


Strontium Chromate		Pricing >
Strontium Chromate Sputtering Target		Pricing >
Linear Formula	SrCrO ₄	
Pubchem CID	24599	
MDL Number	N/A	
EC No.	232-142-6	
IUPAC Name	strontium dioxido(dioxo)chromium	
Beilstein/Reaxys No.	N/A	
SMILES	[Sr+2].[O-][Cr]([O-])(=O)=O	
Inchl Identifier	InChI=1S/Cr.4O.Sr/q;;;2*-1;+2	
Inchl Key	NVKTUNLPFJHLCG-UHFFFAOYSA-N	
Signal Word	N/A	
Hazard Statements	N/A	
Hazard Codes	N/A	
Risk Codes	N/A	
Safety Statements	N/A	
Transport Information	N/A	
GHS Pictograms	GHS03 Oxidizer 	

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SAFETY DATA SHEET

Date Accessed: 05/20/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #7789-06-2

Relevant identified uses of the substance:
Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351

Emergency telephone number:
Domestic, North America +1 800-424-9300
International +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture in
accordance with 29 CFR 1910 (OSHA HCS)

GHS03 Flame over circle

Ox. Sol. 3 H272 May intensify fire; oxidizer.

GHS08 Health hazard

Carc. 1A H350 May cause cancer.

Hazards not otherwise classified

No data available

GHS label elements

GHS label elements, including precautionary
statements

Hazard pictograms



GHS03 GHS08

Signal word

Danger

Hazard statements

H272 May intensify fire; oxidizer.

H350 May cause cancer.

Precautionary statements

P221

Take any precaution to avoid mixing with
combustibles.

P210

Keep away from heat/sparks/open flames/hot
surfaces. - No smoking.

P201

Obtain special instructions before use.

P220

Keep/Store away from clothing/combustible materials.

P280

Wear protective gloves/protective clothing/eye
protection/face protection.

P281

Use personal protective equipment as required.

P308+P313 IF exposed or concerned: Get medical
advice/attention.

P370+P378 In case of fire: Use for extinction: CO2,
powder or water spray.
P405
Store locked up.
P501
Dispose of contents/container in accordance with
local/regional/national/international regulations.
WHMIS classification
C - Oxidizing materials
D1B - Toxic material causing immediate and serious
toxic effects
D2A - Very toxic material causing other toxic effects
Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)
Health (acute effects) = 3
Flammability = 0
Physical Hazard = 2
Other hazards
Results of PBT and vPvB assessment
PBT:
N/A
vPvB:
N/A

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
CAS No. / Substance Name:
7789-06-2 Strontium chromate
Identification number(s):
EC number:
232-142-6
Index number:
024-009-00-4

SECTION 4. FIRST AID MEASURES

Description of first aid measures
If inhaled:
Supply patient with fresh air. If not breathing, provide
artificial respiration. Keep patient warm.
Seek immediate medical advice.
In case of skin contact:
Immediately wash with soap and water; rinse
thoroughly.
Seek immediate medical advice.
In case of eye contact:
Rinse opened eye for several minutes under running
water. Consult a physician.

If swallowed:
Seek medical treatment.
Information for doctor
Most important symptoms and effects, both acute and delayed
May cause cancer.
Suspected of causing cancer by inhalation.
Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing agents
Carbon dioxide, extinguishing powder or water spray.
Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents
Halocarbon extinguisher
Special hazards arising from the substance or mixture
This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.
If this product is involved in a fire, the following can be released:
Chromium oxides
Strontium oxide
Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Environmental precautions:
Do not allow material to be released to the environment without official permits.
Methods and materials for containment and cleanup:
Dispose of contaminated material as waste according to section 13.
Prevention of secondary hazards:
Acts as an oxidizing agent on organic materials such as wood, paper and fats
Keep away from combustible material.

Reference to other sections
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Open and handle container with care.

Information about protection against explosions and fires:

Substance/product can reduce the ignition temperature of flammable substances.

This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Store away from flammable substances.

Store away from reducing agents.

Do not store with organic materials.

Store away from metal powders.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well-sealed containers.

Specific end use(s)

No data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

7789-06-2 Strontium chromate (100.0%)

PEL (USA)

Long-term value: 0.005 mg/m³
as Cr, see 29 CFR 1910.1026
REL (USA)

Long-term value: 0.001 mg/m³
as Cr; See Pocket Guide Apps. A and C
TLV (USA)

Long-term value: 0.0005 mg/m³

EL (Canada) Long-term value: 0.0005 mg/m³
ACIGH A2

EV (Canada) Long-term value: 0.0005 mg/m³
as Cr

Ingredients with biological limit values:
7789-06-2 Strontium chromate (100.0%)

BEI (USA) 25 µg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: Total chromium (fume)

10 µg/L

Medium: urine

Time: increase during shift

Parameter: Total chromium (fume)

Additional information:

No data

Exposure controls

Personal protective equipment

Follow typical protective and hygienic practices for
handling chemicals.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing
immediately.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Maintain an ergonomically appropriate working
environment.

Breathing equipment:

Use suitable respirator when high concentrations are
present.

Recommended filter device for short term use:

Use a respirator with type P100 (USA) or P3 (EN 143)
cartridges as a backup to engineering controls. Risk
assessment should be performed to determine if air-
purifying respirators are appropriate. Only use
equipment tested and approved under appropriate
government standards.

Protection of hands:

Impervious gloves

Inspect gloves prior to use.

Suitability of gloves should be determined both by
material and quality, the latter of which may vary by
manufacturer.

