

CALCIUM NITRATE TETRAHYDRATE

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: Calcium nitrate tetrahydrate
Product Code: 160
CAS#: 13477-34-4
Synonym: Not available
Chemical Name: Not available
Chemical Formula: $\text{CaN}_2\text{O}_6 \cdot 4(\text{H}_2\text{O})$
Formula weight: 236.15

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition:
Name: Calcium citrate tetrahydrate
Toxicological Data on Ingredients: Acute Tox. 4; Eye Dam. 1; H302, H318

SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture
Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008
Potential Acute Health Effects: Not Available
Potential Chronic Health Effects : Not Available
Carcinogenic Effects: Not available
Mutagenic Effects: Not available.
Teratogenic Effects: Not available.
Developmental Toxicity: Not Available
Specific target organ toxicity - Not available

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.
If inhaled If breathed in: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact Wash off with soap and plenty of water. Consult a physician.
In case of eye contact: Flush eyes with water as a precaution.
If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects, both acute and delay: No data available
Indication of any immediate medical attention and special treatment needed: No data available

SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media
Suitable extinguishing media :
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special hazards arising from the substance or mixture
Nitrogen oxides (NOx)
Calcium oxide
Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.



SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

Environmental precautions Do not let product enter drains.

Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling : Not available

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Hygroscopic

Storage Class:

Storage class (TRGS 510): 11: Combustible Solids

Specific end use(s) A part from the uses:

No other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Body Protection Complete suit protecting against chemicals, 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

Appearance Form	: Crystalline
Colour	: Colourless
Odour	: Not available
Odour Threshold	: Not available
pH	: Not available
Melting point/freezing point	: 44°C
Initial boiling point and boiling range	: Not available
Flash point	: Not available
Evaporation rate	: Not available
Flammability (solid, gas)	: Not available
Upper/lower flammability or explosive limits	: Not available
Vapour pressure	: Not available
Vapour density	: Not available
Relative density	: 1.82 g/cm ³



Water solubility : 1.293 g/l at 20°C
Partition coefficient : Not available
Auto-ignition temperature : Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity: Not available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions Not available

Conditions to avoid : Avoid contact with combustible material (paper, wool, oil).

Incompatible materials: Not available.

Hazardous decomposition products **Other decomposition products** - In the event of fire

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity: LD50 Oral - Rat - > 300 - < 2.000 mg/kg.

Skin corrosion/irritation no data available

Serious eye damage/eye irritation : Not Available.

Respiratory or skin sensitization no data available

Carcinogenicity no data available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - > 98,9 mg/l - 96 h

Persistence and degradability:

Not Available.

Bioaccumulative potential :Not available

Mobility in soil no data available

Results of PBT and vPvB assessment **PBT/vPvB assessment** not available

Other adverse affects no data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID:

IMDG:

IATA:

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es):

ADR/RID:

IMDG:

IATA:

Packaging group:



ADR/RID:

IMDG:

IATA:

Environmental hazards:

ADR/RID: No

IMDG Marine pollutant: No

IATA: Yes

SECTION 15: OTHER REGULATORY INFORMATION

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

Special Considerations: Not available

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