

Scientific Documentation

Calcium Chloride, Dihydrate, USP, EP, BP, JP

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



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Specification for Calcium Chloride, Dihydrate, USP, EP, BP, JP (CA140)

| | |
|-------------------|--|
| Item Number | CA140 |
| Item | Calcium Chloride, Dihydrate, USP, EP, BP, JP |
| CAS Number | 10035-04-8 |
| Molecular Formula | $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ |
| Molecular Weight | 147.01 |
| MDL Number | |
| Synonyms | |

| Test | Specification | |
|----------------------------|--------------------------------|-------------|
| | Min | Max |
| ASSAY | 99.0 | 103.0% |
| pH OF A 5% SOLUTION | 4.5 | 9.2 |
| IRON, ALUMINUM, PHOSPHATE | NO TURBIDITY OR PRECIPITATE | |
| IRON (EP) | | 10 ppm |
| ELEMENTAL IMPURITIES | | AS REPORTED |
| HEAVY METALS (JP) | | 10 ppm |
| MAGNESIUM AND ALKALI SALTS | | 0.5% |
| APPEARANCE OF SOLUTION | CLEAR LESS COLOR THAN STANDARD | |
| SULFATE | | 0.024% |
| HYPOCHLORITE | NO BLUE COLOR | |
| BARIUM | NO TURBIDITY | |
| ARSENIC (As) | | 2 ppm |
| ACIDITY / ALKALINITY | | 0.2 ml |
| ALUMINUM | NO TURBIDITY | |
| IDENTIFICATION (A) | POSITIVE FOR CALCIUM | |
| IDENTIFICATION (B) | POSITIVE FOR CHLORIDE | |
| IDENTIFICATION (C) | POSITIVE FOR CALCIUM | |
| IDENTIFICATION (D) | POSITIVE FOR CHLORIDE | |

| Test | Specification | |
|---------------------|--------------------------------------|---------|
| | Min | Max |
| IDENTIFICATION (E) | 97.0 | 103.0 % |
| IDENTIFICATION (F) | POSITIVE FOR CALCIUM AND CHLORIDE | |
| CERTIFIED KOSHER | | |
| CERTIFIED HALAL | | |
| APPEARANCE | | |
| RETEST DATE | | |
| DATE OF MANUFACTURE | | |
| RESIDUAL SOLVENTS | AS REPORTED | |
| MONOGRAPH EDITION | | |
| MONOGRAPH EDITION. | | |
| MONOGRAPH EDITION.. | | |

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 |

Certificate Of Analysis

| | | | |
|-------------------|--|------------------|------------|
| Item Number | CA140 | Lot Number | 1MF0266 |
| Item | Calcium Chloride, Dihydrate, USP, EP, BP, JP | CAS Number | 10035-04-8 |
| Molecular Formula | CaCl ₂ •2H ₂ O | Molecular Weight | 147.01 |

| TEST | SPECIFICATION | | RESULT |
|----------------------------|--------------------------------|-------------|--------------------------------|
| | MIN | MAX | |
| ASSAY | 99.0 | 103.0% | 99.3 % |
| pH OF A 5% SOLUTION | 4.5 | 9.2 | 5.5 |
| IRON, ALUMINUM, PHOSPHATE | NO TURBIDITY OR PRECIPITATE | | NO TURBIDITY OR PRECIPITATE |
| IRON (EP) | | 10 ppm | <10 ppm |
| ELEMENTAL IMPURITIES | | AS REPORTED | COMPLIES WITH STANDARD |
| HEAVY METALS (JP) | | 10 ppm | <10 ppm |
| MAGNESIUM AND ALKALI SALTS | | 0.5% | <0.5 % |
| APPEARANCE OF SOLUTION | CLEAR LESS COLOR THAN STANDARD | | CLEAR LESS COLOR THAN STANDARD |
| SULFATE | | 0.024% | <0.024 % |
| HYPOCHLORITE | NO BLUE COLOR | | NO BLUE COLOR |
| BARIUM | NO TURBIDITY | | NO TURBIDITY |
| ARSENIC (As) | | 2 ppm | <1.5 ppm |
| ACIDITY / ALKALINITY | | 0.2 ml | <0.2 ml |
| ALUMINUM | NO TURBIDITY | | NO TURBIDITY |
| IDENTIFICATION (A) | POSITIVE FOR CALCIUM | | POSITIVE FOR CALCIUM |
| IDENTIFICATION (B) | POSITIVE FOR CHLORIDE | | POSITIVE FOR CHLORIDE |
| IDENTIFICATION (C) | POSITIVE FOR CALCIUM | | POSITIVE FOR CALCIUM |
| IDENTIFICATION (D) | POSITIVE FOR CHLORIDE | | POSITIVE FOR CHLORIDE |

