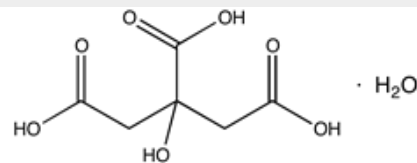


**Citric acid monohydrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph
Eur****Identification**

$C_6H_8O_7 \cdot H_2O$
M = 210,14 g/mol
CAS [5949-29-1]
EC number: 201-069-1
Taric code: 2918 14 00

**Synonyms**

2-Hydroxy-1,2,3-propanetricarboxylic acid monohydrate, β -Hydroxytricarballic acid monohydrate

Applications

analytical chemistry, laboratory reagent, in buffer solutions.

Specifications

| | | | |
|--|----------------|--|--------------|
| assay (acidimetric)..... | 99,5 - 100,5 % | sulphur compounds (as SO ₄)..... | max. 0,002 % |
| assay (acidimetric, referred to dried sample)..... | 99,5 - 100,5 % | calcium (Ca)..... | max. 10 ppm |
| identity (IR-spectrum)..... | passes test | copper (Cu)..... | max. 5 ppm |
| appearance of solution | passes test | iron (Fe)..... | max. 3 ppm |
| insoluble in water..... | max. 0,005 % | lead (Pb)..... | max. 2 ppm |
| chlorides (Cl)..... | max. 5 ppm | magnesium (Mg)..... | max. 10 ppm |
| phosphates (as PO ₄)..... | max. 0,001 % | nickel (Ni)..... | max. 1 ppm |
| oxalates (C ₂ O ₄)..... | passes test | readily carbonizable substances..... | passes test |
| sulfates (SO ₄)..... | max. 0,002 % | residue on ignition..... | max. 0,02 % |
| oxalic acid (C ₂ H ₂ O ₄)..... | max. 360 ppm | water (K.F.)..... | 7,5 - 9,0 |
| | | suitability for determination of Fe..... | passes test |

Physical data

- Appearance: crystals, colourless or white
- Spec. Density: 1,665 g/cm³
- Bulk density: ~ 800 - 1000 kg/m³
- Solub. in water: (20 °C): very soluble in water
- Melting point: 135 - 152 °C
- Boiling point: 135 - 152 °C (decomposes)
- Ignition temperature: 345 °C
- Vapour pressure: (20 °C) < 0,1 hPa
- Expl. limit (lower): 8,0 Vol%
- pH(50 g/l H₂O, 25 °C) ~ 1,85

Safety - GHS

Signal Word: Warning

Hazard Statements:

H319: Causes serious eye irritation.

**Precautionary Statements:**

P280: Wear protective gloves / protective clothing / eye protection / face protection.

P264: Wash thoroughly after handling.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice / attention.

Transport/storage

- 10°C - 30°C