

MATERIAL SAFETY DATA SHEET (MSDS) CALCIUM NITRATE GRANULAR

SECTION 1: Identification of the substance /mixture and of the company/undertaking

1.1. Product identifier

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| Product Name | Calcium Nitrate Granular |
| CAS No. | 15245-12-2 |
| Molecular Weight | 1080.71 |
| Chemical Formula | 5 Ca(NO ₃) ₂ .NH ₄ NO ₃ .10H ₂ O |
| Ammonium-N(NH ₄ -N) | 1.1% |
| Water of crystallization: | 16.7% |

1.2. Composition and Information on Ingredients

Substance/Preparation Preparation

Contains plant nutrients Nitric Acid, Ammonium Calcium Salt.

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting in this section, in accordance with EU or national regulations.

1.3. Details of the supplier of the safety data sheet

| | |
|------------|--------------------------------------|
| Supplier: | Kingenta Australia AG PTY LTD. |
| Address: | 671-677 Hunter Street |
| City: | Newcastle West, 2302 New South Wales |
| Telephone: | +61 2 4929 4972 |
| Fax: | +61 2 4929 6358 |
| Web: | au@kingenta.com |

1.4. Emergency telephone number As Above

SECTION 2: Hazards Identification:

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.
See section 11 for more detailed information on health effects and symptoms.

SECTION 3. First Aid Measures

3.1 Inhalation.

Avoid breathing dust. If inhaled, remove to fresh air.

3.2 Ingestion.

If large quantities of this material are swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

3.3 Skin contact.

Avoid prolonged or repeated contact with skin. After handling, always wash hands thoroughly with soap and water. Get medical attention if irritation develops.

3.4 Eye contact.

In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation occurs.

SECTION 4. Fire Fighting Measures.

4.1 Extinguishing media.

Use water only in flooding quantities. Do NOT use chemical extinguisher of foam or attempt to smother the fire

with steam or sand.

4.2 Special exposure hazards.

Fire-fighters should wear self-contained positive pressure breathing apparatus(SCBA) and full turnout gear.

Avoid breathing dusts, vapours or fumes from burning materials. In case of inhalation of decomposition products

in a fire, symptoms may be delayed.

4.3 Hazardous thermal decomposition products.

These products are : nitrogen oxides(NO.NO₂, etc.)

SECTION 5. Accidental Release Measures.

5.1 Personal precautions:

Use suitable protective equipment(section 8). Follow all fire-fighting procedures(section 5).

5.2 Environmental precautions and clean-up methods:

Avoid contact of spilled material and runoff with soil and water course.

Use a tool to scoop up solid material and place into an appropriate labeled waste container. Do not mist with sawdust or other combustible material. Avoid creating dusty conditions and prevent wind dispersal. Keep out of waterways. See section 13 for Waste Disposal Information.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

SECTION 6. Handling and Storage.

6.1 Handling.

Avoid creating dust when handling and avoid all possible sources of ignition(spark or flame).

Avoid contamination by any source including metals, dust and organic materials. Prevent moisture

pick-up in handling and storage.

6.2 Storage.

Store and use away from heat, sparks, open flame, or any other ignition source. Avoid contact with combustible materials.

SECTION 7. Exposure Controls/ Personal Protection.

7.1 Occupational exposure limits: Total inhalable dust – 10mg/m³

Respirable dust – 5mg/m³

7.2 exposure controls.

Respiratory protection: Use a properly fitted, particulate filter 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.

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.

Eye protection: Recommend, Use dust goggles if dust is generated.

Skin protection: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment for the body should be selected based on the task being performed and the risks

involved.

SECTION 8. Physical and Chemical Properties.

General information:

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|--------------------------------|-----------------------------------|
| Physical state: | Solid |
| Melting/freezing point: | 94°C to 98°C (201.2°F to 208.4°F) |
| Boiling point: | 310°C (590°F) |
| Density(g/cm3): | 1g/cm3 |
| Solubility: | Soluble in cold water. |
| Odor: | odorless |
| Ph: | 5 to 7(conc.(% w/w):10)(Acidic.) |
| Color: | white to yellowish. |

SECTION 9. Stability and Reactivity.

9.1 Stability:

Stable under recommended storage and handling conditions(see section 6).

9.2 Material to avoid:

Reactive or incompatible with the following materials: combustible materials, acids and alkalis.

9.3 Hazardous decomposition products:

These products are nitrogen oxides(NO, NO₂ etc)

SECTION 10. Toxicological Information.

May cause eye and skin irritation.

Adverse health effects are considered unlikely, when the product is used according to directions.

SECTION 11. Ecological Information

11.1 Adverse effects:

The product is not expected to harm the environment when used properly according to directions.

11.2 Remarks.

The product does not show any bioaccumulation phenomena.

SECTION 12: Disposal Consideration

12.1 Hazardous waste:

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU

Direction 91/689/EEC

12.2 Methods of disposal:

Empty containers or liners may retain some product residues. Do not empty into drains; Dispose of this material

and its container in a safe way. Dispose of in accordance with all applicable local and national regulations.

SECTION 13. Transport Information

Not regulated.

Not classified as hazardous material according to UN Orange Book and international transport codes

e.g. ADR(road), RID(rail). AND(inland waterways) and IMDG(sea).

SECTION 14. Regulatory Information.

EU regulations.

Risk phrases: This product is not classified according to EU legislation.

Product use: Industrial applications.

Disclaimer:

To the best of our knowledge, the information provided in this Safety Data Sheet is accurate as at the date of its issue. The information it contains is being given for safety guidance purposes and relates only to the specific material and uses described in it. This information does not necessarily apply to that material when combined with other material (s) or when used otherwise than as described herein. Final determination of the suitability of any material is the sole responsibility of the user. All materials may represent unknown hazards and should be used with caution. Kingenta Australia AG PTY LTD disclaims any liability for loss or damage resulting from the use of any data, information or recommendations set out in this Safety Data Sheet.
