

**Identification**

Ca(NO<sub>3</sub>)<sub>2</sub>·4H<sub>2</sub>O  
M = 236,15 g/mol  
CAS [13477-34-4]  
EC number: 233-332-1  
Taric code: 2834 29 80

**Synonyms**

Nitric acid calcium salt tetrahydrate

**Applications**

analytical chemistry, in pyrotechnics, in the electronic industry, in fertilizer compositions.

**Specifications**

assay (complexometric).....	99 - 103 %	copper (Cu).....	max. 0,0002 %
insoluble in water.....	max. 0,005 %	heavy metals (as Pb).....	max. 0,0005 %
pH (5 %, H <sub>2</sub> O).....	5 - 7	iron (Fe).....	max. 0,0005 %
chlorides (Cl).....	max. 0,005 %	lead (Pb).....	max. 0,0005 %
nitrites (NO <sub>2</sub> ).....	max. 0,001 %	magnesium (Mg).....	max. 0,01 %
sulfates (SO <sub>4</sub> ).....	max. 0,002 %	potassium (K).....	max. 0,005 %
ammonium (NH <sub>4</sub> ).....	max. 0,005 %	sodium (Na).....	max. 0,01 %
barium (Ba).....	max. 0,005 %	strontium (Sr).....	max. 0,01 %

**Physical data**

- Appearance: crystals, colourless or white, approx. 1mm
- Spec. Density: 1,82 g/cm<sup>3</sup>
- Bulk density: ~ 1000 kg/m<sup>3</sup>
- Solub. in water: (20 °C): soluble
- Melting point: 42 °C
- pH(50 g/l H<sub>2</sub>O, 20 °C) 6,0 (anhydrous substance)

**Safety - GHS**

**Signal Word:** Danger

**Hazard Statements:**

- H302: Harmful if swallowed.  
H318: Causes serious eye damage.

**Precautionary Statements:**

- P280: Wear protective gloves / protective clothing / eye protection / face protection.  
P264: Wash thoroughly after handling.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER or doctor / physician.  
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

**Transport/storage**

- ADR: 5.1 O2 III • UN 1454 • CALCIUM NITRATE
- IMDG: 5.1 III • UN 1454 • CALCIUM NITRATE
- IATA/ICAO: 5.1 III • UN 1454 • CALCIUM NITRATE
- PAX: 559
- CAO: 563
- 10°C - 30°C