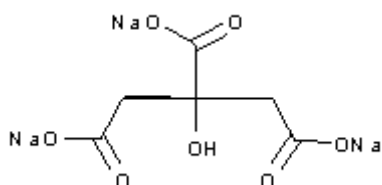
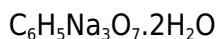


**PRODUCT CODE: 141655****tri-Sodium Citrate 2-hydrate (USP, BP, Ph. Eur.) pure, pharma grade**

M. = 294,10

CAS [6132-04-3]

EINECS 200-675-3

TARIC 2918 15 00 10

SYNONYMS: 2-Hydroxy-1,2,3-Propanetricarboxylic Acid SodiumSalt, Citric Acid Trisodium Salt, Sodium Citrate**PHYSICAL DATA:** Small crystals, White, Soluble in water 720 g/l at 25 °C D 1,98 • M.P.: 150 °C • pH7,5 - 9,0 •**BIBLIOGRAPHY:** Merck Index **12**, 8.746 13, 8.675 Safety **2**, **893 C** • Römpp **8**, **2723** • Beilstein **3**, **IV**, **1272** •ACS **XI** • ISO 6353-3/1987R - 94, 72 • BP.**2018** • USP **41** • Ph. Eur. **8.0** (2014) **9.0** (2017) • F.C.C **10 11** • BOE**243**(8-10-2009) • Regulation (EU) n° 231/2012 •**HAZARDOUS:** RTECS: GE 8300000 • LD50 ipr mus 1.364 mg/kg**SPECIFICATIONS:**

Assay (Perchl. Ac.) (calc. a.a.s)

99,0-100,5%

Identity :

Identity according to Pharmacopoeias:

passes test

pH of 5% solution

7,5-9,0

Maximum limit of impurities

Appearance of solution	passes test
Acidity or alkalinity	passes test
Insoluble matter in H ₂ O	0,025 %
Darkened substances by H ₂ SO ₄	passes test
Chloride (Cl)	0,005%
Ammonium (NH ₄)	0,002%
Sulfate (SO ₄)	0,015%
Residual solvents (Ph.Eur/USP)	passes test
Oxalate (C ₂ O ₄)	0,03%
Tartrate	passes test
Water (H ₂ O)	11,0-13,0 %
Heavy metals (as Pb)	0,001%

K 0,1 %

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