

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 09/25/2014 Version 1.1

SECTION 1. Identification

Product identifier

Product number CX0156

Product name Calcium Chloride Anhydrous Desiccant
 Chry>Powder GR ACS

CAS-No. 10043-52-4

Relevant identified uses of the substance or mixture and uses advised against

Identified uses Reagent for analysis

Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 290 Concord Road, Billerica, MA 01821,

United States of America | General Inquiries: +1-978-715-4321 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

SECTION 2. Hazards identification

GHS Classification

Acute toxicity, Category 4, Oral, H302 Eye irritation, Category 2A, H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS-Labeling

Hazard pictograms



Signal Word Warning

Hazard Statements
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Precautionary Statements

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number CX0156 Version 1.1

Product name Calcium Chloride Anhydrous Desiccant
 Carcium Chloride Anhydrous Chloride Anhydrous Chloride Anhydrous Chloride Anhydrous Chloride Anhyd

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ eye protection/ face protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P330 Rinse mouth.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula CaCl₂ CaCl₂ (Hill)

Molar mass 110.98 g/mol

Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

calcium chloride (>= 90 % - <= 100 %)

10043-52-4

Exact percentages are being withheld as a trade secret.

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

After skin contact: wash off with plenty of water. Remove contaminated clothing.

Eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Ingestion

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

irritant effects, Stomach/intestinal disorders

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number CX0156 Version 1.1

Product name Calcium Chloride Anhydrous Desiccant

Calcium Chlo

Suitable extinguishing media

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

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

Fire may cause evolution of:

Hydrogen chloride gas

Advice for firefighters

Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

Environmental precautions

Do not empty into drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry.

Store at room temperature.

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number CX0156 Version 1.1

Product name Calcium Chloride Anhydrous Desiccant
 Cry>Powder GR ACS

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Application of skin- protective barrier cream recommended. Wash hands after working with substance.

Eve/face protection

Safety glasses

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Other protective equipment:

protective clothing

Respiratory protection

required when dusts are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9. Physical and chemical properties

Physical state solid

Color white

Odor odorless

Odor Threshold Not applicable

pH ca. 8 - 10

at 100 g/l 68 °F (20 °C)

Melting point 772 °C

Boiling point No information available.

Flash point does not flash

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit Not applicable

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

| Product number | CX0156 | Version 1.1 |
|----------------|---|-------------|
| Product name | Calcium Chloride Anhydrous Desiccant Powder GR ACS | |

Todast Hamo

Upper explosion limit Not applicable

Vapor pressure No information available.

Relative vapor density No information available.

Density 2.15 g/cm³

at 68 °F (20 °C)

Relative density No information available.

Water solubility 740 g/l

at 68 °F (20 °C)

Partition coefficient: n-

octanol/water

No information available.

Autoignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

Ignition temperature not combustible

SECTION 10. Stability and reactivity

Reactivity

exothermic dissolution process with water

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

Possibility of hazardous reactions

Exothermic reaction with:

boron trifluoride, vinylmethyl ether

Generates dangerous gases or fumes in contact with:

Metals, Zinc, (generation of hydrogen)

Conditions to avoid

Exposure to moisture.

Incompatible materials

no information available

Hazardous decomposition products

in the event of fire: See section 5.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number CX0156 Version 1.1

Product name Calcium Chloride Anhydrous Desiccant

Calcium Chlo

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

Acute oral toxicity

LD50 Rat: 1,000 mg/kg (IUCLID) (Regulation (EC) No 1272/2008, Annex VI)

Symptoms: After uptake of large quantities:, Stomach/intestinal disorders

Acute inhalation toxicity

Symptoms: Possible damages:, mucosal irritations

Acute dermal toxicity LD50 Rat: 2,630 mg/kg

(IUCLID)

Skin irritation

Rabbit

Result: No irritation OECD Test Guideline 404

Eye irritation Rabbit

Result: Eye irritation OECD Test Guideline 405

Causes serious eye irritation.

Genotoxicity in vitro

Ames test Result: negative

(Lit.)

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number CX0156 Version 1.1

Product name Calcium Chloride Anhydrous Desiccant
 Chromatic Calcium Chloride Anhydrous Desiccant
 Calcium Chloride Anhydrous Chloride Anhydrous Chloride Anhydrous Chloride Anhydrous Chloride Anhydrous Chloride Anhydrous Chloride

by NTP.

ACGIH No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

Further information

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Ecotoxicity

Toxicity to fish

LC50 Lepomis macrochirus (Bluegill sunfish): 10,650 mg/l; 96 h (IUCLID)

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 144 mg/l; 48 h (IUCLID)

Toxicity to algae

IC50 algae: 3,130 mg/l; 120 h (IUCLID)

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Additional ecological information

Discharge into the environment must be avoided.

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number CX0156 Version 1.1

Product name Calcium Chloride Anhydrous Desiccant

Calcium Chlo

SECTION 15. Regulatory information

United States of America

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311,

Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311,

Table 117.3.

DEA List I

Not listed

DEA List II

Not listed

US State Regulations

Massachusetts Right To Know

Remarks

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Ingredients

calcium chloride

New Jersey Right To Know

Ingredients

calcium chloride

California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL.

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number CX0156 Version 1.1

Product name Calcium Chloride Anhydrous Desiccant

Calcium Chlo

Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

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

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Revision Date 09/25/2014

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

All rights reserved. Millipore and the "M" Mark are registered trademarks of Merck KGaA, Darmstadt, Germany.