

Ref:

Date:

SAFETY DATA SHEET: CALCIUM NITRATE TETRAHYDRATE

This Safety Data Sheet (SDS) is prepared for:

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

- **Product Name:** Calcium Nitrate Tetrahydrate
- **Other Names:** Nitric Acid, Calcium Salt, Tetrahydrate; Norwegian Saltpeter Tetrahydrate; Calcium Dinitrate Tetrahydrate
- **CAS No.:** 13477-34-4
- **EINECS EC Number:** 233-332-1
- **Molecular Formula:** $\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$
- **Relevant Uses:** Industrial use only.
- **Supplier:**
 - **Entity Name:** HRSU Indore Pvt. Ltd.
 - **Address:** 9 C-D 5, UG-3, Abhishake Avenue, Slice-4, Scheme No. 78, Indore, Madhya Pradesh, India, 452010
 - **Email:** info@hrsuintore.com

SECTION 2: HAZARDS IDENTIFICATION

- **GHS Classification:**
 - Oxidizing solids: Category 3
 - Acute toxicity, Oral: Category 5
 - Skin irritation: Category 3
 - Serious eye damage/eye irritation: Category 2B
- **GHS Label Elements:**
 - **Signal Word:** Warning
 - **Hazard Statements:**
 - H272: May intensify fire; oxidizer.
 - H303: May be harmful if swallowed.
 - H316: Causes mild skin irritation.
 - H320: Causes eye irritation.
 - **Precautionary Statements:**
 - P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 - P220: Keep/Store away from clothing/other combustible materials.
 - P280: Wear protective gloves/protective clothing/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.
 - P312: Call a POISON CENTER or doctor/physician if you feel unwell.
 - P501: Dispose of contents/container to authorized agents.

HRSU Indore Pvt. Ltd.

Website: hrsuintore.com

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Contact: +91 9425000484

GSTIN: 23AAAGCH4199C1ZP

Registered Office: UG - 3, Abhishek Avenue, Slice - 4, Scheme. No. 78, Vijay Nagar, Indore (M.P.), 452010

Manufacturing Unit: Plot No. 62 Mpdc, Industrial Area Maksi District - Shajapur (M.P.), 465106

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- **Product Name:** Calcium Nitrate Tetrahydrate
- **CAS No.:** 13477-34-4
- **EINECS EC Number:** 233-332-1

SECTION 4: FIRST AID MEASURES

- **Inhalation:** Remove fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- **Ingestion:** Never give anything by mouth to an unconscious person. Get medical attention.
- **Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention.
- **Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

SECTION 5: FIRE-FIGHTING MEASURES

- **Flammability:** Non-flammable, but it will support combustion.
- **Fire Extinguishing Media:** Use water spray or any means suitable for extinguishing the surrounding fire.
- **Special Information:** As an oxidizer, it may accelerate burning. In the event of a fire, wear full protective clothing and a self-contained breathing apparatus. Containers may explode in the heat of a fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **Personal Precautions:** Ventilate the area. Avoid breathing dust. Use personal protective equipment (gloves, safety glasses, etc.).
- **Environmental Precautions:** Do not let the product enter drains.
- **Cleanup Procedures:** Use appropriate tools to place the spilled solid in a waste disposal container. Clean the contaminated surface by spreading water and dispose of it according to local authority requirements.

SECTION 7: HANDLING AND STORAGE

- **Handling:** Wash thoroughly after handling. Minimize dust generation. Avoid contact with skin, eyes, and clothing.
- **Storage:** Store in a cool, dry, and ventilated area away from heat and sunlight in a tightly closed container. Do not store incompatible materials like reducing agents and organic materials.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- **Ventilation:** A system of local and/or general exhaust is recommended.
- **Personal Respirators:** For conditions where exposure to dust is apparent, a particulate respirator may be worn.
- **Skin Protection:** Wear protective gloves and clean body-covering clothing.
- **Eye Protection:** Use chemical safety goggles or a full-face shield where dusting is possible.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** White crystals or granules.
- **Odor:** Odorless.
- **pH:** 5.0 - 9 (10% solution).
- **Melting Point:** 43°C.
- **Solubility:** Freely soluble in water.
- **Molecular Weight:** 236.15 g/mol.

SECTION 10: STABILITY AND REACTIVITY

- **Stability:** Stable under ordinary conditions of use and storage.
- **Hazardous Decomposition Products:** Emits toxic fumes (Nitrogen oxides, Calcium oxide) when heated to decomposition.
- **Incompatibility:** Reactive with reducing agents and organic materials.

SECTION 11: TOXICOLOGICAL INFORMATION

- **Toxicity to Animals:** LD50 [oral, rat]; 3900 mg/kg.
- **Carcinogenic Effects:** Not identified as a carcinogen by IARC.

SECTION 12: ECOLOGICAL INFORMATION

- **Toxicity to fish:** LC50 - Oncorhynchus mykiss (rainbow trout) - > 98.9 mg/l - 96 h.
- **PBT and vPvB assessment:** This substance is not considered to be persistent, bio accumulative, or toxic (PBT).

SECTION 13: DISPOSAL CONSIDERATIONS

- Waste must be managed in an appropriate and approved waste disposal facility. Dispose of the container and unused contents in accordance with federal, state, and local regulations.

SECTION 14: TRANSPORT INFORMATION

- **DOT (USA), TDG (Canada) & ADR/RID (Europe):**
 - **Proper Shipping Name:** Calcium Nitrate
 - **Hazard Class:** 5.1 (Oxidizing Material)
 - **UN Number:** UN1454
 - **Packing Group:** III
- **IATA/IMDG:** Not regulated as dangerous goods.

SECTION 15: REGULATORY INFORMATION

- **USA:**
 - **SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
 - **SARA 311/312 Hazards:** Reactivity Hazard.
 - **SARA 313:** This material contains Calcium nitrate tetrahydrate, which is subject to reporting.
 - **California Prop. 65:** This product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

SECTION 16: OTHER INFORMATION

- **Disclaimer:** The information provided is believed to be accurate and represents the best information currently available. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information.



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