

Preparation Date: 01/01/2019

Revision Date: N/A

Revision Number: N/A

1. IDENTIFICATION

Product identifier

Product code: C6360

Product Name: POTASSIUM DICHROMATE, CRYSTAL, REAGENT, ACS

Other means of identification

Synonyms:

Bichromate of potash
Chromium potassium oxide (K₂Cr₂O₇)
Dichromic acid dipotassium salt
Dipotassium bichromate
Dipotassium dichromate
Dipotassium dichromium heptaoxide
lopezite
Kaliumdichromat [German]
Potassium bichromate
Potassium chromate (K₂Cr₂O₇)
Potassium dichromate
Potassium dichromate (K₂(Cr₂O₇))
Potassium dichromate (K₂Cr₂O₇)
Potassium dichromate(VI)
SRM 935a
7778-50-9
HX7680000
Not available

CAS #:

RTECS #

CI#:

Recommended use of the chemical and restrictions on use

Recommended use: Analytical reagent. In tanning, printing, painting, electroplating and pyrotechnics.
Uses advised against No information available

Supplier:

Dawn Scientific Inc

121 Liberty Street, Metuchen, NJ, 08840

Tel : 732-902-6300 | Fax : 973-802-1005

sales@dawnscientific.com | www.dawnscientific.com

Emergency telephone number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

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
Oxidizing solids	Category 2

Label elements

Danger

Hazard statements

Fatal if swallowed
 Fatal in contact with skin
 Fatal if inhaled
 Causes severe skin burns and eye damage
 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 May cause an allergic skin reaction
 May cause genetic defects
 May cause cancer
 May damage fertility or the unborn child
 Causes damage to organs through prolonged or repeated exposure
 May intensify fire; oxidizer



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not get in eyes, on skin, or on clothing
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wear respiratory protection
 Wear protective gloves/protective clothing/eye protection/face protection
 In case of inadequate ventilation wear respiratory protection
 Contaminated work clothing should not be allowed out of the workplace
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep/Store away from clothing/ .? /combustible materials
 Take any precaution to avoid mixing with combustibles .?

Precautionary Statements - Response

Specific treatment (see .? on this label)

Specific measures (see .? on this label)

Specific treatment is urgent (see .? on this label)

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see .? on this label)

IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO₂ or Halon may provide limited control.

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.

Immediately call a POISON CENTER or doctor/physician

Wash contaminated clothing before reuse

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

If skin irritation or rash occurs: Get medical advice/attention

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.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Potassium Dichromate 7778-50-9	7778-50-9	100	*

4. FIRST AID MEASURES

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.

4. FIRST AID MEASURES

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

Most important symptoms and effects, both acute and delayed

Symptoms	May be fatal if swallowed. May be fatal if inhaled. May be fatal if absorbed through 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. It may affect the kidneys. Central nervous system effects. It may affect the blood.
-----------------	--

Indication of any immediate medical attention and special treatment needed

Notes to Physician:	Treat symptomatically
----------------------------	-----------------------

Protection of first-aiders

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

5. FIRE-FIGHTING MEASURES

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.
--	-----------------------------

Specific hazards arising from the chemical

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

Special Protective Actions for Firefighters

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.

Special Protective Equipment for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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.

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.

Methods and material for containment and cleaning up

Methods for containment

Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up

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.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe vapours/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.

Conditions for safe storage, including any incompatibilities

Technical Measures/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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Potassium Dichromate 7778-50-9	5 ug/m ³ TWA (listed as Chromium compounds) 0.1 mg/m ³ Ceiling (listed as chromates)	0.0002 TWA (as Cr (chromium (VI) compounds)	0.05 mg/m ³ TWA(as Cr)	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Potassium Dichromate 7778-50-9	0.05 mg/m ³ TWA(as Cr)	0.1 mag/m ³ Ceiling (as Cr)	0.05 mg/m ³ TWA(as Cr)	0.05 mg/m ³ TWAEV (as Cr)

Australia and Mexico

Components	Australia	Mexico
Potassium Dichromate 7778-50-9	0.05 mg/m ³ TWA(as Cr)	0.05 mg/m ³ TWA (as Chromium (VI) compounds - water soluble)

Appropriate engineering controls

Engineering measures to reduce exposure:

