

**Identification**

H<sub>3</sub>PO<sub>4</sub>  
 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).

**Specifications**

assay (acidimetric).....	min. 85 %	calcium (Ca).....	max. 0,002 %
identity.....	passes test	cobalt (Co).....	max. 0,00005 %
appearance of solution.....	passes test	copper (Cu).....	max. 0,00005 %
colour (Hazen).....	max. 10	heavy metals (as Pb).....	max. 0,001 %
insoluble in water.....	max. 0,001 %	iron (Fe).....	max. 0,001 %
volatile acids (as CH <sub>3</sub> COOH).....	max. 0,001 %	lead (Pb).....	max. 0,00005 %
chlorides (Cl).....	max. 0,0002 %	magnesium (Mg).....	max. 0,0005 %
fluorides (F).....	max. 0,0001 %	manganese (Mn).....	max. 0,00005 %
nitrates (NO <sub>3</sub> ).....	max. 0,0003 %	nickel (Ni).....	max. 0,0001 %
phosphites,		potassium (K).....	max. 0,0005 %
hypophosphites (as H <sub>3</sub> PO <sub>3</sub> ).....	max. 0,002 %	sodium (Na).....	max. 0,02 %
sulfates (SO <sub>4</sub> ).....	max. 0,002 %	zinc (Zn).....	max. 0,0002 %
antimony (Sb).....	max. 0,0005 %	substances precipitated with ammonia.....	passes test
arsenic (As).....	max. 0,00005 %	substances reducing KMnO <sub>4</sub> .....	passes test
cadmium (Cd).....	max. 0,00005 %		

**Packaging**
**Packaging Code**

1 l  AC11001000  
 2,5 l  AC11002500  
 5 l  AC1100005P  
 25 l  AC1100025P

**Physical data**

- Density: 1,71 g/cm<sup>3</sup>
- 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 H<sub>2</sub>O, 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