| TEST | SPECIFICATION | | RESULT |
|---------------------|-----------------------------------|---------|-----------------------------------|
| | MIN | MAX | |
| IDENTIFICATION (E) | 97.0 | 103.0 % | 100.2 % |
| IDENTIFICATION (F) | POSITIVE FOR CALCIUM AND CHLORIDE | | POSITIVE FOR CALCIUM AND CHLORIDE |
| CERTIFIED KOSHER | | | CERTIFIED KOSHER |
| CERTIFIED HALAL | | | CERTIFIED HALAL |
| APPEARANCE | | | WHITE POWDER |
| RETEST DATE | | | 31-MAR-2025 |
| DATE OF MANUFACTURE | | | 01-MAR-2022 |
| RESIDUAL SOLVENTS | AS REPORTED | | NO RESIDUAL SOLVENTS PRESENT |
| MONOGRAPH EDITION | | | (USP-NF) 2023 |
| MONOGRAPH EDITION. | | | (EP) 11, (BP) 2023 |
| MONOGRAPH EDITION.. | | | (JP) 18 |

Certificate of Analysis Results Entered By:

HBERMUDEZ
Hernan Bermudez
05-JUL-23 09:16:06

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



Certificate of Analysis Results Approved By:

DAMILLER
Davinn Miller
10-JUL-23 09:00:04

All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

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

spectrum®



Revision date 24-March-2021

Revision Number 5

1. Identification

Product identifier

Product Name CALCIUM CHLORIDE, DIHYDRATE, USP, EP, BP, JP

Other means of identification

Product Code(s) CA140

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

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

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

| | |
|-----------------------------------|-------------|
| Acute toxicity - Oral | Category 4 |
| Serious eye damage/eye irritation | Category 2A |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Hazard statements

Harmful if swallowed
Causes serious eye irritation



Appearance Powder Crystalline granules **Physical state** Solid **Odor** No information available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear eye protection/ 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 advice/attention
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

Other information

No information available.

3. Composition/information on ingredients

Substance

| Chemical name | CAS No | Weight-% | Trade secret |
|-----------------------------|------------|----------|--------------|
| Calcium Chloride, Dihydrate | 10035-04-8 | 100 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

| | |
|---|--|
| General advice | Show this safety data sheet to the doctor in attendance. |
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. |
| Skin contact | Wash skin with soap and water. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician. |
| Self-protection of the first aider | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). |

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical No information available.

Explosion data

Sensitivity to mechanical impact none.

Sensitivity to static discharge none.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Hygroscopic. It absorbs moisture from the air. Protect from moisture. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other

recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Appropriate engineering controls

| | |
|----------------------|---|
| Engineering controls | Showers Eyewash stations Ventilation systems. |
|----------------------|---|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|--|
| Eye/face protection | If splashes are likely to occur, wear safety glasses with side-shields. |
| Hand protection | Wear suitable gloves. |
| Skin and body protection | Wear suitable protective clothing. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. |

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-----------------------|-----------------------------|
| Physical state | Solid |
| Appearance | Powder Crystalline granules |
| Color | White |
| Odor | No information available |
| Odor threshold | No information available |

| Property | Values | Remarks • Method |
|--|-------------------------|------------------|
| pH | no data available | None known |
| Melting point / freezing point | 175.5 °C / 347.9 °F | None known |
| Boiling point / boiling range | no data available | None known |
| Flash point | no data available | None known |
| Evaporation rate | no data available | None known |
| Flammability (solid, gas) | no data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | No data available | None known |
| Vapor density | no data available | None known |
| Relative density | 1.850 | None known |
| Water solubility | Easily soluble in water | None known |
| Solubility(ies) | Soluble in water | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | no data available | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | no data available | None known |
| Dynamic viscosity | No data available | None known |

Other information

| | |
|----------------------|--------------------------|
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Softening point | No information available |
| Molecular weight | 147.01 |
| VOC Content (%) | No information available |
| Liquid Density | No information available |

Bulk density No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

.

