

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** POTASSIUM CHROMATE

### Other means of identification

**Product No.:** 3058, 6870

### Recommended use and restriction on use

**Recommended use:** Not available.

**Restrictions on use:** Not known.

### Details of the supplier of the safety data sheet

#### Manufacturer

**Company Name:** Avantor Performance Materials, Inc.  
**Address:** 3477 Corporate Parkway, Suite 200  
Center Valley, PA 18034

**Telephone:** Customer Service: 855-282-6867

**Fax:** 610-573-2610  
**Contact Person:** Environmental Health & Safety  
**E-mail:** info@avantormaterials.com

### Emergency telephone number:

24 Hour Emergency: 908-859-2151  
Chemtrec: 800-424-9300

## 2. Hazard(s) identification

### Hazard Classification

#### Health Hazards

Acute toxicity (Oral)	Category 3
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Skin sensitizer	Category 1
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1B
Specific Target Organ Toxicity - Single Exposure	Category 3

#### Environmental Hazards

Acute hazards to the aquatic environment	Category 1
Chronic hazards to the aquatic environment	Category 1

### Label Elements

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Toxic if swallowed.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
May cause respiratory irritation.  
May cause genetic defects.  
May cause cancer.  
Very toxic to aquatic life with long lasting effects.

**Precautionary Statement**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

**Response:** IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment (see this label). IF exposed or concerned: Get medical advice/attention. Collect spillage.

**Storage:** Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None.

**3. Composition/information on ingredients**

**Substances**

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
POTASSIUM CHROMATE		7789-00-6	99 - 100%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4. First-aid measures**

<b>General information:</b>	Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
<b>Ingestion:</b>	Call a physician or poison control center immediately. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>Inhalation:</b>	Move to fresh air. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Skin Contact:</b>	Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation persists after washing. In case of irritation from airborne exposure, move to fresh air.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** Toxic if swallowed. Irritating to eyes, respiratory system and skin.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically. Symptoms may be delayed.

**5. Fire-fighting measures**

**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Extinguish with foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing media:** None known.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

<b>Methods and material for containment and cleaning up:</b>	Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.
<b>Notification Procedures:</b>	Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.
<b>Environmental Precautions:</b>	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling:</b>	Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid breathing dust or vapor. Do not taste or swallow. Do not eat, drink or smoke when using the product. Use only with adequate ventilation. Wash hands thoroughly after handling. See Section 8 of the SDS for Personal Protective Equipment.
<b>Conditions for safe storage, including any incompatibilities:</b>	Keep in a cool, well-ventilated place. Store in a dry place.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
POTASSIUM CHROMATE - as Cr	TWA	0.05 mg/m3	US. ACGIH Threshold Limit Values (2011)
POTASSIUM CHROMATE - as Cr(VI)	REL	0.001 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
POTASSIUM CHROMATE	TWA	0.005 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (02 2006)
	OSHA_AC T	0.0025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) (02 2006)
POTASSIUM CHROMATE - as CrO3	Ceiling	0.1 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
POTASSIUM CHROMATE	Ceiling	0.1 mg/m3	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)

#### Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
POTASSIUM CHROMATE (Total chromium: Sampling time: End of shift at end of work week.)	25 µg/l (Urine)	ACGIH BEL (03 2013)
POTASSIUM CHROMATE (Total chromium: Sampling time: Increase during shift.)	10 µg/l (Urine)	ACGIH BEL (03 2013)

<b>Appropriate Engineering Controls</b>	No data available.
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## Individual protection measures, such as personal protective equipment

<b>General information:</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.
<b>Eye/face protection:</b>	Wear safety glasses with side shields (or goggles) and a face shield.
<b>Skin Protection</b>	
<b>Hand Protection:</b>	Chemical resistant gloves
<b>Other:</b>	Wear suitable protective clothing and gloves.
<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator.
<b>Hygiene measures:</b>	Provide eyewash station and safety shower. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using the product. Wash contaminated clothing before reuse.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	solid
<b>Form:</b>	Crystals or powder.
<b>Color:</b>	Yellow
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	8.5 - 10.0 (50 g/l, 20 °C)
<b>Melting point/freezing point:</b>	975 °C
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	not applicable
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	6.7
<b>Relative density:</b>	2.73 (20 °C)
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	629 g/l (20 °C)
<b>Solubility (other):</b>	alcohol: Practically Insoluble
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

### Other information

**Molecular weight:** 194.19 g/mol (CrH<sub>2</sub>O<sub>4</sub>.2K)

## 10. Stability and reactivity

<b>Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of Hazardous Reactions:</b>	Hazardous polymerization does not occur.
<b>Conditions to Avoid:</b>	Contact with incompatible materials.
<b>Incompatible Materials:</b>	Reducing agents. Flammable material.
<b>Hazardous Decomposition Products:</b>	By heating and fire, toxic vapors/gases may be formed.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion:</b>	Toxic if swallowed.
<b>Inhalation:</b>	May cause irritation to the respiratory system.
<b>Skin Contact:</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye irritation.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral</b>	
<b>Product:</b>	LD 50 (Mouse): 180 mg/kg
<b>Dermal</b>	
<b>Product:</b>	No data available.
<b>Inhalation</b>	
<b>Product:</b>	No data available.
<b>Repeated dose toxicity</b>	
<b>Product:</b>	No data available.

