

CALCIUM NITRATE TETRA HYDRATE MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product form	:	Substance
CAS-No.	:	13477-34-4
Product code	:	30606, 30607
Formula	:	Ca(NO ₃) ₂ ·4H ₂ O

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

1.2.1. Relevant identified uses

Industrial/professional use spec	:	Industrial
For professional use only		
Use of the substance/mixture	:	Laboratory Reagent

1.2.2. Uses advised against

No additional information available

1.3. Details of the manufacturer of the safety data sheet

Techno Pharmchem
Plot No.1022, Modern Industrial Estate,
Bahadurgarh-124507, India
T +91 11 23646422
info@technopharmchem.com

1.4. Emergency telephone number

Emergency number: +91 11 23646422 (9:30am – 5.30pm)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to regulation (EC) No. 1272/2008 [CLP]

Oxidising solids, H272

Category 2

Acute toxicity (oral), H302

Category 4

Acute toxicity (inhal.), H332

Category 4

Full text of H statements: see section 16

Classification according to directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

O; R8

Xn; R20

Xn; R22

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP)	:	Danger
Hazard statements (CLP)	:	H272- Oxidizer. H302+H332 - Harmful if swallowed or if inhaled
Precautionary statements (CLP)	:	P220- Keep away from clothing and other combustible materials.

2.3. Other hazards

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Name	:	CALCIUM NITRATE TETRAHYDRATE
CAS No	:	13477-34-4

Full text of R- and H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures after inhalation	:	Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
First-aid measures after skin contact	:	Wash with plenty of soap and water. Get medical advice/attention.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	:	Rinse mouth. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

- Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂)
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special Hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with eyes. Do not breathe vapors.
Avoid dust formation.
- Hygiene measures : Do not eat, drink or smoke when using this product.
Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

No additional information available

8.2. Exposure controls

Hand protection	:	Protective gloves
Eye protection	:	Chemical goggles or safety glasses
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	In case of inadequate ventilation wear respiratory protection

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	Colorless crystals
Odour	:	Odourless
Odour threshold	:	No data available
pH	:	5.5 - 7
Relative evaporation rate (butylacetate=1)	:	No data available
Melting Point	:	44°C
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (Solid,gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Density	:	1.86 g/cm ³
Solubility	:	Water: 121 g/100ml
Log pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other Information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No additional information available

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Not classified
		pH: 5.5 - 7
Serious eye damage/irritation	:	Not classified
		pH: 5.5 - 7
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product/packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1454 IMDG: 1454 IATA: 1454

14.2 UN Proper shipping name

ADR/RID : CALCIUM NITRATE TETRAHYDRATE
IMDG : CALCIUM NITRATE TETRAHYDRATE
IATA : Calcium Nitrate Tetrahydrate

14.3 Transport Hazard class(es)

ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Ensure all local, regional, national and/or international regulations are observed.

15.2 Chemical safety Assessment

For this product a chemical safety assessment was not carried out.



SECTION 16: OTHER INFORMATION

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

H272	Oxidizer.
H302	Harmful if swallowed.
H302 + H332	Harmful if swallowed or if inhaled
H319	Causes serious eye irritation.
H332	Harmful if inhaled

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.