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

No information available

Unknown acute toxicity

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

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

| | |
|--|---|
| Ecotoxicity | The environmental impact of this product has not been fully investigated. |
| Persistence and degradability Bioaccumulation | No information available. Inherently biodegradable. |
| Other adverse effects | No information available. |

13. Disposal considerations

Waste treatment methods

| | |
|--|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated packaging | Do not reuse empty containers. |

14. Transport information

| | |
|--------------------------|---------------|
| <u>DOT</u> | not regulated |
| <u>TDG</u> | not regulated |
| <u>MEX</u> | not regulated |
| <u>ICAO (air)</u> | not regulated |
| <u>IATA</u> | not regulated |
| <u>IMDG</u> | not regulated |
| <u>RID</u> | not regulated |
| <u>ADR</u> | not regulated |
| <u>ADN</u> | not regulated |

15. Regulatory information

International Inventories

| | |
|-------------|----------|
| TSCA | Complies |
|-------------|----------|

| | |
|----------------------|---|
| DSL/NDSL | Does not Comply |
| EINECS/ELINCS | Does not Comply |
| ENCS | This product complies with ENCS: |
| IECSC | This product complies with China: |
| KECL | Does not Comply |
| PICCS | Complies |
| AICS | All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS). |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA

Health hazards 2

Flammability 0

Instability 0

Physical and chemical properties -

HMIS

Health hazards 2

Flammability 0

Physical hazards 0

Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 24-March-2021
Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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 |
|----------------|--|
| CA140 | Calcium Chloride, Dihydrate, USP, EP, BP, JP |

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

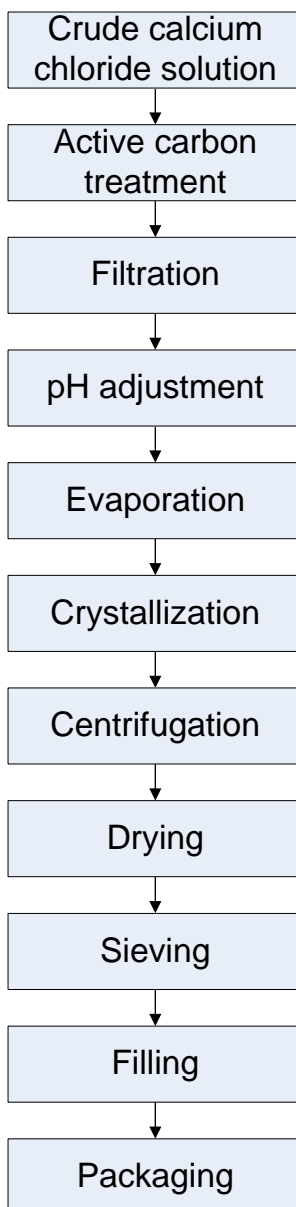
Sincerely,

A handwritten signature in black ink, appearing to read "Oralia Chavez", written in a cursive style.

Oralia Chavez
Quality Assurance Specialist

Manufacturing Process Flowchart

Calcium Chloride, Dihydrate, USP, EP, BP, JP - CA140



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

CA140, Calcium Chloride, Dihydrate, USP, EP, BP, JP

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
- Cereals containing Gluten
- Celery
- Mustard
- Sesame Seed
- Soy
- 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 or irradiation.

Shelf Life Statement

The above mentioned catalog item is typically assigned a shelf life of 60 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
- CMR Substances
- Pesticides



**RE: Elemental Impurities - Calcium Chloride, Dihydrate, USP, EP, BP, JP
(Cat# CA140)**

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above material complies with the USP<232>, <233> Elemental Impurities and the ICH Q3D Elemental Impurities Guideline. The following elemental impurities are likely to be present:

| Elemental Impurity | | Class | Expected Concentration |
|--------------------|----|-------|------------------------|
| Cadmium | Cd | 1 | < 0.5 ppm |
| Lead | Pb | 1 | < 0.5 ppm |
| Arsenic | As | 1 | < 1.5 ppm |
| Mercury | Hg | 1 | < 3 ppm |
| Cobalt | Co | 2A | < 5 ppm |
| Vanadium | V | 2A | < 10 ppm |
| Nickel | Ni | 2A | < 20 ppm |

Other elemental impurities considered by USP <232>, <233> and ICH Q3D which are not addressed in the above mentioned table are not 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. It is responsibility of the end user to evaluate suitability of any chemical for the intended use as well as to assess compound-specific limits of daily intake of metal impurities. 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,

Technical Services
Spectrum Chemical Mfg. Corp.

