



Scientific Documentation

C1344, Chromic Chloride, Hexahydrate, USP

Not appropriate for regulatory submission.
Please visit www.spectrumchemical.com or
contact Tech Services for the most up-to-date
information contained in this information
package.

Spectrum Chemical Mfg Corp

769 Jersey Avenue
New Brunswick, NJ 08901
Phone 732.214.1300

Ver4.06 13.October.2022

C1344, Chromic Chloride, Hexahydrate, USP

Table of Contents

- Product Specification
- Certificate of Analysis Sample(s)
- Safety Data Sheet (SDS)
- Certification of Current Good Manufacturing Practices (cGMP)
- Manufacturing Process Flowchart
- Source Statement
- BSE/TSE Statement
- Allergen Statement
- EU Fragrance Allergen Statement
- GMO Statement
- Melamine Statement
- Nitrosamine Statement
- Animal Testing Statement
- Organic Compliance Statement
- Shelf Life Statement
- Other Chemicals Statement
- Elemental Impurities Statement
- Residual Solvents Statement
- General Label Information – Sample Label

spectrum®

- General Lot Numbering System Guidance
- Kosher Certificate
- Halal Certificate

spectrum®

Item Number	C1344
Item	Chromic Chloride, Hexahydrate, USP
CAS Number	10060-12-5
Molecular Formula	CrCl ₃ •6H ₂ O
Molecular Weight	266.45
MDL Number	
Synonyms	Chromium Chloride ; Chromium Trichloride

Test	Specification	
	Min	Max
ASSAY (CrCl ₃ •6H ₂ O)	98.0	101.0 %
INSOLUBLE MATTER		0.01 %
SUBSTANCES NOT Pptd BY NH ₄ OH (as SO ₄)		0.20 %
SULFATE		0.01 %
IRON (Fe)		0.01 %
ELEMENTAL IMPURITIES		AS REPORTED
IDENTIFICATION (A)	YELLOW COLOR DEVELOPS	
IDENTIFICATION (B)	WHITE PRECIPITATE FORMS	
CERTIFIED KOSHER		
CERTIFIED HALAL		
EXPIRATION DATE		
DATE OF MANUFACTURE		
APPEARANCE		
RESIDUAL SOLVENTS	AS REPORTED	

Spectrum Chemical Mfg Corp

Corporate Headquarters:	West Coast Facility:
769 Jersey Ave.	14422 S. San Pedro St.
New Brunswick, NJ 08901	Gardena, CA 90248
732.214.1300	310.516.8000

Item Number	C1344	Lot Number	1KL0345
Item	Chromic Chloride, Hexahydrate, USP	CAS Number	10060-12-5
Molecular Formula	CrCl ₃ •6H ₂ O	Molecular Weight	266.45

TEST	SPECIFICATION		RESULT
	MIN	MAX	
ASSAY (CrCl ₃ •6H ₂ O)	98.0	101.0 %	98.2 %
INSOLUBLE MATTER		0.01 %	<0.01 %
SUBSTANCES NOT Pptd BY NH ₄ OH (as SO ₄)		0.20 %	0.02 %
SULFATE		0.01 %	<0.01 %
IRON (Fe)		0.01 %	<0.01 %
ELEMENTAL IMPURITIES		AS REPORTED	NO ELEMENTAL IMPURITIES PRESENT
IDENTIFICATION (A)	YELLOW COLOR DEVELOPS		YELLOW COLOR DEVELOPS
IDENTIFICATION (B)	WHITE PRECIPITATE FORMS		WHITE PRECIPITATE FORMS
CERTIFIED KOSHER			CERTIFIED KOSHER
CERTIFIED HALAL			CERTIFIED HALAL
EXPIRATION DATE			30-APR-2023
DATE OF MANUFACTURE			01-MAY-2020
APPEARANCE			DARK GREEN CRYSTALS
RESIDUAL SOLVENTS	AS REPORTED		NO RESIDUAL SOLVENTS USED
MONOGRAPH EDITION			(USP) 43

Spectrum Chemical Mfg Corp
14422 South San Pedro Street
Gardena 90248 CA



Certificate of Analysis Results Certified By:

Jigisha Patel

Jigisha Patel
VP Regulatory Compliance & Technical Services,
Regulatory

Read and understand label and SDS before handling any chemicals. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. It is the customer's responsibility to provide adequate hazardous material training and ensure that appropriate Personal Protective Equipment (PPE) is used before handling any chemical.