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.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Safety glasses with side-shields. or. Goggles.
- Skin and body protection:** Chemical resistant apron. Long sleeved clothing. Gloves.
- Respiratory protection:** Wear respirator with dust filter. Be sure to use an approved/certified respirator or equivalent..
- 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.	Appearance: Crystalline.	Color: Orange-red.
Odor: Odorless.	Taste Bitter. Metallic.	Molecular/Formula weight: 294.18
Formula: K ₂ Cr ₂ O ₇	Flammability: No information available	Flashpoint (°C/°F): No information available.
Flash point (°C): No data available	Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available
Lower Explosion Limit (%): No information available	Upper Explosion Limit (%): No information available	pH: 4 (1% solution)
Melting point/range(°C/°F): 398°C/ 748°F	Boiling point/range(°C/°F): 500°C/ 932°F	Decomposition temperature(°C/°F): No information available
Bulk density: 1.6 g/m ³ @ 20°C	Density (g/cm³): No information available	Specific gravity: 2.68
Vapor pressure @ 20°C (kPa): No information available	Evaporation rate: No information available	Vapor density: No information available
VOC content (g/L): No information available	Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): 5
Viscosity: No information available	Miscibility: No information available	Solubility: Easily soluble in hot water Soluble in cold water Solubility in water: 4.9 g/ 100 ml water @ 0 °C Solubility in water: 10.5% (w/w) @ 20°C Solubility in water: 102 g/100 ml water @ 100°C Insoluble in Alcohol

10. STABILITY AND REACTIVITY

Reactivity

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

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, boron + silicon, glycol, sulfur, plastics, hydrazine, hydroxylamine

Reacts explosively with hydrazine, and anhydrous hydroxylamine

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Incompatible materials.

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

Hazardous decomposition products: Oxides of potassium. Chromium oxides.

Corrosivity:

No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Skin. Eyes. Inhalation. Ingestion.

Acute Toxicity

Component Information

Potassium Dichromate - 7778-50-9

LD50/oral/rat = 48 mg/kg Oral LD50 Rat

25 mg/kg [RTECS]

LD50/oral/mouse = No information available

LD50/dermal/rat = 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

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 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
<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u>	
Chronic Toxicity	<p>Skin: Repeated or prolonged skin contact can produce eczematous allergic contact dermatitis with deep ulcers that do not heal.</p> <p>Inhalation: Repeated or prolonged inhalation can cause chronic rhinitis, coughing, dyspnea, wheezing, substernal pain, asthma, perforation of the nasal septum, and mucous membrane injury.</p> <p>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.</p>
Sensitization:	May cause sensitization by inhalation and skin contact
Mutagenic Effects:	<p>May affect genetic material</p> <p>Mutations in microorganisms</p> <p>Experiments with bacteria and/or yeast have shown mutagenic effects</p> <p>Mutagenic effects in mammalian somatic cells</p> <p>Cytogenic analysis - hamster ovary</p> <p>DNA damage - hamster ovary</p> <p>Cytogenic Analysis: human lymphocyte</p> <p>Cytogenic analysis (hamster lung)</p>
Carcinogenic effects:	Carcinogenic.

		Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
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	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

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.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:

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

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

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal 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

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Potassium Dichromate	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN3086
Proper Shipping Name: Toxic solids, oxidizing, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: 5.1
Packing Group: I
ERG No: 141
Marine Pollutant: No data available
DOT RQ (lbs): No information available

Symbol(s): G

TDG (Canada)

UN-No: UN3086
Proper Shipping Name: Toxic solid, oxidizing, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: (5.1)
Packing Group: I
Description: No information available

14. TRANSPORT INFORMATION

ADR

UN-No: UN3086
Proper Shipping Name: Toxic solid, oxidizing, n.o.s.
Hazard Class: 6.1
Packing Group: I
Subsidiary Risk: 5.1
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: UN3086
Proper Shipping Name: Toxic solid, oxidizing, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: 5.1
Packing Group: I
Description: No information available
IMDG Page: No information available
Marine Pollutant No information available
EMS: F-A
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: UN3086
Proper Shipping Name: Toxic solid, oxidizing, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: 5.1
Packing Group: I
Classification Code: No information available
Description: No information available

ICAO

UN-No: UN3086
Proper Shipping Name: Toxic solid, oxidizing, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: 5.1
Packing Group: I
Description: No information available

