



Material Safety Data Sheet Chromium AA std 1000ppm

Section 1 - Chemical Product and Company Identification

MSDS Name:

Chromium AA std 1000ppm

Catalog Numbers:

LC13120

Synonyms:

Chromium reference solution, 1000ppm

Company Identification:

LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
7778-50-9	Potassium dichromate	0.2

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Orange***Caution!** *Contains hexavalent chromium, which is known to be a cancer hazard.***Target Organs:** *None known.***Potential Health Effects****Eye:**

May cause mild eye irritation.

Skin:

May cause mild skin irritation. Low hazard for usual industrial handling.

Ingestion:

May cause mild digestive tract irritation. Ingestion of chromium in higher concentrations may cause dizziness, thirst, abdominal pain, vomiting, nausea, shock, oliguria or anuria. Ingestion of over 5 grams chromium results in death from kidney failure and subsequent nitrogen increase.

Inhalation:

May cause allergic respiratory reaction.



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Chronic:

May cause dermatitis and conjunctivitis. May cause respiratory tract cancer. May cause liver and kidney damage. May cause cancer in humans. Laboratory experiments have resulted in mutagenic effects. Possible risk of harm to the unborn child. May impair fertility.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.

Ingestion:

Get medical aid at once. If victim is conscious, give 2-4 glasses of water and induce vomiting.

Inhalation:

Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

Negligible fire and explosion hazard when exposed to heat or flame. Move container if possible, avoid breathing vapors or dust.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 7732-18-5: Not published.

CAS# 7778-50-9: H-4, F-0, I-1, special hazard - OX.

Explosion Limits:

Lower: N/A Upper: N/A

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal.



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Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

Storage:

Store capped at room temperature. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Provide local exhaust or general dilution ventilation, to keep airborne levels low.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Potassium dichromate	0.05mg/m ³ TWA (as Cr) (listed under Chromium (IV) compound, water-soluble)	0.001mg/m ³ TWA (as Cr) 0.15mg/m ³ IDLH (as Cr(VI)) (listed as Chromates)	5mg/ m ³ TWA (listed under Chromium (VI) compounds)

OSHA Vacated PELs:**Personal Protective Equipment****Eyes:**

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Not required for normal use. Firefighting-- any self-contained breathing apparatus with full facepiece operated in pressure-demand mode.

Section 9 - Physical and Chemical Properties

Physical State:	Clear liquid
Color:	Orange
Odor:	Odorless
pH:	Slightly acidic
Vapor Pressure:	14mm Hg @20°C
Vapor Density:	> air
Evaporation Rate:	< ether
Viscosity:	No information found.
Boiling Point:	> 212°F (> 100.00°C)
Freezing/Melting Point:	< 32°F (< 0.00°C)
Decomposition Temperature:	No information found.
Solubility in water:	Soluble.



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Specific Gravity/Density: 1.0
Molecular Formula: No information found.
Molecular Weight: No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures up to boiling point.

Conditions to Avoid:

Incompatible materials, excess heat, combustible and/or organic materials.

Incompatibilities with Other Materials:

Reducing agents, acids, strong bases, acetic anhydride, hydrazine, hydroxylamine, nitric acid, oils, hydrochloric acid.

Hazardous Decomposition Products:

Oxygen, oxides of potassium, chromium dioxide, toxic chromium oxide fumes

Hazardous Polymerization:

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 7778-50-9: HX7680000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 7778-50-9:

Oral, mouse: LD50 = 190 mg/kg.

Draize test, rabbit, eye: 140mg severe

Oral, rat: LD50 = 25mg/kg;

Skin, rabbit: LD50 = 14mg/kg

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7778-50-9:

ACGIH:A1 – Confirmed Human carcinogen (listed as ‘Chromium (VI) compounds – water – soluble)

California: carcinogen (listed as Cr(VI) compounds)

NTP: Known carcinogen (listed as Cr(VI) compounds)

IARC: Group I carcinogen

Epidemiology:

Certain hexavalent chromium compounds are considered carcinogenic based on epidemiological studies on workers and experimental studies on animals.

Teratogenicity:

Oral, rat: TDLo = 1 gm/kg (female 0-19 day(s) after conception) Specific Developmental Abnormalities – musculoskeletal system.; Oral mouse: TDLo = 1 gm/kg (female 20 day(s) pre-mating) Effects on Embryo or Fetus – extra – embryonic structures (e.g., placenta, umbilical cord) and effects on Embryo or Fetus – fetotoxicity (except death, e.g., stunted fetus).



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Reproductive:

Oral, rat: TDLo = 525 mg/kg (female 21 day(s) after conception) Fertility – pre – implantation mortality (e.g. reduction in number of implants per female; total number of implants per corpora lutea) and Fertility – post implantation mortality (e.g. dead and/or resorbed implants per total number of implants).

Mutagenicity:

Micronucleus test: Human, Lymphocyte = 300 ug/L.; Morphological Transformation: Human, Fibroblast = 200 nmol/L.; DNA Damage: Human, Fibroblast = 500 nmol/L.; Unscheduled DNA Synthesis: Human, Fibroblast = 50 umol/L.; DNA Inhibition: Human, Fibroblast = 100 umol/L.; DNA Inhibition: Human, HeLa cell = 13 umol/L.; Mutation Test Systems – not otherwise specified: Human, Fibroblast = 100 umol/L.

Neurotoxicity:

No information found.

Section 12 - Ecological Information

Most of the chromium is surface waters is present in particulate form as sediment. Chromium is present usually as Cr (III) in the soil and is characterized by its lack of mobility, except where Cr(VI) is involved. Dangerous to aquatic life in high concentrations.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 7778-50-9 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 7778-50-9: final RQ = 10 pounds (4.54 kg)

CERCLA/SARA Section 313:

This material contains Potassium dichromate (listed as Chromium (VI) compounds), 0.2%, CAS# 7778-50-9, which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.



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OSHA - Highly Hazardous:

None of the components are on this list.

US State

State Right to Know:

Potassium dichromate can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Massachusetts and Minnesota.

California Regulations:

Warning: This product contains Potassium Dichromate, listed as Chromium (VI) compounds, a chemical known to the State of California to cause cancer.

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 7778-50-9 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7778-50-9 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: August 30, 1998

Revision Date: August 3, 2007

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