The Elemental Impurities standards implemented by USP and other Pharmaceutical Compendia reflect a growing understanding of the toxicology of trace levels of elemental impurities that can remain in drug substances originating from either raw materials or manufacturing processes. Identifying and quantifying impurities can be critical to predicting the best possible patient outcomes. Elemental Impurities has been a requirement of all products meeting USP/NF, EP and BP monographs since January 1, 2018. More information can be found in USP sections <232> Elemental Impurities – Limits and <233> Elemental Impurities – Procedures. Data for drug substances furnished by Spectrum Chemical Mfg. Corp can be used to ensure that patient daily exposures by oral administration to the selected elements are not exceeded in the formulation of pharmaceutical products.

SAFETY DATA SHEET

Preparation Date: 05/05/2015

Revision date 8/29/2019

Revision Number: G5

1. IDENTIFICATION

Product identifier

Product code: C1344
Product Name: CHROMIC CHLORIDE, HEXAHYDRATE, USP

Other means of identification

Synonyms: Chromium (III) Chloride Hexahydrate; Chromium Chloride, hexahydrate; Chromium sesquichloride; Chromium trichloride hexahydrate; Hexaaquachromium (III) chloride; Hexaaquachromium chloride
CAS #: 10060-12-5
RTECS # GB5450000
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: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by 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 4
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1B
Specific target organ toxicity (single exposure)	Category 3

Label elements

Danger

Hazard statements

Harmful if swallowed
 Causes serious eye irritation
 May cause respiratory irritation

May cause an allergic skin reaction



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves
Wear eye/face protection

Precautionary Statements - Response

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 attention.
IF ON SKIN: Wash with plenty of water
If skin irritation or rash occurs: Get medical attention
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Chromic Chloride, hexahydrate	10060-12-5	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.

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 if irritation occurs. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **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.

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
May cause conjunctivitis
May cause corneal opacity
May cause an allergic skin reaction
May cause skin irritation
May cause irritation of respiratory tract
Coughing and wheezing
May cause pulmonary edema
It may affect the kidneys
Causes digestive (gastrointestinal) tract irritation
Ingestion may cause nausea, vomiting, and diarrhea

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: The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products No information available.

Specific hazards No information available.

Special Protective Actions for Firefighters

Specific Methods: No information available

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. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering 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. 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. 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/dust. 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 in a dry and well-ventilated place. Store at room temperature in the original container. Hygroscopic. Protect from moisture. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Chromic Chloride, hexahydrate	10060-12-5	0.5 mg/m ³ TWA (as Cr - chromium (III) compounds)	None	0.5 mg/m ³ TWA (as Cr - chromium (III) inorganic compounds)	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Chromic Chloride, hexahydrate	10060-12-5	0.5 mg/m ³ TWA (as Cr - chromium (III) compounds)	0.5 mg/m ³ TWA (as Cr - chromium (III) compounds)	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Chromic Chloride, hexahydrate	10060-12-5	0.5 mg/m ³ TWA (as Cr - chromium (III) compounds)	0.5 mg/m ³ TWA (as Cr - chromium (III) inorganic compounds)

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
Gloves
Long sleeved clothing

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: Crystals. Deliquescent.	Color: Greenish-black to violet.
Odor: Odorless.	Taste No information available.	Formula CrCl ₃ •6H ₂ O
Molecular/Formula weight (g/mole): 266.45	Flammability (solid, gas) no data 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): 83°C/181.4°F	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): No information available	Bulk density: No information available	Density (g/cm³): 1.76
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):	Partition coefficient	

No information available

(n-octanol/water):
No information available

Viscosity:
No information available

Miscibility:
No information available

Solubility:
Easily soluble in cold water
Easily soluble in hot water
Insoluble in diethyl ether
Partially soluble in acetone
Soluble in Alcohol
Solubility in water: 58g/100ml of cold water

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents

Chemical stability

Stability: Hygroscopic. Stable at normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Incompatible materials. Exposure to moisture.

