

Identification

NH₃
M = 17,03 g/mol
CAS [1336-21-6]
EC number: 215-647-6
Taric code: 2814 20 00

Synonyms

Ammonia water, Ammonium hydroxide solution

Applications

analytical chemistry, laboratory reagent.

Specifications

assay (acidimetric, NH ₃).....	25,0 - 30,0 %	iron (Fe).....	max. 0,1 ppm
density (20°/20°).....	0,892 - 0,910	lead (Pb).....	max. 0,05 ppm
appearance of solution.....	clear and colourless	magnesium (Mg).....	max. 0,1 ppm
carbonates (as CO ₂).....	max. 0,001 %	potassium (K).....	max. 0,5 ppm
chlorides (Cl).....	max. 0,5 ppm	sodium (Na).....	max. 0,5 ppm
phosphates (as PO ₄).....	max. 0,5 ppm	pyridine and related substances.....	max. 2 ppm
silicates (SiO ₂).....	max. 0,001 %	substances reducing KMnO ₄	max. 8 ppm
sulfates (SO ₄).....	max. 2 ppm	oxidisable substances.....	passes test
calcium (Ca).....	max. 0,5 ppm	residue on evaporation.....	max. 0,001 %
copper (Cu).....	max. 0,1 ppm		

Physical data

- Density: 0,90 g/cm³
- Melting point: -57,5 °C
- Boiling point: 37,7 °C
- Vapour pressure: (20 °C) ~ 500 hPa
- Expl. limit (upper): 33,6 Vol%
- Expl. limit (lower): 15,4 Vol%
- pH(20 °C) > 12

Safety - GHS

Signal Word: Danger

Hazard Statements:

- H314: Causes severe skin burns and eye damage.
H400: Very toxic to aquatic life.
H335: May cause respiratory irritation.

**Precautionary Statements:**

- P260: Do not breathe dust / fume / gas / mist / vapours / spray.
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.
P321: Specific treatment (see on this label).
P405: Store locked up.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Toxicological data

- LD 50 (oral, rat): 350 mg/kg
- MAK: 20 ml/m³, 14 mg/m³
- WGK: 2
- Poison class CH (Swiss): 2

Transport/storage

- ADR: 8 C5 III • UN 2672 • AMMONIA SOLUTION
- IMDG: 8 III • UN 2672 • AMMONIA SOLUTION
- IATA/ICAO: 8 III • UN 2672 • AMMONIA SOLUTION
- PAX: 819
- CAO: 813
- Store below 25°C