

MA0130 Manganese(II) sulfate monohydrate, extra pure, Phampur®, Ph Eur, BP, USP



assay (complex, on ignited sample) 99,0 - 101,0 %
 assay (complexometric) 98,0 - 102,0 %
 identification passes test
 appearance of solution passes test
 chlorides (Cl) max. 100 pp
 iron (Fe) max. 10 ppm
 zinc (Zn) max. 50 ppm

non precipitable with $(\text{NH}_4)_2\text{S}$ max. 0,5 %
 residue on ignition (500 °C) 10,0 - 12,0 %
 Elemental impurities are analysed according to guideline CHMP/ICH/353369/2013.
 Residual solvents are analysed according to guideline CPMP/ICH/283/95.

ART. NO.	VOLUME	CONTAINER
MA01300500	500 g	
MA01301000	1 kg	
MA0130005P	5 kg	

MA0131 Manganese(II) sulfate monohydrate, ExpertQ®, for analysis, ACS, Reag. Ph Eur

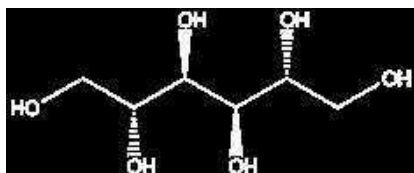


assay (complexometric) 98,0 - 101,0 %
 identity (IR-spectrum) passes test
 appearance of solution passes test
 insoluble in water max. 0,01 %
 chlorides (Cl) max. 0,001 %
 calcium (Ca) max. 0,005 %
 copper (Cu) max. 5 ppm
 heavy metals (as Pb) max. 0,001 %
 iron (Fe) max. 0,001 %

lead (Pb) max. 0,001 %
 magnesium (Mg) max. 0,005 %
 nickel (Ni) max. 5 ppm
 potassium (K) max. 0,005 %
 sodium (Na) max. 0,005 %
 zinc (Zn) max. 0,005 %
 substances reducing KMnO_4 passes test
 residue on ignition (500°C) 10,0 - 12,0 %

ART. NO.	VOLUME	CONTAINER
MA01310500	500 g	
MA01311000	1 kg	
MA0131005P	5 kg	
MA0131025P	25 kg	

D(-)-MANNITOL



- Synonyms: Manna sugar
- $\text{C}_6\text{H}_{14}\text{O}_6$
- $M = 182,17 \text{ g/mol}$
- CAS [69-65-8]
- EINECS-No.: 200-711-8
- Solub. in water: (25 °C): 213 g/l
- Melting point: 165-169 °C
- Boiling point: (4 hPa) 290 - 295 °C

- LD 50 (oral, rat): 13500 mg/kg
- Tariff number: 2905 43 00 00
- Applications: analytical chemistry, manufacturing of synthetic resins, for pharmaceutical use, in food industry, for determination of: boric acid.

MA0149 D(-)-Mannitol, extra pure, Phampur®, Ph Eur, BP, USP, JP

assay (HPLC, referred to dried sample) 97,0 - 102,0 %
 identification passes test
 appearance of solution clear and colourless
 conductivity (25°C; 20%, in H_2O) max. 20 $\mu\text{S/cm}$
 melting range 165 - 170 °C
 heavy metals max. 5 ppm
 nickel (Ni) max. 1 ppm

related substances passes test
 reducing sugars (as glucose) max. 0,1 %
 loss on drying (105° C, 4h) max. 0,5 %
 Residual solvents are analysed according to guideline CPMP/ICH/283/95.
 Elemental impurities are analysed according to guideline CHMP/ICH/353369/2013.

ART. NO.	VOLUME	CONTAINER
MA01490500	500 g	
MA01491000	1 kg	
MA0149005P	5 kg	

MA0150 D(-)-Mannitol, ExpertQ®, for analysis, ACS, Reag. Ph Eur

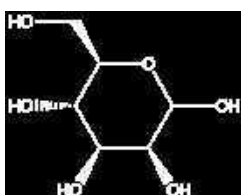
assay (HPLC, referred to dried sample) 97,0 - 102,0 %
 identity (IR-spectrum) passes test
 insoluble in water max. 0,01 %
 acidity max. 0,0008 meq/g
 conductivity (25°C; 20%, in H_2O) max. 20 $\mu\text{S/cm}$
 specific rotation ($[\alpha]_{25^\circ\text{C/D}}$, $c = 10$, in borax, 13 %) + 23,3° - + 24,3°
 melting range 165 - 170 °C

heavy metals max. 5 ppm
 nickel (Ni) max. 1 ppm
 reducing sugars (as glucose) max. 0,1 %
 reducing sugars passes test
 related substances passes test
 residue on ignition max. 0,01 %
 loss on drying (105°C) max. 0,05 %
 loss on drying (105° C, 4h) max. 0,5 %

ART. NO.	VOLUME	CONTAINER
MA01500500	500 g	
MA01501000	1 kg	
MA0150005P	5 kg	

D(+)-MANNOSE

MA0160 D(+)-Mannose, for biochemistry



- $\text{C}_6\text{H}_{12}\text{O}_6$
- $M = 180,16 \text{ g/mol}$
- CAS [3458-28-4]
- EINECS-No.: 222-392-4
- Solub. in water: (20 °C): freely soluble
- Melting point: 133 °C
- Tariff number: 2940 00 00 10
- Applications: analytical chemistry, in biochemistry, in food industry, synthesis of organic products.

assay (HPLC) min. 98 %
 identity (IR-spectrum) passes test
 specific rotation ($[\alpha]_{20^\circ\text{C/D}}$, $c = 5$, H_2O) +13,8° - +14,4°
 heavy metals (as Pb) max. 0,001 %
 water (K.F.) max. 0,5 %

ART. NO.	VOLUME	CONTAINER
MA01600010	10 g	