Incompatible Materials: Oxidizing agents

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

Chromic Chloride, hexahydrate

CAS No 10060-12-5

LD50/oral/rat = 1790 mg/kg Oral LD50 Rat
LD50/oral/mouse = 2.39 g/kg Oral LD50 Mouse
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 Toxicity = 1790 mg/kg

LD50/oral/mouse =

Value - Acute Tox = 2390 mg/kg

LD50/dermal/rabbit

Value - Acute Toxicity = No information available

LD50/dermal/rat

VALUE - Acute Tox = 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:

May cause skin irritation. May cause allergic skin reaction.

Eye Contact:

Causes serious eye irritation. May cause conjunctivitis. May cause corneal opacity.

Inhalation

Irritating to respiratory system. May cause irritation of respiratory tract. Symptoms may include coughing and wheezing. May cause delayed pulmonary edema.

Ingestion

Harmful if swallowed. Causes digestive (gastrointestinal) tract irritation. Ingestion may cause nausea, vomiting, diarrhea.

Aspiration hazard

No information available.

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

Chronic Toxicity

Skin: Sensitizer. May cause allergic skin reaction (allergic contact dermatitis). Chronic exposure may affect the kidneys and cause kidney damage.

Sensitization:

May cause sensitization by skin contact.

Mutagenic Effects:

May affect genetic material based on animal test data
DNA Damage - hamster lung
Sister Chromatid Exchange - hamster fibroblast; hamster lung
Cytogenetic Analysis: human lymphocyte

Carcinogenic effects:

Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic	Australia - Prohibited Carcinogenic
-----------	--------	------	---------------------	-----	------------------------	-------------------------------------	-------------------------------------

						Substances	Substances
Chromic Chloride, hexahydrate	10060-12-5	Not listed	A4 - Not Classifiable as a Human Carcinogen (chromium (III) inorganic compounds)	Not listed	Not listed	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 No data is available

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: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects 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

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Chromic Chloride, hexahydrate	10060-12-5	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide Number	No information available
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available

TDG (Canada)

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No Information available
Description:	No information available

ADR

UN Number	Not regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Packing group	No information available
Subsidiary Risk:	No information available

IMDG

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No information available

RID

UN Number	Not Regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Subsidiary Risk:	No information available
Packing group	No information available

ICAO (air)

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available

IATA

UN Number	Not Regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available

Subsidiary Risk: No information available
Packing group No information available
Precautionary Statements - Response No information available
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Chromic Chloride, hexahydrate	10060-12-5	Not listed. It is exempt from listing on the TSCA 8(b) Inventory since it is a hydrate. However, the anhydrous form (CAS number 10025-73-7) is listed as ACTIVE on the TSCA 8(b) Inventory.	Not present	Present	Not present	Present	Present	Not present

U.S. Regulations

Chromic Chloride, hexahydrate

- New Jersey RTK Hazardous Substance List:** sn 2245 (chromium 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 (chromium compounds)
- Pennsylvania RTK - Environmental Hazard List** Present (chromium compounds)
- Minnesota - Hazardous Substance List:** Present (as Cr - chromium (III) compounds)
- Louisiana Reportable Quantity List for Pollutants:** 100 lb RQ (chromium compounds)
- California Directors List of Hazardous Substances:** Present (chromium compounds)

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

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

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Chromic Chloride, hexahydrate	10060-12-5	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	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
Chromic Chloride, hexahydrate	10060-12-5	None	None	None	Chromium (III) Compounds	1%

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Chromic Chloride, hexahydrate	10060-12-5	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 not 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

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Chromic Chloride, hexahydrate	10060-12-5	Not Listed	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Chromic Chloride, hexahydrate	10060-12-5	Not listed

Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Chromic Chloride, hexahydrate	10060-12-5	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Chromic Chloride, hexahydrate	10060-12-5	

EU - CLP (1272/2008)

R-phrase(s)

R22 - Harmful if swallowed

R36 - Irritating to eyes

R43 - May cause sensitization by skin contact

S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S24 - Avoid contact with skin

S37 - Wear suitable gloves

S46 - If swallowed, seek medical advice immediately and show this container or label

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Chromic Chloride, hexahydrate	10060-12-5		No information	

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

Indication of danger:

Xn - Harmful

Xi - Irritant

Xn



Xi

**16. OTHER INFORMATION**

Preparation Date: 05/05/2015
Revision date 8/29/2019
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



Certification of Compliance with current Good Manufacturing Practices

Dear Valued Customer:

Spectrum Chemical Mfg Corp certifies that the following product(s) is produced, processed, packaged and held in compliance with current Good Manufacturing Practices (cGMP) in accordance with the applicable parts of 21 CFR, parts 210 and 211 of the Code of Federal Regulations.

Catalog Number	Product Name
C1344	Chromic Chloride, Hexahydrate, USP

Spectrum is an FDA registered and inspected Drug Establishment. Our United States Food and Drug Administration (USFDA) Registration numbers are as follows:

Spectrum-Gardena, CA: 2020632
Spectrum-New Brunswick, NJ: 2246824

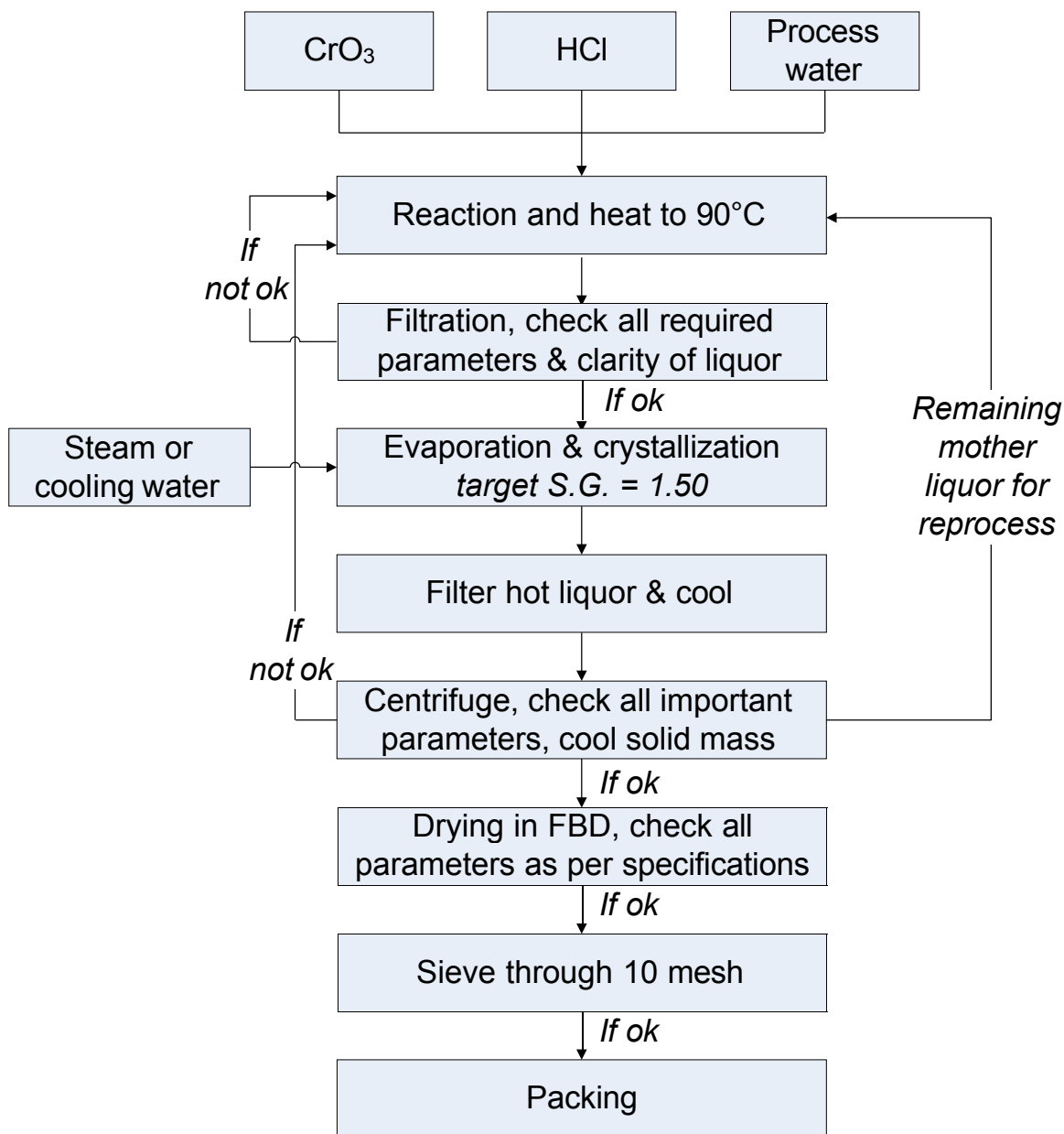
Thank you for your interest in Spectrum products. If we may be of further assistance, please feel free to contact the Quality Assurance department at 310-516-8000 or via email at qualityassurance@spectrumchemical.com