IATA

UN-No: UN3086
Proper Shipping Name: Toxic solid, oxidizing, n.o.s.
Hazard Class: 6.1
Subsidiary Risk: 5.1
Packing Group: I
ERG Code: 6X
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Potassium Dichromate	Present R	Present KE-29094	Present	Present (1)-278	Present	Present	Present 231-906-6

U.S. Regulations

Potassium Dichromate

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 1564

New Jersey - Discharge Prevention - List of Hazardous Substances: Present

Pennsylvania RTK: Environmental hazard

Pennsylvania RTK - Environmental Hazard List Present

Pennsylvania RTK - Special Hazardous Substances Present

New York Release Reporting - List of Hazardous Substances:

= 10 lb RQ

Louisiana Reportable Quantity List for Pollutants: 100 lb. RQ (Listed as chromium compounds)

California Directors List of Hazardous Substances: Present

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

Chemicals Known to the State of California to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Potassium Dichromate	Carcinogen (listed as Chromium (VI) compounds)	Developmental toxicity (listed as Chromium (VI) compounds)	Male reproductive toxicity (listed as chromium hexavalent compounds)	Female reproductive toxicity (listed as Chromium hexavalent compounds)

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Potassium Dichromate	= 4.54 kg final RQ = 10 lb final RQ	None	None	Chromium compounds	0.1%

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Potassium Dichromate	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

C Oxidizing materials

D1A Very toxic materials

D2A Very toxic materials

D2B Toxic materials

Potassium Dichromate

C D1A D2A D2B

Canada Controlled Products Regulation:

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

Potassium Dichromate

Components	WHMIS Ingredient Disclosure List -
Potassium Dichromate	0.1 %

Inventory

Components	Canada (DSL)	Canada (NDSL)
Potassium Dichromate	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Potassium Dichromate	Not listed	Not listed

EU Classification

R-phrase(s)

R21 - Harmful in contact with skin.
R25 - Toxic if swallowed.
R26 - Very toxic by inhalation.
R34 - Causes burns.
R45 - May cause cancer.
R46 - May cause heritable genetic damage.
R50 - Very toxic to aquatic organisms.
R53 - May cause long-term adverse effects in the aquatic environment.
R60 - May impair fertility.
R61 - May cause harm to the unborn child.
R 8 - Contact with combustible material may cause fire.
R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R42/43 - May cause sensitization by inhalation and skin contact.

S -phrase(s)

S53 - Avoid exposure - obtain special instructions before use.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60 - This material and its container must be disposed of as hazardous waste.
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

Components	Classification	Concentration Limits:	Safety Phrases
------------	----------------	-----------------------	----------------

Potassium Dichromate	Xn; R21 T; R25-48/23 T+; R26 C; R34 R42/43 Carc.Cat.2; R45 Muta.Cat.2; R46 N; R50-53 Repr.Cat.2; R60-61 O; R8	25%≤C: T+,N; R45-46-60-61-21-25-26-34-42/43-48/23-50/53 10%≤C<25%: T+,N; R45-46-60-61-22-26-34-42/43-48/23-51/53 7%≤C<10%: T+,N; R45-46-60-61-22-26-36/37/38-42/43-48/20-51/53 5%≤C<7%: T,N; R45-46-60-61-22-23-36/37/38-42/43-48/20-51/53 3%≤C<5%: T,N; R45-46-60-61-22-23-42/43-48/20-51/53 2.5%≤C<3%: T,N; R45-46-60-61-23-42/43-48/20-51/53 1%≤C<2.5%: T; R45-46-60-61-23-42/43-48/20-52/53 0.5%≤C<1%: T; R45-46-60-61-20-42/43-52/53 0.25%≤C<0.5%: T; R45-46-20-42/43-52/53 0.2%≤C<0.25%: T; R45-46-20-42/43 0.1%≤C<0.2%: T; R45-46-20	S53 S45 S60 S61
----------------------	--	---	-----------------

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xn - Harmful.

T - Toxic

T+ - Very toxic.

C - Corrosive.

N - Dangerous for the environment.

O - Oxidising.

T+



T



C



Xn



O



N



16. OTHER INFORMATION

16. OTHER INFORMATION

Preparation Date: 01/01/2019
Revision Date: N/A
Prepared by: -

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. DSI Chemicals & Laboratory Products, assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Dawn Scientific Inc assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet