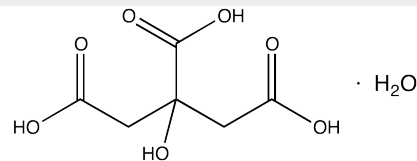


Citric acid monohydrate, for analysis, ExpertQ®, ACS, ISO, Reag. Ph Eur

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, b-Hydroxytricarballic acid monohydrate

Applications

analytical chemistry, laboratory reagent, in buffer solutions.

Specifications

assay (acidimetric)..... 99,5 - 100,5 %
assay (acidimetric, referred to dried sample)..... 99,5 - 100,5 %
identity (IR-spectrum)..... passes test
appearance of solution passes test
insoluble in water..... max. 0,005 %
chlorides (Cl)..... max. 5 ppm
phosphates (as PO₄)..... max. 0,001 %
oxalates (C₂O₄)..... passes test
sulfates (SO₄)..... max. 0,002 %
oxalic acid (C₂H₂O₄)..... max. 360 ppm

sulphur compounds (as SO₄)..... max. 0,002 %
calcium (Ca)..... max. 10 ppm
copper (Cu)..... max. 5 ppm
iron (Fe)..... max. 3 ppm
lead (Pb)..... max. 2 ppm
magnesium (Mg)..... max. 10 ppm
nickel (Ni)..... max. 1 ppm
readily carbonizable substances..... passes test
residue on ignition..... max. 0,02 %
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