Sincerely,

Oralia Chavez
Quality Assurance Specialist

Manufacturing Process Flowchart

Chromic Chloride, Hexahydrate, USP - C1344



Spectrum Chemical Mfg Corp

Corporate Headquarters:

769 Jersey Ave.
New Brunswick, NJ 08901
732.214.1300

West Coast Facility:

14422 S. San Pedro St.
Gardena, CA 90248
310.516.8000

C1344, Chromic Chloride, Hexahydrate, USP

Source Statement

The above mentioned catalog item is manufactured by chemical synthesis. No animal or plant derived products are used in the manufacturing process.

BSE/TSE Statement

The above mentioned catalog item does not contain nor is manufactured using any animal derived products and is therefore, BSE/TSE free.

Allergen Statement

The above mentioned catalog item does not contain any of the following:

- Milk
- Egg
- Fish
- Shellfish
- Tree Nuts
- Wheat
- Peanuts
- Soy
- Cereals containing Gluten
- Celery
- Mustard
- Sesame Seed
- Corn
- Latex
- Sulfites > 10 ppm

EU Fragrance Allergen Statement

The above mentioned catalog item does not contain any of the 26 EU fragrance allergens listed in Annex III lines 67-92. These substances are not intentionally added to the following chemical and therefore are not expected to be present.

GMO Statement

The above mentioned catalog item is manufactured without the use of genetically modified organisms and is therefore GMO free.

Melamine Statement

The above mentioned catalog does not use or add melamine to the manufacturing process and is considered melamine-free.

Nitrosamine Statement

Based on knowledge of the manufacturing process, nitrosamine impurities are not known or suspected to be present in this material.

Animal Testing Statement

The above mentioned catalog item has not been tested on animals.

Organic Compliance Statement

The above mentioned catalog item has not been produced using GMOs, irradiation, ethylene oxide (EtO) or sewage sludge.

Shelf Life Statement

The above mentioned catalog item is typically assigned a shelf life of 36 months from the date of manufacture. The actual assigned shelf life for any specific lot should be referenced on the Certificate of Analysis.

Other Chemicals Statement

Spectrum does not have any reason to suspect the above mentioned catalog item contains any of the following chemicals. This product does not come into contact with these chemicals during packaging or storage:

- Aflatoxins
- Antibiotics
- Bisphenol A (BPA)
- CMR Substances
- Parabens
- Pesticides
- Phthalates
- Preservatives

RE: Elemental Impurities - Chromic Chloride, Hexahydrate, USP(Cat# C1344)

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above mentioned material complies with the USP<232>,<233>Elemental Impurities and the ICH Q3D Elemental Impurities Guideline. Per the current supply chain no Class 1, Class 2A, Class 2B or Class 3 elemental impurities are likely to be present. These substances are not used in the production process, are not intentionally added or known to be present in the above mentioned material.

This information is subject to change and is intended for risk assessment only. For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at TechServices@spectrumchemical.com.

Sincerely,



Jonathan Ong
Technical Services Specialist
Spectrum Chemical Mfg Corp.

CORPORATE HEADQUARTERS

769 Jersey Avenue
New Brunswick, NJ 08901
PHONE 732.214.1300
FAX 732.246.7132

WEST COAST FACILITY

14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843

RE: Residual Solvents – Chromic Chloride, Hexahydrate, USP (Cat# C1344)

To Whom It May Concern:

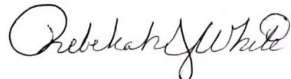
Thank you for your interest in Spectrum high quality chemicals.

