agents. Combustible materials. Organic materials. Metals. Acids. Alkalis.

10.6 Hazardous decomposition products: Oxides of potassium. Chromium oxides.

Other information:

Corrosivity: No information available.

Special Remarks on Corrosivity: No information available.

Section 11: Toxicological Information

Information on the likely routes of exposure:

Principal routes of exposure: skin, Eyes, Inhalation, Ingestion.

11.1 Information on toxicological effects:

Acute Toxicity

Component Information

Potassium Dichromate – 7778-52-9

LD50 oral/rat = 48 mg/kg Oral/ LD50 Rat
25 mg/kg [RTECS

LD50 oral/mouse = No information available

LD50 dermal/rabbit = 1150 mg/kg Dermal LD50 Rabbit

LC50 inhalation/rat = No information available

LC50 inhalation/mouse = No information available

Other LD50 or LC50 information = No information available

Product Information:

LD50/oral/rat = VALUE- Acute Tox Oral = 25mg/kg

LD50/oral/mouse = Value - Acute Tox Oral = No information available

LD50/dermal/rabbit = VALUE-Acute Tox Dermal = 1150mg/kg

LD50/dermal/rat = VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Fatal if absorbed through skin. It causes skin irritation and may cause skin burns. It can be absorbed by the skin and cause systemic effects. Deep ulceration of the skin of the hands, resulting from occupational exposure can penetrate as far as the bone in severe cases.

Eye Contact: Causes eye irritation and may cause eye burns. It may cause severe damage With possible loss of vision, transient corneal bulging, residual irregular astigmatism, and anesthesia of the area after bulging resolves.

Inhalation Fatal if inhaled. Causes respiratory tract irritation. Inhalation of dust or mist can Also cause irritation of the nose and eyes. Symptoms may include sneezing, rhinorrhea, throat erythema, nasal septum lesions, or perforation with bleeding, discharge, or crusting.

Ingestion Fatal if swallowed. When ingested in small amounts, it can cause burns of the esophagus, with possible stricture formation and perforation of the stomach. Symptoms may include abdominal and esophageal pain, nausea, vomiting, hypermotility, diarrhea, gastrointestinal tract irritation and bleeding, respiratory distress, cyanosis, coma, and death. 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, hepatitis, hepatic failure), behavior/central nervous system/nervous system (somnolence, ataxia, vertigo, muscle cramps).

It may also affect the blood and cause anemia, methemoglobinemia (characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis with bluish skin, rapid heart rate and chocolate-brown colored blood), thrombocytopenia.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Skin: Repeated or prolonged skin contact can produce eczematous allergic Contact dermatitis with deep ulcers that do not heal. 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, methemoglobinemia (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.

Sensitization: May cause sensitization by inhalation and skin contact
Mutagenic Effects: May affect genetic material
 Mutations in microorganisms
 Experiments with bacteria and/or yeast have shown mutagenic effects
 Mutagenic effects in mammalian somatic cells
 Cytogenic analysis - hamster ovary
 DNA damage - hamster ovary
 Cytogenic Analysis: human lymphocyte
 Cytogenic analysis (hamster lung)

Carcinogenic effects: Carcinogenic.

Components	IARC	ACGIH Carcinogens	NTP	OSHA HCS Carcinogens
Potassium Dichromate	Group 1 - Monograph 49 [1990] Chromium (VI) Supplement 7 [1987] Monograph 23 [1980] Monograph 2 [1973]	A1- Confirmed Human Carcinogen for Chromium (VI) water soluble inorganic compounds		Not listed Present

ACGIH (American Conference of Governmental Industrial Hygienists)
A1 - Known Human Carcinogen
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans

Australia Prohibited Carcinogenic Substances: Not listed.

Australia Notifiable Carcinogenic Substances: Not listed.

Reproductive toxicity: May damage fertility or the unborn child

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available
STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.
Target Organs: Blood. Kidneys. Lungs. Liver. Respiratory system. Skin. Eyes.

Section 12: Ecological Information

12.1 Ecotoxicity: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potassium Dichromate – 7778-50-9

Freshwater Fish Species Data: 14-20.9 mg/L LC50 Pimephales promelas 96 h static 1
21.209-30.046 mg/L LC50 Oryzias latipes 96 h semi-static 1
26 mg/L LC50 Morone saxatilis 96 h static 1
113.6-155.7 mg/L LC50 Lepomis macrochirus 96 h flow-through 1
24.81-34.55 mg/L LC50 Poecilia reticulata 96 h semi-static 1
65.6-137.6 mg/L LC50 Lepomis macrochirus 96 h static 1
23-41.2 mg/L LC50 Poecilia reticulata 96 h static 1
12.3 mg/L LC50 Oncorhynchus mykiss 96 h semi-static 1
320 mg/L LC50 Lepomis macrochirus 96 h 1
15.41-30.36 mg/L LC50 Pimephales promelas 96 h flow-through 1
139 mg/L LC50 Cyprinus carpio 96 h static 1

12.2 Persistence and degradability: 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 form 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 characterized by its lack of mobility, except in cases where Cr(VI) is involved. Chromium (VI) of natural origin is rarely found

12.3 Bio-accumulative potential: No information available.

12.4 Mobility in soil: No information available.

12.5 Results of PBT and vPvB assessment: PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects: No information available.

