SAFETY DATA SHEET

Preparation Date: 1/8/2018 **Revision Date:** 1/8/2018 **Revision Number:** G1

1. IDENTIFICATION

Product identifier

Product code: C1235
Product Name: CHROMERGE(R)

Other means of identification
Synonyms: No information available
CAS #: Mixture
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)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Vapors)	Category 2
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1
Oxidizing liquids	Category 3

Label elements

Danger

Hazard statements
Causes severe skin burns and eye damage
Fatal if inhaled
Toxic if swallowed
Toxic in contact with skin
May cause an allergic skin reaction
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure
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
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear respiratory protection
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves
Wear eye/face protection
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep/Store away from clothing and other combustible materials
Take any precaution to avoid mixing with combustibles

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO_2 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.
Immediately call a POISON CENTER or doctor/physician.
Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth
Do NOT induce vomiting

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 %
Water	7732-18-5	50-75
Chromium Trioxide	1333-82-0	25-50

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. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact: Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes. Continue flushing with plenty of water for at least 15 minutes. Immediate medical attention is required. Call a physician immediately.

Eye Contact: Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or 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. Immediate medical attention is required. Call a physician immediately.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is conscious, give water or milk. Immediate medical attention is required. Call a physician or Poison Control Center immediately. Toxic if swallowed.

Most important symptoms and effects, both acute and delayed

Symptoms
Severe skin and eye irritation or burns
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Causes digestive (gastrointestinal) tract irritation
May cause gastrointestinal (digestive) tract burns
May cause abdominal pain, nausea, vomiting, diarrhea
May affect the liver
It may affect the kidneys

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: No information available.

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: 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: Keep people away from and upwind of spill/leak. 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. 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. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. 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:
Use only in area provided with appropriate exhaust ventilation. Keep away from incompatible materials.

Safe Handling Advice
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed. Keep in a well-ventilated place. Store at room temperature in the original container. May corrode metallic surfaces. Do not store in uncoated metallic containers. Store in a segregated and approved area. Do not store near combustible materials. Store away from incompatible materials.

Incompatible Materials:
Reducing agents
Organic materials
Combustible materials
Metals
Strong bases
Alcohols
Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Water	7732-18-5	None	None	None	None
Chromium Trioxide	1333-82-0	0.005mg/m³ TWA (as Cr)	0.0002 mg/m³ TWA Cr	0.05mg/m³ TWA (as Cr)	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Water	7732-18-5	None	None	None	None
Chromium Trioxide	1333-82-0	0.05mg/m³ TWA (as Cr)	0.025mg/m³ TWA (as Cr)	0.05mg/m³ TWA (as Cr)	0.05mg/m³ TWAEV (as Cr)

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Water	7732-18-5	None	None
Chromium Trioxide	1333-82-0	0.05mg/m³ TWA (as Cr)	0.05mg/m³ TWA (as Cr)

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Face-shield

Skin and body protection: Chemical resistant apron
Long sleeved clothing
Gloves
If working with large quantities:
Chemical resistant protective suit
Boots

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:
Liquid

Appearance:
No information available.

Color:
Dark brown.

Odor:
Odorless.

Taste
No information available.

Formula:
No information available

Molecular/Formula weight:
No information available

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):
No information available

Boiling point/range(°C/°F):
No information available

Bulk density:
No information available

Density (g/cm3):
1.47

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:
Soluble in Water

10. STABILITY AND REACTIVITY

Reactivity

For Chromium Trioxide:
Reactive with reducing agents, combustible materials, organic materials, metals, acids, alkalis. Incompatible with ethyl alcohol, spirit nitrous ether, almost every organic substance, bromides, chlorides, iodides, hypophosphites, sulfites, sulfides, hydrocarbons, ketones, methanol, isoamyl alcohol, cyclohexanol, furfuryl, ethylene glycol, glycerol, bromine pentafluoride, hydrogen sulfide, butanol, isobutanol, acetaldehyde, propionaldehyde, butylaldehyde, benzaldehyde, butraldehyde, benzene, perlargonic acid, isopropyl acetate, pentyl acetate, ethyl acetate, methyldioxane, dimethyldioxane, acetone, acetic anhydride, alkali metals, halogens, dimethyl formamide, diethyl formamide, potassium permanganate, pyridine, benzylethlyaniline, 1,3-dimethylhexahydropyrimidone, oils, greases or any easily oxidizable material. Acetylene is oxidized violently. Reacts violently with diethyl ether. It will reactly violently with naphthalene, camphor, glycerol, or turpentine. It will ignite ethyl alcohol. Selenium reacts violently with Chromium Trioxide. Can react violently with most metal powders, ammonia, ammonium salts, phosphorus, sulfur, acids

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Incompatible materials.

Incompatible Materials: Reducing agents
Organic materials
Combustible materials
Metals
Strong bases
Alcohols
Acids

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:
Skin. Inhalation. Ingestion.

