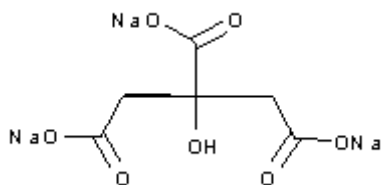
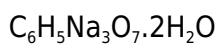


**PRODUCT CODE: 631655****tri-Sodium Citrate 2-hydrate (Ph. Eur, BP, USP) GMP - IPEC grade**

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** • Römp **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.)(Ph. Eur.) (calc. a.a.s)	99,0-101,0%
Assay (Perchl. Ac.)(USP) (a.a.s.)	99,0-100,5%
Identity :	
Identity according to Pharmacopoeias:	
Identity Sodium	passes test
Identity Citrate	passes test

Identity B USP	passes test
Maximum limit of impurities	
Appearance of solution	
Appearance Clear < formazin I	passes test
Appearance Colourless	passes test
Acidity or alkalinity (< 0.2 ml HCl or NaOH 0.1M)	passes test
Alkalinity USP	passes test
Loss on drying at 180°C	10,0-13,0%
Chloride (Cl)	0,0050 %
Sulfate (SO ₄)	0,0150 %
Residual solvents (Ph.Eur/USP)	passes test
Easily darkened substances	< Y2 o GY2
Oxalate (C ₂ O ₄)	0,0300 %
Tartrate	passes test
Water (KF)	11,0-13,0 %
Heavy metals (as Pb)	0,0010 %

Elemental impurities (ICH Q3D):

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