



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name CHROMATE, 1,000 ppm, ION CHROMATOGRAPHY STANDARD SOLUTION
Catalog # 3759
Version # 01
Revision date 04-Sep-2009
CAS # Mixture
Manufacturer information GFS Chemicals, Inc.
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Powell, OH 43065 US
www.gfschemicals.com
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Toll Free 800-858-9682
Emergency Assistance Chemtrec 800-424-8300

2. Hazards Identification

Emergency overview CAUTION
Cancer hazard. Prolonged exposure may cause chronic effects.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Eyes Contact may irritate or burn eyes. Avoid contact with eyes.

Skin May cause skin irritation. Avoid contact with the skin.

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard. Harmful if inhaled. May cause cancer by inhalation. Do not breathe dust/fume/gas/mist/vapors/spray.

Ingestion Harmful if swallowed. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. Do not ingest.

Potential environmental effects May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Hazardous components	CAS #	Percent
POTASSIUM CHROMATE	7789-00-6	0.1 - 1
Non-hazardous components	CAS #	Percent
WATER	7732-18-5	90 - 100

Composition comments

US OSHA Table Z-1-A: Ceiling Limit Value (mg/m3)

POTASSIUM CHROMATE 7789-00-6 MGM3 - 0.1

US OSHA Table Z-2: Ceiling Limit Value

POTASSIUM CHROMATE 7789-00-6 0.1 MGM3

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Skin contact Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim 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. Get medical attention immediately.

Ingestion Rinse mouth. DO NOT induce vomiting, give ice to suck, water to drink, and get medical attention immediately. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Notes to physician In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General advice IF exposed or concerned: Get medical advice/attention. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties No unusual fire or explosion hazards noted. The product is not flammable.

Extinguishing media

Suitable extinguishing media Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Protection of firefighters

Protective equipment and precautions for firefighters In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out.

Specific methods In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Keep upwind. Keep out of low areas. Keep people away from and upwind of spill/leak. Ventilate closed spaces before entering them. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods for containment Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up Should not be released into the environment. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water.

Never return spills in original containers for re-use.

7. Handling and Storage

Handling Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Wear personal protective equipment. Avoid release to the environment. Handle and open container with care.

Storage Store in a well-ventilated place. Keep container tightly closed. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Personal protective equipment

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Chemical resistant gloves.

Eye / face protection Wear chemical goggles.

Skin protection Wear protective gloves.

General hygiene considerations Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Clear.
Color	Yellow.
Odor	Odorless.
Odor threshold	Not available.
Physical state	Liquid.
Form	Liquid.
pH	Not available.
Melting point	32 °F (0 °C)
Freezing point	Not available.
Boiling point	212 °F (100 °C)
Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	1
Relative density	1 g/cm ³
Solubility (water)	completely miscible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Percent volatile	99.83 % estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Incompatible materials	None known.
Hazardous decomposition products	No hazardous decomposition products are known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects

Acute Oral: LD 50

POTASSIUM CHROMATE 7789-00-6 Mouse 180 mg/kg

Acute Toxicity other routes: LD 50

POTASSIUM CHROMATE 7789-00-6 Rabbit 11 mg/kg Intramuscular
POTASSIUM CHROMATE 7789-00-6 Mouse 32 mg/kg Intraperitoneal

Toxicology data for the preparation

Acute LD50: 18824 mg/kg, Mouse, Other, estimated

Chronic effects Hazardous by OSHA criteria. Prolonged exposure may cause chronic effects.

Carcinogenicity Hazardous by OSHA criteria. Cancer hazard. Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs: Evidence of carcinogenicity in humans

POTASSIUM CHROMATE 7789-00-6 Sufficient data.

US ACGIH Threshold Limit Values: A1 carcinogen

POTASSIUM CHROMATE 7789-00-6 Group A1 Confirmed human carcinogen.

US NTP Report on Carcinogens: Known carcinogen

POTASSIUM CHROMATE 7789-00-6 Known carcinogen.

US OSHA Specifically Regulated Substances: Cancer hazard

POTASSIUM CHROMATE 7789-00-6 Cancer hazard.

12. Ecological Information

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment.

