

SAFETY DATA SHEET

Preparation Date: 1/26/2018

Revision Date: 1/26/2018

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: L1111
Product Name: LITHIUM CHROMATE DIHYDRATE, REAGENT

Other means of identification

Synonyms: No information available
CAS #: 7789-01-7
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Oxidizing solids	Category 3

Label elements

Danger

Hazard statements

Causes skin irritation
 Causes serious eye irritation
 May cause respiratory irritation
 May cause an allergic skin reaction
 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 May cause cancer
 Suspected of causing genetic defects
 Suspected of damaging fertility or the unborn child
 May intensify fire; oxidizer



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Wear respiratory protection
 Wear protective gloves/protective clothing/eye protection/face protection
 Use only outdoors or in a well-ventilated area
 Wash face, hands and any exposed skin thoroughly after handling
 Contaminated work clothing must not be allowed out of the workplace
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Keep away from heat
 Keep/Store away from clothing and other combustible materials
 Take any precaution to avoid mixing with combustibles

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

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. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water

Take off contaminated clothing and wash it before reuse

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

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 %
Lithium Chromate Dihydrate	7789-01-7	100

4. FIRST AID MEASURES

First aid measures

General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. First aider needs to protect himself. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes serious eye irritation Moderately irritating to the eyes Causes skin irritation Moderately irritating to the skin Irritating to respiratory system May cause loss of appetite May cause nausea May cause an allergic skin reaction May cause allergic respiratory reaction Chronic sores (ulcers) on the skin May affect the liver It may affect the kidneys May cause personality and mood changes May affect behavior/central nervous system (tremor, convulsions)
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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: If it is involved in a fire the following can be released: Nitrogen Oxides. Lithium oxides.

Specific hazards: Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.). The product is not flammable, but

it may cause fire when in contact with other material. Contact with combustible or organic materials may cause fire. Will accelerate burning when involved in a fire. Container explosion may occur under fire conditions or when heated.

Special Protective Actions for Firefighters

Specific Methods:

Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after 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:

Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition. 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. 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. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from combustible material. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Deliquescent. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store in a segregated and approved area. Do not store near combustible materials. Store away from incompatible materials.

Incompatible Materials:

Reducing agents
 Combustible materials
 Organic materials
 Hydrazine
 Sulfur
 Acids
 Chromic acid

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Lithium Chromate Dihydrate	7789-01-7	5 µg/m ³ TWA	0.0002 mg/m ³ TWA Cr	0.05 mg/m ³ TWA (as Cr)	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Lithium Chromate Dihydrate	7789-01-7	0.05 mg/m ³ TWA (as Cr)	0.025 mg/m ³ (as Cr)	0.05 mg/m ³ TWA (as Cr)	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Lithium Chromate Dihydrate	7789-01-7	0.05 mg/m ³ TWA (as Cr)	0.05 mg/m ³ TWA (as Cr)

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: Goggles

Skin and body protection: Chemical resistant apron
 Long sleeved clothing
 Gloves

Respiratory protection: Wear respirator with dust filter.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid	Appearance: Crystalline powder.	Color: Yellow.
Odor: Odorless.	Taste No information available.	Formula: LiCrO4.2H2O
Molecular/Formula weight: 165.92	Flammability: No information available	Flashpoint (°C/°F): No information 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	Melting point/range(°C/°F): No information available	Decomposition temperature(°C/°F): 75 deg. C/167 deg. F
Boiling point/range(°C/°F): No information available	Bulk density: No information available	Density (g/cm3): 2.15
Specific gravity: No information available	pH: No information available	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): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Very soluble in water	

10. STABILITY AND REACTIVITY

Reactivity

No information available

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Exposure to moist air. Exposure to moisture. Incompatible materials.

Incompatible Materials: Reducing agents
Combustible materials
Organic materials
Hydrazine
Sulfur
Acids
Chromic acid

Hazardous decomposition products: No information available.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity

Component Information

Lithium Chromate Dihydrate	
CAS-No.	7789-01-7

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
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 = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

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

Skin Contact: Causes skin irritation. Moderately irritating to the skin.
Eye Contact: Causes serious eye irritation. Moderately irritating to the eyes.
Inhalation Irritating to respiratory system.
Ingestion No information available.
Aspiration hazard No information available.

Product code: L1111

Product name: LITHIUM CHROMATE
DIHYDRATE, REAGENT

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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Repeated exposure can cause loss of appetite, nausea, muscle cramps, convulsions, tremors, and personality changes. Long-term exposure can cause deep slow-healing ulcers on the skin and an ulcer or hole in the "bone" (septum) dividing the inner nose. Chronic exposure may affect the liver and kidneys. Prolonged or repeated exposure may cause allergic respiratory and skin reactions.

Sensitization: May cause sensitization by inhalation and skin contact.

Mutagenic Effects: Suspected of causing genetic defects

Carcinogenic effects: Carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Lithium Chromate Dihydrate	7789-01-7	Group 1 - Carcinogenic to Humans Monograph 100C [2012] Monograph 49 [1990] evaluated as a group (for Chromium VI compounds)	Group A1 - Confirmed Human Carcinogen (for Chromium VI inorganic water soluble compounds)	Known Human Carcinogen Chromium hexavalent compounds	Present see 29 CFR 1910.1026	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity Suspected of damaging 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 Respiratory system.

STOT - repeated exposure No information available.

