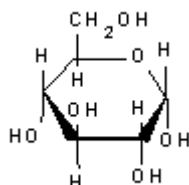


PRODUCT CODE: 141341

D(+)-Glucose anhydrous (USP, BP, Ph. Eur.) pharma grade, BioChemica

$C_6H_{12}O_6$

$C_6H_{12}O_6$



M.= 180,16

CAS [50-99-7]

EINECS 200-075-1

TARIC 1702 30 50 10

SYNONYMS: Dextrose, D-Glucopyranose, Grape sugar

PHYSICAL DATA: Small crystals, White, Soluble in water 900 g/l at 20 °C M.P.: 146 °C • pH6 - 7 •

BIBLIOGRAPHY: Merck Index **12**, 4.467 13, 4.472 Sax **GFG000** • Beilstein **31**, **83 IV**, **1**, **4302** • BRN 1724615 • ACS **XI** • **BP.2021** • **USP 43** • Ph. Eur. **9.0** (2017) **10.0** (2020) 6.3 • F.C.C **12 13** • DAB 10 (1991) •

HAZARDOUS: RTECS: LZ 6600000 • LD L0 oral rbt 20.000 mg/kg • LD50 oral rat 25.800 mg/kg • LD50 ipr mus 18.000 mg/kg

SPECIFICATIONS:

Assay (as $C_6H_{12}O_6$)	97,5 - 102,0 %
Identity :	
Identity according to Pharmacopoeias:	passes test
pH sol. 10 %	4,5 - 7,0
Specific rotation $[\alpha]_{20/D} c=10$ (in H_2O)	+52,6 - +53,2°

Maximum limit of impurities

ABS

at λ 280 nm 0.5M sol. in water	0,05
at λ 260 nm 0.5M sol. in water	0,05
Appearance and colour of solution	passes test
Acidity or alkalinity	passes test
Insoluble matter in H ₂ O	0,01 %
Residue on ignition (as SO ₄)	0,1 %
Chloride (Cl)	0,01 %
Sulfate (SO ₄)	0,02 %
Residual solvents (Ph.Eur/USP)	passes test
Conductivity (20 % aq. Sol. 25°C)	20 uS/cm
Soluble starch and sulfites (as SO ₂)	0,0015 %
Related substances:	
Fructose	0,15 %
Maltose + Isomaltose	0,4 %
Maltotriose	0,2 %
Unspecified impurities	0,10 %
Total impurities	0,5 %
Dextrin	passes test
Water (H ₂ O)	0,5 %
Heavy metals (as Pb)	0,0005 %
Ba	passes test
Ca	0,02 %
Fe	0,0005 %

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	1 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