Invertebrate Toxicity: EC 50

POTASSIUM CHROMATE	7789-00-6	Amphipod (Crangonyx pseudogracilis) 0.66 - 1.04 mg/l 96 h Renewal Intoxication
POTASSIUM CHROMATE	7789-00-6	Calanoid copepod (Eudiaptomus padanus padanus) 8.6 - 11.9 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Cyclopoid copepod (Cyclops abyssorum prealpinus) 8 - 12 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Amphipod (Crangonyx pseudogracilis) 2.13 - 3.33 mg/l 48 h Renewal Intoxication
POTASSIUM CHROMATE	7789-00-6	Daggerblade grass shrimp (Palaemonetes pugio) > 100 mg/l 4 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Daggerblade grass shrimp (Palaemonetes pugio) > 100 mg/l 8 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Daggerblade grass shrimp (Palaemonetes pugio) 14.1 - 32.8 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Daggerblade grass shrimp (Palaemonetes pugio) 5.5 - 23.6 mg/l 96 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Opossum shrimp (Americamysis bahia) 4.2 - 7.14 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Daggerblade grass shrimp (Palaemonetes pugio) > 100 mg/l 24 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Opossum shrimp (Americamysis bahia) 4.28 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Opossum shrimp (Americamysis bahia) 5.11 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Opossum shrimp (Americamysis bahia) 5.4 - 6.9 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Opossum shrimp (Americamysis bahia) 6.48 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Opossum shrimp (Americamysis bahia) 6.72 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Opossum shrimp (Americamysis bahia) 7.14 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Opossum shrimp (Americamysis bahia) 7.23 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Scud (Hyalella azteca) 0.323 - 1.23 mg/l 96 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.00512 - 0.0107 mg/l 96 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.00962 - 0.0245 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.0172 - 0.0214 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Opossum shrimp (Americamysis bahia) 4.21 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.0213 - 0.0347 mg/l 24 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.026 - 0.039 mg/l 24 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.0268 - 0.0403 mg/l 24 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.0591 - 0.0752 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.0706 - 0.109 mg/l 24 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.123 - 0.24 mg/l 24 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.137 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.144 - 0.296 mg/l 24 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.74 - 0.99 mg/l 24 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 1.1 - 1.41 mg/l 24 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.024 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.039 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.06 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.08 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.1 mg/l 96 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.11 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.13 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.15 - 0.19 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.17 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.22 mg/l 48 h Renewal Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.22 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia pulex) 0.26 mg/l 48 h Static Intoxication
POTASSIUM CHROMATE	7789-00-6	Water flea (Daphnia magna) 0.0204 - 0.0366 mg/l 24 h Static Intoxication

Micro-organisms Toxicity: LC 50

POTASSIUM CHROMATE 7789-00-6 Diatom (Nitzschia linearis) 7.8 mg/l 5 d Static Mortality

Environmental effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence and degradability Not available.

13. Disposal Considerations

Waste codes D007: Waste Chromium

Disposal instructions Dispose of this material and its container to hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

Waste from residues / unused products Not applicable.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

POTASSIUM CHROMATE 7789-00-6 0.1 % N090

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

POTASSIUM CHROMATE 7789-00-6 N090 Listed.

CERCLA (Superfund) reportable quantity

POTASSIUM CHROMATE, REAGENT (ACS): 10.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

POTASSIUM CHROMATE 7789-00-6 Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

POTASSIUM CHROMATE 7789-00-6 Listed: February 27, 1987 Carcinogenic.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

POTASSIUM CHROMATE 7789-00-6 Listed: December 19, 2008 Developmental toxin.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

POTASSIUM CHROMATE 7789-00-6 Listed: December 19, 2008 Female reproductive toxin.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

POTASSIUM CHROMATE 7789-00-6 Listed: December 19, 2008 Male reproductive toxin.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

POTASSIUM CHROMATE 7789-00-6 500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance

POTASSIUM CHROMATE 7789-00-6 Listed.

US - Pennsylvania RTK - Hazardous Substances: Special hazard

POTASSIUM CHROMATE 7789-00-6 Special hazard.

16. Other Information**Further information**

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 1*
Flammability: 0
Physical hazard: 1

NFPA ratings

Health: 1
Flammability: 0
Instability: 1

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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