

# Material Safety Data Sheet

From: Biogard-Agronomics, Inc.  
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Emergency Telephone No. 1-800-673-8502  
Alternate: Contact your emergency Poison Control Center  
Chemical Emergency ONLY: 800-424-9300 (US), Outside US: 202-483-7616

## *Calcium-25*

### 1. Product Identification.

*Calcium-25* is a non-toxic, granular concentrate to make an agricultural spray for plants, including, but not limited to, field crops grown by farmers, landscaping, nurseries, and home use.

### 2. Composition/Information on Ingredients.

Calcium chloride (flake) combined with trace amounts of naturally-occurring plant waxes from natural sources to aid in absorption.

### 3. Hazards Identification.

#### Emergency Overview

Caution: Irritant. *Calcium-25 concentrate* is irritating to both skin and eyes and should be washed from skin or eyes on contact with water only. Remove contaminated clothing and wash before reuse. There are no known long-term harmful effects. Diluted product is not harmful to skin, eyes, or through ingestion. There is no long-term effect with chronic exposure to the undiluted product. Avoid breathing dust of undiluted product.

### 4. First Aid Measures.

The following applies to the Calcium-25 concentrate as shipped only: for skin, flush with water as soon as possible after contact. For eyes, flush with water

for 15 minutes. If irritation persists, contact a physician. Treat all symptoms for contact with calcium chloride only. Organic ingredients are non-toxic, do not irritate, and pose no threat to humans or animals. Breathing the diluted product when sprayed poses no threat, however dust from the undiluted product may cause lung irritation.

#### 5. Fire Fighting Measures.

**Calcium-25** is not flammable. No precautions are necessary.

#### 6. Accidental Release Measures.

Remove items which could be contaminated. For large amounts, shovel or brush away to remove, and flush the area with large amounts of plain water. Run-off, under these conditions is harmless to human, animal, and plant life. Amounts removed as solid can be disposed of by diluting with large amounts of water, and may be released to drains, ground, etc.

#### 7. Handling and Storage.

Keep in a tightly closed container, away from moisture. The product is not affected by heat or light. Dilute product prior to use as instructed.

#### 8. Exposure Control/Personal Protection.

Avoid contact of undiluted product with eyes and skin. Avoid breathing dust or contact with eyes. Do not breathe dust when pouring. **Calcium-25** should be poured in a well ventilated area, such as outdoors, when mixing with water. Contact of properly-diluted solution is harmless.

#### 9. Physical and Chemical Properties.

**Calcium-25** has the same chemical and physical properties and calcium chloride. The product is highly hygroscopic, and should be kept stored in air-tight containers prior to use.

Molecular weight 110.99

Percent  $\text{CaCl}_2$  by weight 75-80% (as dihydrate)

From: natural salt brines

#### 10. Stability and Reactivity.

Under ordinary conditions, **Calcium-25** has an indefinite shelf life when kept in the original shipping container (HDPE with polypropylene caps).

The product does not decompose with heat under 212 degrees F.

There is no hazardous polymerization or bi-products were decomposition a problem with this product.

The product is incompatible in solution with other agricultural products, such as herbicides and pesticides, since it may interfere with the action of these products, or the activity of this product. Using other products is recommended a day after using **Calcium-25**, or a week earlier.

Avoid moisture with undiluted product. Use the product as soon after mixing with water ONLY as possible.

#### 11. Toxicological Information.

Toxicology for **Calcium-25** is essentially that of calcium chloride, which has an i.v. LD50 in mice of 42.2 mg/kg. This is slightly above the measurements found with sodium chloride (table salt).

#### 12. Ecological Information.

**Calcium-25** has been specifically exempted from registration by the U.S. Environmental Protection Agency and FIFRA, in writing, on two occasions in the early 1980's. Furthermore, the product has been allowed for use by organic certified farms since February 20, 1990, by groups such as OCIA, OEFFA, CCOF, MOFGA, NOFA, OFPANA, and others.

#### 13. Disposal Considerations.

This is set forth in Paragraph 6 above.

14. Transport Information.

*Calcium-25* may be transported via ground or air worldwide without restriction. The product is sold in sizes as follows: 1 oz, 8 oz., 4 lb., and 40 lb. Containers, and is shipped in approved corrugated cardboard boxes.

15. Other Information.

Label includes precautions and instructions, referring to package inserts for further instructions.

Label precautions:

- Irritant. Avoid contact with undiluted package contents with skin and eyes.
- In case of contact, flush with water.
- Do not use surfactant additives.
- Keep container tightly closed.
- Do not take internally.
- Keep out of reach of children.

40-lb. Package also states:

- For eyes, flush with water for 15 minutes, and call a physician if irritation persists.
- Remove any contaminate clothing and wash promptly before reuse.
- When used as directed, this product will not harm plant life.
- Do not take internally
- If ingested, contact a poison control center and treat for ingestion of calcium choride.
- Organic ingredients are totally non-toxic.
- Buyer assumes all liability for the handling and use of this product not in accordance with label instructions.

## 16. Disclaimer.

Bio-Gard Agronomics, Inc. provides the information contained herein in good faith, and makes representation as to its accuracy as set forth hereinabove. This document is provided only as a guide to the appropriate precautionary handling of the material by a properly trained person using *Calcium-25*. Individuals receiving this product must exercise their independent judgment in determining appropriateness for its specified purpose. Bio-Gard Agronomics, Inc. makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for its particular purpose with respect to the information set forth herein, or the product to which the information refers. Accordingly, Bio-Gard Agronomics, Inc. will not be responsible for damages resulting from the use of, or reliance upon, this information.