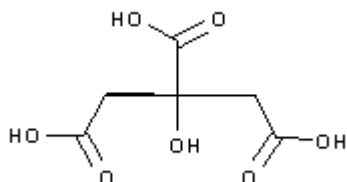


PRODUCT CODE: 141018

Citric Acid 1-hydrate (USP, BP, Ph. Eur., JP) pure, pharma grade

$C_6H_8O_7 \cdot H_2O$



M.= 210,14

CAS [5949-29-1]

EINECS 201-069-1

TARIC 2918 14 00 00

SYNONYMS: 2-Hydroxy-1,2,3-Propanetricarboxylic Acid

PHYSICAL DATA: Small crystals, in water at 20°C D 1,542 • M.P.: 135 °C • pH(50g/l)1,8 •

BIBLIOGRAPHY: Merck Index **13**, 2.350 Safety **2**, **892 D** • Römp **8**, **879** • Beilstein **3**, **556 IV**, **1272** • BRN 4018641 • ACS **XI** • ISO 6353/2-1983 R - 8 , 10 • BP.**2023** • USP **43** • Ph. Eur. **10.0** (2019) **11.0** (2023) • F.C.C **13** • BOE **243**(8-10-2009) • Regulation (EU) n° 231/2012 •

HAZARDOUS: RTECS: GE 7810000 • LD50 ipr rat 375 mg/kg



H: H319 •

P: P264 • P280 • P305+P351+P338 • P337+P313 •

SPECIFICATIONS:

Assay (Acidim.) calc. a.a.s.	99,5-100,5%
Identity :	
Identity according to Pharmacopoeias:	passes test

Maximum limit of impurities

Appearance of solution	passes test
Insoluble matter in H ₂ O	0,01 %
Darkened substances by H ₂ SO ₄	passes test
Residue on ignition (as SO ₄)	0,05 %
Chloride (Cl)	0,005%
Sulfate (SO ₄)	0,01%
Colour of solution	passes test
Residual solvents (Ph.Eur/USP)	passes test
Oxalate (C ₂ O ₄)	0,035%
Water (H ₂ O)	7,5-8,8 %
Heavy metals (as Pb)	0,0010 %

Ba	passes test
Ca	0,02 %
Mg	0,005 %

Elemental impurities (ICH Q3D):

Class 1	
Cd	0,5 ppm
Pb	0,5 ppm
As	1 ppm
Hg	1,5 ppm

Class 2A	
Co	5 ppm
V	10 ppm
Ni	20 ppm

Class 2B	
Tl	5 ppm
Au	10 ppm
Pd	10 ppm
Ir	10 ppm
Os	10 ppm
Rh	10 ppm
Ru	10 ppm
Se	15 ppm
Ag	15 ppm
Pt	10 ppm

Class 3	
Li	55 ppm
Sb	120 ppm
Ba	140 ppm
Mo	25 ppm
Cu	250 ppm
Sn	600 ppm
Cr	25 ppm