Penetration time of glove material (in minutes)

No data available

Eye protection:

Safety glasses
Body protection:
Protective work clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

Form: Powder

Color: Yellow

Odor: Odorless

Odor threshold: No data available.

pH: N/A

Melting point/Melting range: No data available

Boiling point/Boiling range: No data available

Sublimation temperature / start: No data available

Flash point: N/A

Flammability (solid, gas)

Contact with combustible material may cause fire.

Ignition temperature: No data available

Decomposition temperature: No data available

Autoignition: No data available.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:

Lower: No data available

Upper: No data available

Vapor pressure: N/A

Density at 20 °C (68 °F): 3.895 g/cm³ (32.504 lbs/gal)

Relative density

No data available.

Vapor density

N/A

Evaporation rate

N/A

Solubility in Water (H₂O): Slightly soluble

Soluble

Partition coefficient (n-octanol/water): No data available.

Viscosity:

Dynamic: N/A

Kinematic: N/A

Other information

No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

May intensify fire; oxidizer.

Chemical stability

Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided:
Decomposition will not occur if used and stored according to specifications.
Possibility of hazardous reactions
Reacts with reducing agents
Reacts with flammable substances
Conditions to avoid
No data available
Incompatible materials:
Flammable substances
Reducing agents
Organic materials
Metal powders
Hazardous decomposition products:
Chromium oxides
Strontium oxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity:
Harmful if swallowed.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.
LD/LC50 values that are relevant for classification:
Oral LD50 3118 mg/kg (rat)
Skin irritation or corrosion:
Irritant to skin and mucous membranes.
Eye irritation or corrosion:
Irritating effect.
Sensitization:
No sensitizing effects known.
Germ cell mutagenicity:
The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for this substance.
Carcinogenicity:
May cause cancer.
IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity.
ACGIH A1: Confirmed human carcinogen: Agent is carcinogenic to humans based on epidemiologic studies of, or convincing clinical evidence in, exposed humans.
NTP-K: Known to be carcinogenic: sufficient evidence from human studies.
(inhalation) EPA-A: human carcinogen: sufficient evidence from epidemiologic studies to support a causal association between exposure and cancer.
(inhalation) EPA-K: Known human carcinogens.
(oral) EPA-D: Not classifiable as to human

carcinogenicity: inadequate human and animal evidence of carcinogenicity or no data are available.
(oral) EPA-CBD: Carcinogenic potential cannot be determined.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this substance.
Reproductive toxicity:
No effects known.
Specific target organ system toxicity - repeated exposure:
No effects known.
Specific target organ system toxicity - single exposure:
No effects known.
Aspiration hazard:
No effects known.
Subacute to chronic toxicity:
No effects known.
Additional toxicological information:
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
Carcinogenic categories
OSHA-Ca (Occupational Safety & Health Administration)
Substance is not listed.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity:
No data available
Persistence and degradability
No data available
Bioaccumulative potential
No data available
Mobility in soil
No data available
Ecotoxicological effects:
Remark:
Very toxic for aquatic organisms
Additional ecological information:
Do not allow material to be released to the environment without official permits.
Do not allow product to reach groundwater, water courses, or sewage systems, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
May cause long lasting harmful effects to aquatic life.
Avoid transfer into the environment.
Very toxic for aquatic organisms
Results of PBT and vPvB assessment

PBT:
N/A
vPvB:
N/A
Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Recommendation
Consult official regulations to ensure proper disposal.
Uncleaned packagings:
Recommendation:
Disposal must be made according to official
regulations.
Recommended cleansing agent:
Water, if necessary with cleansing agents.

SECTION 14. TRANSPORT INFORMATION

UN-Number
DOT, IMDG, IATA
UN3087
UN proper shipping name
DOT
Oxidizing solid, toxic, n.o.s. (strontium chromate)
IMDG, IATA
OXIDIZING SOLID, TOXIC, N.O.S. (strontium
chromate)
Transport hazard class(es)
DOT
Class
5.1 Oxidising substances.
Label
5.1+6.1
Class
5.1 (OT2) Oxidizing substances
Label
5.1+6.1
IMDG, IATA
Class
5.1 Oxidising substances.
Label
5.1+6.1
Packing group
DOT, IMDG, IATA
III
Environmental hazards:
Environmentally hazardous substance, solid

Special precautions for user
Warning: Oxidizing substances
EMS Number: F-A,S-Q
Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code
N/A
Transport/Additional information:
DOT
Marine Pollutant (DOT):
No
UN "Model Regulation":
UN3087, Oxidizing solid, toxic, n.o.s. (strontium
chromate), 5.1 (6.1), III

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental
regulations/legislation specific for the substance or
mixture
GHS GHS label elements, including precautionary
statements
Hazard pictograms
GHS03
GHS08
Signal word
Danger
Hazard statements
H272 May intensify fire; oxidizer.
H350 May cause cancer.
Precautionary statements
P221
Take any precaution to avoid mixing with
combustibles.
P210
Keep away from heat/sparks/open flames/hot
surfaces. - No smoking.
P201
Obtain special instructions before use.
P220
Keep/Store away from clothing/combustible materials.
P280
Wear protective gloves/protective clothing/eye
protection/face protection.
P281
Use personal protective equipment as required.
P308+P313 IF exposed or concerned: Get medical
advice/attention.
P370+P378 In case of fire: Use for extinction: CO2,
powder or water spray.
P405
Store locked up.
P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings)

7789-06-2 Strontium chromate

California Proposition 65

Prop 65 - Chemicals known to cause cancer

7789-06-2 Strontium chromate

Prop 65 - Developmental toxicity

Substance is not listed.

Prop 65 - Developmental toxicity, female

7789-06-2 Strontium chromate

Prop 65 - Developmental toxicity, male

7789-06-2 Strontium chromate

Information about limitation of use:

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.

This substance is included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH).

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use)

Substance is listed.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties

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