This document has been produced electronically and is valid without a signature.

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 - Calcium Chloride, Dihydrate, USP, EP, BP, JP
(Cat# CA140)**

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,

Technical Services
Spectrum Chemical Mfg. Corp.

This document has been produced electronically and is valid without a signature.

CORPORATE HEADQUARTERS

769 Jersey Avenue
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FAX 732.246.7132

WEST COAST FACILITY

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

Label Information

The Spectrum label presents technical and safety information in an easily understood format. Our technical specialists stay abreast of the latest requirements of the Globally Harmonized System for Classification and Labelling of Chemicals (GHS), as well as the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA) and other government regulatory agencies in order to ensure compliance, accuracy and concise hazard communication.

WARNING
 • Harmful if swallowed • Causes serious eye irritation.
 • Do not eat, drink or smoke when using this product • Wear eye protection, face protection • Wash face, hands and any exposed skin thoroughly after handling.
FIRST AID: 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 SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.
KEEP FROM CHILDREN

spectrum®
 CHEMICAL MFG CORP

CA140 **2.5 KG**

Calcium Chloride

Dihydrate

USP, EP, BP, JP

CAS 10035-04-8

CAUTION: For manufacturing, processing or repacking.
 Read and understand the label and Safety Data Sheet (SDS) prior to use.

Chemical Emergency: (800)424-9300
 www.SpectrumChemical.com

CaCl₂•2H₂O **F.W. 147.01**

Assay 99.0-103.0%
 pH of a 5% Solution 4.5-9.2

MAXIMUM LIMITS

Iron, Aluminum and Phosphate To pass test
 Iron (EP) 10 ppm
 Elemental Impurities As reported
 Heavy Metals (JP) 10 ppm
 Magnesium and Alkali Salts 0.5%
 Appearance of Solution To pass test
 Sulfate 0.024%
 Hypochlorite To pass test
 Barium To pass test
 Arsenic 2 ppm
 Acidity and Alkalinity To pass test
 Aluminum To pass test
 Residual Solvents To pass test

HYGROSCOPIC: Keep tightly closed.

WARNING: Cancer and Reproductive Harm-
 www.P65Warnings.ca.gov

G 19/H2GHS A **Lot No. 062233**

SPECTRUM CHEMICAL MFG. CORP. Gardena, CA 90248 • New Brunswick, NJ 08901

- | | | |
|---|--|---|
| A Bar Code | G Chemical Abstracts Service (CAS) Registry Number | K Empirical Formula, Formula Weight and Technical Specifications Panel |
| B GHS Hazard Pictograms | H Caution Information | L Expiration Information |
| C Warning, Safety Data and Precautionary Information | I DOT Shipping Information | M Lot Number |
| D Product Catalog Number | J Toll-Free 24-Hour Chemical Emergency Telephone Number | N Kosher Certified by Kosher Supervision of America (KSA). |
| E Item Name, Form, Grade | | O Storage Color Band |
| F Size/Quantity | | P Halal Certified by IFANCA |
| | | Q bioCertified |

This color-coded band indicates the hazard most likely to be posed by that material under storage conditions. The criteria used to assign band colors have been established by the Storage Code working group of the Society for Chemical Hazard Communication (SCHC). It is recommended that like colors be stored together, unless otherwise stated, based on the color codes indicated to the right. However, it is the responsibility of the customer to check with their local fire department for possible conflicts with our recommendations when storing hazardous chemicals.

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

- YELLOW:** Oxidizer
- RED:** Flammable
- GREEN:** General Storage
- BLUE:** Health Hazard
- WHITE:** Corrosive



KOSHER SUPERVISION OF AMERICA

בס"ד
Jan 18, 2024

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
755-769 Jersey Ave.
New Brunswick NJ 08901
USA

| | |
|---------------------------|---|
| Product Name | CA140, Calcium Chloride, Dihydrate, USP, EP, BP, JP |
| Brand | Spectrum |
| UKD-ID | KSAV3-D2W2O59 |
| D/P/M | P |
| Symbol Required | KSA |
| Special Conditions | |

This certificate expires on
Feb 01, 2025

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.