# Safety Data Sheet

## Section 1 – Identification of the substance/preparation and of the company/undertaking

### Identification of the substance or mixture

Product name: Calcium chloride dihydrate
Catalog number: 600-026-**
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

### Company details

Wisent Inc.
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Saint-Jean-Baptiste, Qc
Canada J0L2B0
Telephone: +1 (450) 446-2660
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Wisent Inc.
PO Box 131
St-Bruno, Qc
Canada, J3V 4P8

## Section 2 – Hazards identification

### Classification of the substance or mixture GHS

**Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)**
Eye irritation (Category 2A), H319
For the full text of the H-Statements mentioned in this Section, see Section 16.

### GHS Label elements, including precautionary statements

**Pictogram**

**Signal word**
Warning
**Hazard statement(s)**
H319 Causes serious eye irritation.
**Precautionary statement(s)**
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
**Hazards not otherwise classified (HNOC) or not covered by GHS** – none

## Section 3 – Composition/Information on ingredients

**Formula :** $CaCl_2 \cdot 2H_2O$
**Molecular weight :** 147.01 g/mol
**CAS-No. :** 10035-04-8
**EC-No. :** 233-140-8
**Index-No. :** 017-013-00-2

| Component | Classification | Concentration |
|---|---|---|
| Calcium chloride dihydrate | Eye Irrit. 2A; H319 | <= 100 % |

## Section 4 – First aid measures

**Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**Ingestion**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Inhalation**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin contact**

Rinse with plenty of soap and water. Consult a physician.

**Eye contact**

Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling.

**Information for doctor**

No data available

## Section 5 – Firefighting measures

**Extinguishing media**

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Hydrogen chloride gas, Calcium oxide

Nature of decomposition products not known.

**Advice for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**

No data available

## Section 6 – Accidental release measures

**Personal precaution, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.
**Methods and material for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
**Environmental precautions**
Do not let product enter drains.
**Reference to other sections**
For disposal see section 13.

## Section 7 – Handling and storage

**Precaution for safe handling**
PAvoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.
**Condition for safe storage, including any incapability**
Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): 13: Non Combustible Solids
**Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## Section 8 – Exposure controls/personal protection

**Control parameters**
**Components with workplace control parameters**

| Components | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Calcium chloride | 10035-04- 8 | TWA | 5 mg/m3 | dihydrate Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act. |

**Exposure controls**
**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
**Personal protective equipment**
**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Do not let product enter drains.

## Section 9 – Physical and chemical properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| Appearance | crystalline |
| Colour | white |
| Odour | No data available |
| Odour Threshold | No data available |
| pH | 5.0 - 8 at 147 g/l at 25 °C (77 °F) |
| Melting point/ freezing point | Melting point/range: 176 °C (349 °F) - dec. |
| Boiling point | No data available |
| Flash point | No data available |
| Auto ignition temperature | No data available |
| Decomposition temperature | No data available |
| Viscosity | No data available |
| Evaporation rate | No data available |
| Flammability | No data available |
| Upper explosion limit | No data available |

| | |
|---|---|
| Lower explosion limit | No data available |
| Vapour pressure | 0.01 hPa at 20 °C (68 °F) |
| Vapour density | No data available |
| Relative density | 1.850 g/cm3 |
| Relative vapour density | No data available |
| Specific gravity | No data available |
| Water Solubility | 147 g/l at 20 °C (68 °F) - completely soluble |
| Solubility (solvents) | No data available |
| Partition coefficient | No data available |
| Explosive properties | No data available |
| Oxidizing properties | No data available |

## Section 10 – Stability and reactivity

**Reactivity**
No data available
**Chemical stability**
Stable under recommended storage conditions.
**Possibility of hazardous reactions**
No data available
**Condition to avoid**
No data available
**Incompatible materials**
Strong acids, Borane/boron oxides, Zinc, Calcium oxide, Methyl vinyl ether, Calcium chloride is attacked by bromine trifluoride
**Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Calcium oxide Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known. Other decomposition products - No data available In the event of fire: see section 5

## Section 11 – Toxicological information

**Information on toxicological effects**
**Acute toxicity**
LD50 Oral - Rabbit - male - 500 - 1,000 mg/kg
(OECD Test Guideline 401)
Remarks: (anhydrous substance)
Inhalation: Irritating to respiratory system.
LD50 Dermal - Rabbit - male and female - > 5,000 mg/kg
Remarks: (anhydrous substance)
(ECHA) No data available
**Skin corrosion/irritation**
Skin - Rabbit

Result: No skin irritation - 4 h
(OECD Test Guideline 404)
Remarks: (anhydrous substance)

**Serious eye damage/eye irritation**

Eyes - Rabbit
Result: Moderate eye irritation
(OECD Test Guideline 405)
Remarks: (anhydrous substance)

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

Ames test
S. typhimurium
Result: negative
Mutagenicity (mammal cell test): chromosome aberration.
Chinese hamster fibroblasts
Result: negative

**Carcinogenicity**

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available
Acute oral toxicity - After uptake of large quantities:, Stomach/intestinal disorders, Nausea

**Aspiration hazard**

No data available

**Additional Information**

RTECS: EV9810000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## Section 12 –Ecological information

**Toxicity**

**Toxicity to fish**

static test LC50 - Pimephales promelas (fathead minnow) - 4,630 mg/l - 96 h (US-EPA) Remarks: (anhydrous substance)

**Toxicity to daphnia and other aquatic invertebrates**

static test EC50 - Daphnia magna (Water flea) - 2,400 mg/l - 48 h (OECD Test Guideline 202) Remarks: (anhydrous substance)

**Toxicity to algae**

EC50 - Pseudokirchneriella subcapitata - 2,900 mg/l - 72 h (OECD Test Guideline 201) Remarks: (anhydrous substance)

**Persistence and degradability**

The methods for determining biodegradability are not applicable to inorganic substances.

**Bioaccumulative potential**

No data available

**Results of PBT and vPvB assessment PBT/vPvB assessment**

Not available as chemical safety assessment not required/not conducted

**Other adverse effects**

No data available

## Section 13 – Disposal considerations

**Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

## Section 14 – Transport information

**DOT (US)**

Not regulated as dangerous

**IATA**

Not regulated as dangerous

**IMDG**

Not regulated as dangerous

## Section 15 – Regulatory information

**WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

## Section 16 – Other information

MSDS Date of revision: June 2019

For research use only. Not use for diagnostic procedures.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions