

Identification

HNO₃
M = 63,01 g/mol
CAS [7697-37-2]
EC number: 231-714-2
Taric code: 2808 00 00

Applications

oxidizing agent, synthesis of nitrates and organic nitro compounds.

Specifications

| | | | |
|---------------------------------------|----------------|--|---------------|
| assay (acidimetric)..... | min. 60 % | iron (Fe)..... | max. 0,2 ppm |
| chlorides (Cl)..... | max. 0,00005 % | lead (Pb)..... | max. 0,01 ppm |
| fluorides (F)..... | max. 0,0001 % | lithium (Li)..... | max. 0,02 ppm |
| phosphates (as PO ₄)..... | max. 0,0001 % | magnesium (Mg)..... | max. 0,1 ppm |
| sulfates (SO ₄)..... | max. 0,0001 % | manganese (Mn)..... | max. 0,01 ppm |
| aluminium (Al)..... | max. 0,5 ppm | molybdenum (Mo)..... | max. 0,02 ppm |
| arsenic (As)..... | max. 0,01 ppm | nickel (Ni)..... | max. 0,05 ppm |
| barium (Ba)..... | max. 0,02 ppm | potassium (K)..... | max. 0,1 ppm |
| beryllium (Be)..... | max. 0,01 ppm | silver (Ag)..... | max. 0,01 ppm |
| bismuth (Bi)..... | max. 0,1 ppm | sodium (Na)..... | max. 0,5 ppm |
| cadmium (Cd)..... | max. 0,5 ppm | strontium (Sr)..... | max. 0,01 ppm |
| calcium (Ca)..... | max. 0,5 ppm | thallium (Tl)..... | max. 0,05 ppm |
| chromium (Cr)..... | max. 0,1 ppm | titanium (Ti)..... | max. 0,1 ppm |
| cobalt (Co)..... | max. 0,01 ppm | vanadium (V)..... | max. 0,01 ppm |
| copper (Cu)..... | max. 0,01 ppm | zinc (Zn)..... | max. 0,05 ppm |
| germanium (Ge)..... | max. 0,05 ppm | zirconium (Zr)..... | max. 0,1 ppm |
| heavy metals (as Pb)..... | max. 0,2 ppm | residue on ignition (as SO ₄)..... | max. 0,0005 % |

Physical data

- Density: 1,37 g/cm³
- Solub. in water: (20 °C): miscible
- Melting point: -22 °C
- Boiling point: ~ 120 °C
- pH(20 °C) < 1

Safety - GHS

Signal Word: Danger

Hazard Statements:

- H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage.
H331: Toxic if inhaled.



Precautionary Statements:

- P221: Take any precaution to avoid mixing with combustibles.
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
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.
P370+P378: In case of fire: Use ... for extinction.
P405: Store locked up.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Transport/storage

- ADR: 8 C1 II • UN 2031 • NITRIC ACID
- IMDG: 8 II • UN 2031 • NITRIC ACID
- IATA/ICAO: 8 II • UN 2031 • NITRIC ACID
- PAX: 851

- CAO: 855
- 10°C - 30°C