#### Skin Corrosion/Irritation

**Product:** Causes skin irritation.

#### Serious Eye Damage/Eye Irritation

**Product:** Causes serious eye irritation.

#### Respiratory or Skin Sensitization

**Product:** May cause an allergic skin reaction.

#### Carcinogenicity

**Product:** May cause cancer.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

POTASSIUM CHROMATE Overall evaluation: 1. Carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

POTASSIUM CHROMATE Known To Be Human Carcinogen.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** May cause genetic defects.

**In vivo**

**Product:** May cause genetic defects.

**Reproductive toxicity**

**Product:** No components toxic to reproduction

**Specific Target Organ Toxicity - Single Exposure**

**Product:** Respiratory tract irritation.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** Oral: testes, Central nervous system. - Causes damage to organs through prolonged or repeated exposure.

**Aspiration Hazard**

**Product:** Not classified

**Other effects:** None known.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Specified substance(s):**

POTASSIUM LC 50 (Bluegill (*Lepomis macrochirus*), 96 h): 170 mg/l Mortality  
CHROMATE LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 38.8 - 40.9 mg/l Mortality

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

POTASSIUM LC 50 (Water flea (*Daphnia magna*), 24 h): 2.98 mg/l Mortality  
CHROMATE LC 50 (Opossum shrimp (*Americamysis bahia*), 24 h): > 10 mg/l Mortality  
LC 50 (Water flea (*Daphnia magna*), 48 h): 0.55 mg/l Mortality  
LC 50 (Opossum shrimp (*Americamysis bahia*), 48 h): 4.3 mg/l Mortality  
LC 50 (Water flea (*Daphnia magna*), 96 h): 0.31 mg/l Mortality

**Chronic hazards to the aquatic environment:**

**Fish**  
**Product:** No data available.

**Aquatic Invertebrates**  
**Product:** No data available.

**Toxicity to Aquatic Plants**  
**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**  
**Product:** There are no data on the degradability of this product.

**BOD/COD Ratio**  
**Product:** No data available.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**  
**Product:** No data available on bioaccumulation.

**Partition Coefficient n-octanol / water (log Kow)**  
**Product:** No data available.

**Mobility in Soil:** No data available.

**Other Adverse Effects:** Very toxic to aquatic life with long lasting effects.

**13. Disposal considerations**

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

**DOT**

UN Number:	UN 3288
UN Proper Shipping Name:	Toxic solid, inorganic, n.o.s.(POTASSIUM CHROMATE)
Transport Hazard Class(es)	
Class(es):	6.1
Label(s):	6.1
Packing Group:	III
Marine Pollutant:	Yes
Special precautions for user:	—

**IMDG**

UN Number: UN 3288  
 UN Proper Shipping Name: TOXIC SOLID, INORGANIC, N.O.S.(POTASSIUM CHROMATE)  
 Transport Hazard Class(es)  
   Class(es): 6.1  
   Label(s): 6.1  
   EmS No.: F-A, S-A  
 Packing Group: III  
 Marine Pollutant: Yes  
 Special precautions for user: -

**IATA**

UN Number: UN 3288  
 Proper Shipping Name: Toxic solid, inorganic, n.o.s.(POTASSIUM CHROMATE)  
 Transport Hazard Class(es)  
   Class(es): 6.1  
   Label(s): 6.1  
 Marine Pollutant: Yes  
 Packing Group: III  
 Special precautions for user: -

**15. Regulatory information**

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
 None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
POTASSIUM CHROMATE	10 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Acute (Immediate)  
 Chronic (Delayed)

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
POTASSIUM CHROMATE	10 lbs.

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
POTASSIUM CHROMATE	10000 lbs

**SARA 313 (TRI Reporting)**

<u>Chemical Identity</u>	<u>Reporting threshold for other users</u>	<u>Reporting threshold for manufacturing and processing</u>
POTASSIUM CHROMATE	10000 lbs	25000 lbs.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
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POTASSIUM  
CHROMATE

Reportable quantity: 10 lbs.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**  
None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

POTASSIUM CHROMATE Carcinogenic.  
POTASSIUM CHROMATE Male reproductive toxin.  
POTASSIUM CHROMATE Female reproductive toxin.  
POTASSIUM CHROMATE Developmental toxin.

**US. New Jersey Worker and Community Right-to-Know Act**

Chemical Identity

POTASSIUM CHROMATE

**US. Massachusetts RTK - Substance List**

Chemical Identity

POTASSIUM CHROMATE

**US. Pennsylvania RTK - Hazardous Substances**

Chemical Identity

POTASSIUM CHROMATE

**US. Rhode Island RTK**

Chemical Identity

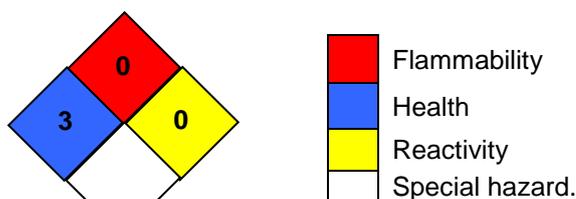
POTASSIUM CHROMATE

**Inventory Status:**

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

**16. Other information, including date of preparation or last revision**

**NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

**Issue Date:** 04-09-2015

SDS\_US - SDS000001035

**Revision Date:** No data available.

**Version #:** 1.0

**Further Information:** No data available.

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