Section 13: Disposal Considerations

13.1 Waste treatment methods:

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Potassium Dichromate is not listed under RCRA F Series, K Series, P Series or U Series Wastes.

Section 14: Transport Information

DOT:

UN Number: UN3086
Proper Shipping Name: Toxic solids, oxidizing, n.o.s. (Potassium Dichromate)
Hazard Class: 6.1
Subsidiary Risk: 5.1
Packing Group: II
ERG No: 141
DOT RQ (lbs): 10 lbs.
Poison Inhalation Hazard: No

Symbol(s): G

IATA:

UN Number: UN3086
Proper Shipping Name: Toxic solid, oxidizing, n.o.s. (Potassium Dichromate)
Hazard Class: 6.1
Subsidiary Risk: 5.1
Packing Group: II

IMDG:

UN Number: UN3086
Proper Shipping Name: TOXIC SOLID, OXIDIZING, N.O.S. (Potassium Dichromate)
Hazard Class: 6.1
Subsidiary Risk: 5.1
Packing Group: II
Marine Pollutant: Yes
EMS: F-A, S-Q

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture:

International Inventories: (Potassium Dichromate)

U.S. TSCA: Present R
Korea KECL: Present KE-29094
Philippines (PICCS): Present
Japan ENCS: Present (1)-278
China: Present
Australia (AICS): Present
EINECS-No.: Present 231-906-6

U.S. Government Regulations:

TSCA Section 5(a)2- Chemicals with Significant New Use Rules (SNURS):

Potassium Dichromate, CAS# 7778-50-9, is not listed.

TSCA Section 8(d) – Health and Safety Reporting:

Potassium Dichromate, CAS# 7778-50-9, is not listed.

SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

The following components are subject to reporting levels established by SARA Title III, Section 303:

Potassium dichromate CAS # 7778-50-9 Revision date: 1993-04-24

Reporting de minimis 0.1% as chromium compounds

SARA 311/312 Hazards:

Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

CERCLA – Hazardous Substances and their Reportable Quantities:

4.54 kg final RQ 10 lb. final RQ

U.S. State Regulations:

Massachusetts Right to Know Components:

Potassium Dichromate CAS # 7778-50-9 Revision date: 1993-04-24

Pennsylvania Right to Know Components:

Potassium Dichromate CAS # 7778-52-9 Revision Date 1993-04-24

New Jersey Right to Know Components:

Potassium Dichromate CAS# 7778-50-9 Revision Date 1993-04-24

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986:

Potassium Dichromate (listed as Chromium (VI) Compounds and/or Chromium hexavalent compounds):

WARNING! This product contains a chemical known to the State of California to cause cancer.

WARNING! This product contains a chemical known to the State of California to cause developmental toxicity.

WARNING! This product contains a chemical known to the State of California to cause male reproductive toxicity.

WARNING! This product contains a chemical known to the State of California to cause female reproductive toxicity.

CANADA

WHMIS hazard Class: Potassium Dichromate

C Oxidizing material
D1A Very toxic materials
D2A Very toxic materials
D2B Toxic materials

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the SDS contains all of the information required by the CPR.

WHMIS Ingredient Disclosure List: 0.1%.

DSL/NDSL:

Potassium Dichromate is listed on the DSL.

Potassium Dichromate is not listed on the NDSL.

EU regulations
EPCRA/SARA Right to Know
Authorizations and/or restrictions on use
State regulations
Other EU regulations
VOC Guidelines
National regulations

15.2 Chemical Safety Assessment:

Other information, including date of preparation or last revision
Indication of changes

Abbreviations and acronyms

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
CMRG: Chemical Manufacturer's Recommended Guidelines
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bio-accumulative and Toxicological
vPvB: very Persistent and very Bio-accumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety Health
ATE: Acute Toxicity Estimates
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
STEL: Short Term Exposure Limit
CEIL: Ceiling

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

The information and recommendations set forth above are taken from sources believed to be accurate as of the date hereof, however SPI Supplies and Structure Probe, Inc. make no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assume no liability to any user thereof. The information contained in this sheet does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation. Be aware of the Structure Probe, Inc. Copyright Policy. Structure Probe, Inc. grants a nonexclusive license to make unlimited copies of this safety sheet for internal use only. Quite obviously, this information would pertain only to this material when purchased from SPI Supplies as product from other sources, with other ingredients and impurity levels could have substantially different properties.