The above mentioned catalog item complies with the requirements of the USP <467> Residual Solvents and the ICH Q3C Residual Solvents Guideline. No Class 1, Class 2, Class 3 or other solvents are used or produced in the manufacture of this product.

For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at TechServices@spectrumchemical.com.

Sincerely,



Rebekah J. White
Technical Service Representative
Spectrum Chemical Mfg. Corp.

CORPORATE HEADQUARTERS

769 Jersey Avenue
New Brunswick, NJ 08901
PHONE 732.214.1300
FAX 732.246.7132

WEST COAST FACILITY

14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843



RE: Lot Numbering System

Dear Valued Customer:

This letter is to inform you of Spectrum Chemicals and Laboratory Products' Lot Numbering System. The system is based on an alpha-numerical sequence which provides the month, year and location of production.

The lot numbering system utilized until 2010 is a sequence of **six characters**, two letters followed by four numbers. The first letter represents the year, for example, Y denotes 2009 and Z denotes 2010. The second letter represents the month and site, for example, A-L denotes January through December at Spectrum's Gardena, CA facility, while M-X denotes January through December at the New Brunswick, NJ facility. The following four numbers are sequentially assigned.

Example: ZI0928 = The 928th material produced in California in September 2010

The lot numbering system utilized for 2011 and forward, is a sequence of **seven characters**. The first character, a number, represents the production facility:

- 1 = Gardena, CA Facility
- 2 = New Brunswick, NJ Facility
- 3 = China Facility
- 4 = Pharmacy, NJ Facility

The second character, a letter, represents the year. For example, A denotes 2011 and B denotes 2012. The third character, a letter, represents the month, with A denoting January and L denoting December. The following four numbers are sequentially assigned.

Example: 2AA0706 = The 706th material produced in New Jersey in January 2011

Thank you for your interest with Spectrum products. Please feel free to contact us at 310-516-8000 or via email at quality_assurance@spectrumchemical.com if we may be of further assistance.

Sincerely,

Oralia Chavez,
Quality Assurance Specialist

CORPORATE HEADQUARTERS

769 Jersey Avenue
New Brunswick, NJ 08901
PHONE 732.214.1300
FAX 732.246.7132

WEST COAST FACILITY

14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843



KOSHER SUPERVISION OF AMERICA

בס"ד
Jan 20, 2022

The following product(s) prepared by the named company are certified kosher with the stated requirements:

Spectrum Laboratory Products, Inc.

S-0032

14422 South San Pedro Street
Gardena CA 90248
USA

Product Name C1344, Chromic Chloride, Hexahydrate, USP

Brand Spectrum

UKD-ID KSAV3-U7G1V1

D/P/M P

Symbol Required KSA

Special Conditions

This certificate expires on
Feb 01, 2023

Rabbi Binyomin Lisbon
Kashrus Administrator

Placing the KSA logo on products not listed above constitutes an un-authorized use of the KSA symbol, which is a federally registered trademark.



المجلس الإسلامي الأمريكي للغذاء و التغذية
THE ISLAMIC FOOD AND NUTRITION COUNCIL OF AMERICA
IFANCA HALAL PRODUCT CERTIFICATE شهادة حلال

This is to certify that the following product(s) have been produced under the supervision of the Islamic Food and Nutrition Council of America(IFANCA). The production facility as well as component ingredients have been reviewed and approved. The product(s) are in compliance with the halal requirements under Islamic laws.

Date: August 23, 2022

Document #: 11205.11206.II224611

Company Name & Address: **Spectrum Laboratory Products, Inc.** 755-769 Jersey Ave New Brunswick, New Jersey 08901 USA

Plant Name & Address: **Spectrum Laboratory Products, Inc.** 769-Jersey Ave New Brunswick, New Jersey 08901 USA

ProductName	Product Code	Halal-ID	Product Certificate #
1. Chromium Chloride, Hexahydrate, USP	C1344	B93989	HC-22SPQP20

Muhammad Munir Chaudry
Muhammad Munir Chaudry, Ph.D.
President



This Certificate is valid until **August 31, 2023** and subject to renewal at that time.



Page 1 of 1