

Identification

KNO₃
M = 101,11 g/mol
CAS [7757-79-1]
EC number: 231-818-8
Taric code: 2834 21 00

Synonyms

Nitric acid potassium salt, Saltpeter

Applications

analytical chemistry, laboratory reagent, oxidizing agent, in pyrotechnics, manufacture of glass, in food industry.

Specifications

assay (acidimetric, referred to dried sample).....	99,0 - 101,0 %	sulfates (SO ₄).....	max. 0,003 %
assay (acidimetric).....	min 99 %	ammonium (NH ₄).....	max. 0,001 %
appearance of solution.....	clear and colourless	calcium (Ca).....	max. 0,001 %
insoluble in water.....	max. 0,005 %	copper (Cu).....	max. 0,0001 %
acidity or alkalinity.....	passes test	heavy metals.....	max. 0,0005 %
pH (5 %, H ₂ O).....	5 - 8	iron (Fe).....	max. 0,0003 %
chlorides (Cl).....	max. 0,001 %	lead (Pb).....	max. 0,0001 %
iodates (IO ₃).....	max. 0,0005 %	magnesium (Mg).....	max. 0,002 %
nitrites (NO ₂).....	max. 0,001 %	sodium (Na).....	max. 0,005 %
phosphates (as PO ₄).....	max. 0,0005 %	reducible substances.....	passes test
		identity (IR-spectrum).....	passes test

Physical data

- Appearance: crystals, white
- Spec. Density: 2,11 g/cm³
- Bulk density: ~ 800 kg/m³
- Solub. in water: (20 °C): 320 g/l
- Melting point: 334 °C
- pH(50 g/l H₂O, 20 °C) 5,5 - 8,0

Safety - GHS

Signal Word: Danger

Hazard Statements:

H272: May intensify fire; oxidiser.

**Precautionary Statements:**

- P221: Take any precaution to avoid mixing with combustibles.
P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.
P220: Keep / Store away from clothing / combustible materials.
P280: Wear protective gloves / protective clothing / eye protection / face protection.
P370+P378: In case of fire: Use ... for extinction.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Transport/storage

- ADR: 5.1 O2 III • UN 1486 • POTASSIUM NITRATE
- IMDG: 5.1 III • UN 1486 • POTASSIUM NITRATE
- IATA/ICAO: 5.1 III • UN 1486 • POTASSIUM NITRATE
- PAX: 516
- CAO: 518
- 10°C - 30°C