Acute Toxicity

Component Information

Water	
CAS-No.	7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
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 LC50information = No information available

Chromium Trioxide	
CAS-No.	1333-82-0

LD50/oral/rat = 80 mg/kg Oral LD50 Rat
LD50/oral/mouse = 127 mg/kg
LD50/dermal/rabbit = 20-200 mg/kg (European Chemicals Bureau IUCLID dataset); 57 mg/kg (European Chemicals Bureau IUCLID dataset)
LD50/dermal/rat = 55 mg/kg
LC50/inhalation/rat = 0.217 mg/L Inhalation LC50 Rat 4 h
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = 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:	Toxic in contact with skin. Severe skin irritation. Causes skin burns. May cause sensitization by skin contact. May cause allergic skin reaction. Contact with broken skin may cause ulcers (chromic sores) and absorption, which may cause systemic poisoning affecting behavior/central nervous system(muscle weakness, somnolence), kidneys and liver and respiration.
Eye Contact:	Severe eye irritation. Causes eye burns.
Inhalation	Fatal if inhaled. Causes irritation of the respiratory tract with possible burns. May affect behavior/central nervous system (somnolence).
Ingestion	Toxic if swallowed. Causes digestive (gastrointestinal) tract irritation. May cause gastroenteritis. May cause digestive (gastrointestinal) tract burns. May cause perforation of the digestive tract. May cause abdominal pain, nausea, vomiting, diarrhea. May affect urinary system (kidneys).
Aspiration hazard	No information available.

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

Chronic Toxicity	For Chromium trioxide:. Skin: Repeated or prolonged skin contact may cause allergic contact dermatitis (allergic skin reaction). May also cause slow-healing skin ulcers ("chrome sores"), particularly if skin is broken. Inhalation: Repeated or prolonged inhalation may cause allergic respiratory reaction. May cause chest discomfort, cough and/or shortness of breath. Chronic exposure may affect the liver and kidneys.
Sensitization:	May cause sensitization by skin contact.
Mutagenic Effects:	For Chromium Trioxide May cause genetic defects Mutations in microorganisms Experiments with bacteria and/or yeast have shown mutagenic effects Mutagenic effects in mammalian somatic cells Mutagenic effects on mammalian germ cells

Carcinogenic effects: May cause cancer.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Chromium Trioxide	1333-82-0	Group 1 - Carcinogenic to Humans - Monograph 49 [1990] Chromium[VI] Supplement 7 [1987] Monograph 23 [1980] Monograph 2 [1973]	Not listed	Known Human Carcinogen Chromium hexavalent compounds	Present	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: May cause adverse reproductive effects based on animal data
Possible risk of impaired fertility

Developmental Effects: May cause adverse developmental effects based on animal data
Possible risk of harm to the unborn child

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.
STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.
Target Organs: Kidneys. Liver. Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Chromium Trioxide - 1333-82-0
Freshwater Fish Species Data: 40 mg/L LC50 Colisa fasciatus 96 h static 1

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
Water	7732-18-5	None	None	None	None
Chromium Trioxide	1333-82-0	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	UN1755
Proper Shipping Name:	Chromic acid solution
Hazard Class:	8
Subsidiary Class	No information available
Packing group:	II
Emergency Response Guide Number	154
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	B2, IB2, T8, TP2
Symbol(s):	No information available
Description:	UN1755, Chromic acid solution, 8, II

TDG (Canada)

UN-No:	UN1755
Proper Shipping Name:	Chromic acid solution
Hazard Class:	8
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant	No Information available
Description:	UN1755, Chromic acid solution, 8, II

ADR

UN-No:	UN1755
Proper Shipping Name:	Chromic acid solution
Hazard Class:	8
Packing Group:	II
Subsidiary Risk:	No information available
Special Provisions	518
Description:	UN1755, Chromic acid solution, 8, II

IMO / IMDG

UN-No:	UN1755
Proper Shipping Name:	Chromic acid solution
Hazard Class:	8
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant	No information available
EMS:	F-A
Description	UN1755, Chromic acid solution, 8, II

RID

UN-No:	UN1755
Proper Shipping Name:	Chromic acid solution
Hazard Class:	8

Subsidiary Risk: No information available
Packing Group: II
Special Provisions 518
Description: UN1755, Chromic acid solution, 8, II

ICAO

UN-No: UN1755
Proper Shipping Name: Chromic acid solution
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: II
Description: UN1755, Chromic acid solution, 8, II
Special Provisions A3

IATA

UN-No: UN1755
Proper Shipping Name: Chromic acid solution
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 8L
Special Provisions No information available
Description: UN1755, Chromic acid solution, 8, II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Water	7732-18-5	Present	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Chromium Trioxide	1333-82-0	PresentACTIVE	Present KE-06020	Present	Present (1)-284	Present	Present	Present 215-607-8

U.S. Regulations

Chromium Trioxide

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0437
Pennsylvania RTK: Special hazardous substance
Pennsylvania RTK - Special Hazardous Substances Present

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:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Chromium Trioxide	1333-82-0	Carcinogen	Developmental toxicity (listed as Chromium (hexavalent compounds))	Male Reproductive toxicity (listed as Chromium (hexavalent compounds))	Female Reproductive toxicity (listed as Chromium (hexavalent 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
Water	7732-18-5	None	None	None	None	None
Chromium Trioxide	1333-82-0	None	None	None	None	None

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
Water	7732-18-5	Not Applicable	Not Applicable
Chromium Trioxide	1333-82-0	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: .

