

Identification

Ca(NO₃)₂·4H₂O
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).....	min. 98 %	ammonium (NH ₄).....	max. 0,005 %
insoluble in water.....	max. 0,01 %	copper (Cu).....	max. 0,002 %
pH (5 %, H ₂ O).....	4 - 7	iron (Fe).....	max. 0,002 %
acidity (as HNO ₃).....	max. 0,05 %	lead (Pb).....	max. 0,002 %
chlorides (Cl).....	max. 0,005 %	nickel (Ni).....	max. 0,002 %
sulfates (SO ₄).....	max. 0,02 %	non precipitable by ammonium oxalate (as SO ₄)	max. 0,3 %

Physical data

- Appearance: crystals, colourless or white, approx. 1mm
- Spec. Density: 1,82 g/cm³
- Bulk density: ~ 1000 kg/m³
- Solub. in water: (20 °C): soluble
- Melting point: 42 °C
- pH(50 g/l H₂O, 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