

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 - 88 %	heavy metals (as Pb).....	max. 0,001 %
identification.....	passes test	iron (Fe).....	max. 0,005 %
appearance of solution.....	clear and colourless	substances precipitated with ammonia.....	passes test
hypophosphorous acid and phosphorous acid.....	passes test	Residual solvents are analysed according to guideline CPMP/ICH/283/95.	
alkali phosphates.....	passes test		
chlorides (Cl).....	max. 0,005 %		
nitrates (NO ₃).....	passes test		
sulfates (SO ₄).....	max. 0,01 %		
arsenic (As).....	max. 0,0002 %		

Packaging**Packaging Code**

1 l  AC10981000
2,5 l  AC10982500
5 l  AC1098005P
25 l  AC1098025P

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) < 0,5
- 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.
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): 1530 mg/kg (anhydrous substance)
- WGK: 1
- Poison class CH (Swiss): 2

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
- Store between 15°C and 25°C