Target Organs: Liver. Kidneys. Skin. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

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	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Lithium Chromate Dihydrate	7789-01-7	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1479
Proper Shipping Name: Oxidizing solid, n.o.s. (lithium chromate)
Hazard Class: 5.1
Subsidiary Class: No information available
Packing group: III
Emergency Response Guide Number: 140
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: 62, IB8, IP3, T1, TP33
Symbol(s): [DOT]: (G) - Identifies proper shipping names for which one or more technical names of the hazardous material must be entered in parentheses, in association with the basic description.
Description: UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

TDG (Canada)

UN-No: UN1479
Proper Shipping Name: Oxidizing solid, n.o.s. (lithium chromate)
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant: No Information available
Description: UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

ADR

UN-No: UN1479
Proper Shipping Name: Oxidizing solid, n.o.s. (lithium chromate)
Hazard Class: 5.1
Packing Group: III
Subsidiary Risk: No information available
Special Provisions: 274
Description: UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

IMO / IMDG

UN-No: UN1479
Proper Shipping Name: Oxidizing solid, n.o.s. (lithium chromate)
Hazard Class: 5.1

Product code: L1111

Product name: LITHIUM CHROMATE
DIHYDRATE, REAGENT

Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant No information available
EMS: F-A
Special Provisions 223, 274, 900
Description UN1479, OXIDIZING SOLID, N.O.S. (LITHIUM CHROMATE), 5.1, III

RID

UN-No: UN1479
Proper Shipping Name: Oxidizing solid, n.o.s. (lithium chromate)
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: III
Special Provisions 274
Description: UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

ICAO

UN-No: UN1479
Proper Shipping Name: Oxidizing solid, n.o.s. (lithium chromate)
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: III
Description: UN1479, OXIDIZING SOLID, N.O.S., 5.1, III
Special Provisions A3

IATA

UN-No: UN1479
Proper Shipping Name: Oxidizing solid, n.o.s. (lithium chromate)
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: III
ERG Code: 5L
Special Provisions No information available
Description: UN1479, OXIDIZING SOLID, N.O.S., 5.1, III

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Lithium Chromate Dihydrate	7789-01-7	Not Listed	Not present	Not present	Not present	Not present	Not present	Not present

U.S. Regulations

Lithium Chromate Dihydrate

- Massachusetts RTK:** Present (for Lithium chromate anhydrous (CAS no. 14307-35-8))
- New Jersey RTK Hazardous Substance List:** sn 3575 (chromium VI compounds)
- New Jersey (EHS) List:** SN 2245 500 lb TPQ (chromium compounds)
- New Jersey - Discharge Prevention - List of Hazardous Substances:** Present (chromium compounds)
- Pennsylvania RTK - Environmental Hazard List** Present (chromium and chromium VI compounds)
- Minnesota - Hazardous Substance List:** Present (chromium VI compounds)
- New York Release Reporting - List of Hazardous Substances:** 10 lb RQ(air); 10 lb (land/water)(for Lithium chromate anhydrous (CAS no. 14307-35-8))

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 can expose you to chemicals including (see table below) which is (are) known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

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

⚠️ WARNING: This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Lithium Chromate Dihydrate	7789-01-7	carcinogen (chromium VI compounds)	developmental toxicity (chromium VI compounds)	Not Listed	female reproductive toxicity (chromium VI compounds)

CERCLA/SARA

Components	CAS-No.	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 de minimis
Lithium Chromate Dihydrate	7789-01-7	10 lb. final RQ; 4.54 kg final RQ (for lithium chromate)	None	None	Chromium VI compounds	0.1%

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Lithium Chromate Dihydrate	7789-01-7	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

The classification of this product has not been validated yet

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.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Lithium Chromate Dihydrate	7789-01-7	Not Listed	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Lithium Chromate Dihydrate	7789-01-7	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Lithium Chromate Dihydrate	7789-01-7	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Lithium Chromate Dihydrate	7789-01-7	Skin sensitizers - Skin Sens. 1: H317 May cause allergic skin reaction. (except Barium chromate and those specified elsewhere in this Annex); Carcinogenicity - Inhalation - Carc. 1B: H350 May cause cancer by inhalation. (except Barium chromate and compounds specified elsewhere in this Annex); Hazardous to aquatic environment - acute hazard - Aquatic Acute 1: H400 Very toxic to aquatic life. (except Barium chromate and compounds specified elsewhere in this Annex); Hazardous to aquatic environment - chronic hazard - Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects. (except Barium chromate and compounds specified elsewhere in this Annex)024-017-00-8(for chromium VI compounds)

EU - CLP (1272/2008)

R-phrase(s)

R43 - May cause sensitization by skin contact.

R49 - May cause cancer by inhalation.

R50 - Very toxic to aquatic organisms.

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	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Lithium Chromate Dihydrate	7789-01-7	R43 Carc.Cat.2; R49 N; R50-53 (for chromium VI compounds)	No information	S: 53-45-60-61(for chromium VI compounds)

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

Indication of danger:

T - Toxic

Xi - Irritant.

N - Dangerous for the environment.

T



Xi



N



Product code: L1111

Product name: LITHIUM CHROMATE
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16. OTHER INFORMATION

Preparation Date: 1/26/2018
Revision Date: 1/26/2018
Prepared by: Sonia Owen

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. Spectrum Chemicals & Laboratory Products, Inc. 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, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet