

Identification

H₃PO₄
M = 98,00 g/mol
CAS [7664-38-2]
EC number: 231-633-2
Taric code: 2809 20 00

Synonyms

Orthophosphoric acid

Applications

analytical chemistry, laboratory reagent, in fertilizer compositions, solvents (for pharmaceuticals synthesizing), antioxidant (in food industry), in pharma industry.

Specifications

assay (acidimetric).....	85,0 - 88,0 %	chlorides (Cl).....	max. 50 ppm
Identification phosphate.....	passes test	nitrates (NO ₃).....	passes test
Identification A (EP).....	passes test	sulfates (SO ₄).....	max. 100 ppm
appearance of solution.....	clear and colourless	sulfates (SO ₄).....	passes test
hypophosphorous acid and phosphorous acid...	passes test	arsenic (As).....	max. 2 ppm
alkali phosphates.....	passes test	iron (Fe).....	max. 50 ppm
		substances precipitated with ammonia.....	passes test

Physical data

- Density: 1,71 g/cm³
- Solub. in water: (20 °C): miscible
- Melting point: ~ 21 °C
- Boiling point: ~ 158 °C
- Vapour pressure: (25 °C) 2,2 hPa
- pH(100 g/l H₂O, 20 °C) < 1
- Hygroscopic

Safety - GHS

Signal Word: Danger

Hazard Statements:

H314: Causes severe skin burns and eye damage.

**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.

P310: Immediately call a POISON CENTER or doctor / physician.

P405: Store locked up.

P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Transport/storage

- ADR: 8 C1 III • UN 1805 • PHOSPHORIC ACID, SOLUTION
- IMDG: 8 III • UN 1805 • PHOSPHORIC ACID, SOLUTION
- IATA/ICAO: 8 III • UN 1805 • PHOSPHORIC ACID, SOLUTION
- PAX: 819
- CAO: 821
- 15°C - 25°C