Component
Water
7732-18-5 (50-75)
Chromium Trioxide
1333-82-0 (25-50)

WHMIS 2015 Hazard Classification
Not a dangerous product according to HPR classification criteria

Oxidizing solids - Undefined: Oxidizing solids - undefined category (hazard class was established from consulted scientific literature but did not allow to specify hazard category); Acute toxicity - Oral - Category 2: H300 Fatal if swallowed. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Acute toxicity - Dermal - Category 2: H310 Fatal in contact with skin. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Acute toxicity - Inhalation - Category 2: H330 Fatal if inhaled. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Respiratory sensitizers - Category 1: H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Skin sensitizers - Category 1A: H317 May cause allergic skin reaction. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Germ cell mutagenicity - Category 2: H341 Suspected of causing genetic defects. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Carcinogenicity - Category 1A: H350 May cause cancer. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Reproductive Toxicity - Category 1B: H360 May damage fertility or the unborn child. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Reproductive Toxicity - Category 2: H361 Suspected of damaging fertility or the unborn child. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate); Specific

target organ toxicity - Repeated exposure - Category 2: H373 May cause damage to organs through prolonged or repeated exposure. (classification is based on available data for all water-soluble Hexavalent chromium (Cr(VI)) as Potassium dichromate)

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
C Oxidizing materials
D1A Very toxic materials
D2A Very toxic materials
D2B Toxic materials
E Corrosive material

Components

	WHMIS 1988
Water	Uncontrolled product according to WHMIS classification criteria
Chromium Trioxide	C,D1A,D2A,D2B,E

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.

Components	**WHMIS Ingredient Disclosure List -**
Chromium Trioxide	0.1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Chromium Trioxide	1333-82-0	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Water	7732-18-5	Not listed
Chromium Trioxide	1333-82-0	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Water	7732-18-5	Not listed
Chromium Trioxide	1333-82-0	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Water	7732-18-5	
Chromium Trioxide	1333-82-0	Oxidizing solids - Ox. Sol. 1: H271 May cause fire or explosion, strong oxidizer.; Acute toxicity - Oral - Acute Tox. 3: H301 Toxic if swallowed. (Minimum classification); Acute toxicity - Dermal - Acute Tox. 3: H311 Toxic in contact with skin. (Minimum classification); Acute toxicity - Inhalation - Acute Tox. 2: H330 Fatal if inhaled. (Minimum classification); Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage.; Respiratory sensitizers - Resp. Sens. 1: H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.; Skin sensitizers - Skin Sens. 1: H317 May cause allergic skin reaction.; Germ cell

		mutagenicity - Muta. 1B: H340 May cause genetic defects.; Carcinogenicity - Carc. 1A: H350 May cause cancer.; Reproductive Toxicity - Repr. 2: H361f Suspected of damaging fertility. (Hazard statements H360 and H361 indicate a general concern for effects on both fertility and development: May damage/Suspected of damaging fertility or the unborn child; According to the criteria, the general hazard statement can be replaced by the hazard statement indicating the specific effect of concern in accordance with section 1.1.2.1.2; When the other differentiation is not mentioned, this is due to evidence proving no such effect, inconclusive data or no data and the obligations in Article 4(3) shall apply for that differentiation); Specific target organ toxicity - Repeated exposure - STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure. (No information to prove exclusion of certain routes of exposure); Hazardous to aquatic environment - acute hazard - Aquatic Acute 1: H400 Very toxic to aquatic life.; Hazardous to aquatic environment - chronic hazard - Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects.024-001-00-0 Specific target organ toxicity - Single exposure - STOT SE 3: H335 May cause respiratory irritation. (C >= 1 %)024-001-00-0

EU - CLP (1272/2008)

R-phrase(s)

R35 - Causes severe burns.
R26 - Very toxic by inhalation.
R45 - May cause cancer.
R46 - May cause heritable genetic damage.
R50 - Very toxic to aquatic organisms.
R53 - May cause long-term adverse effects in the aquatic environment.
R62 - Possible risk of impaired fertility.
R 9 - Explosive when mixed with combustible material.
R24/25 - Toxic in contact with skin and if swallowed.
R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R42/43 - May cause sensitization by inhalation and skin contact.

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**
Water	7732-18-5		No information	

Chromium Trioxide	1333-82-0	T; R24/25-48/23 T+; R26 C; R35 R42/43 Carc.Cat.1; R45 Muta.Cat.2; R46 N; R50-53 Repr.Cat.3; R62 O; R9	10%<=C C; R35 5%<=C<10% C; R34 1%<=C<5% Xi; R36/37/38	S53 S45 S60 S61

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

Indication of danger:
C - Corrosive.
T - Toxic
T+ - Very toxic.
Xn - Harmful.
O - Oxidising.
N - Dangerous for the environment.

16. OTHER INFORMATION

Preparation Date: 1/8/2018
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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