



" clyzo " - Monograph Comparison



AS PER CURRENT USP 2022/EP11/JP18

Product Name	Manganese(II) Chloride 4-hydrate (USP) pharma grade	 PanReac AppliChem ITW Reagents	Issue Date	March-23
Product Code	191410		Prepared by	Sr. Tech Lead
CAS NO.	13446-34-9		Reviewed by	Manager Technical
Manufacturer Name	PanReac AppliChem		Version no.	CLYZO/PAN/191410/01

Sr. No.	Test	Manufacturer COA		Pharmacopeial Specifications	
		Complies USP	USP 2022	EP Version 11.0	JP 18
1	Description	Pink Crystal	Large, irregular, pink, odorless, translucent crystals.	Product Not Official in European Pharmacopoeia	Product Not Official in Japanese Pharmacopoeia
2	Solubility	Soluble in water	Soluble in water and in alcohol; insoluble in ether.		
3	Identification 1	Should produce a white, curdy precipitate of silver chloride with silver nitrate TS, which is insoluble in nitric acid. After being washed with water, this precipitate should be soluble in a slight excess of 6 N ammonium hydroxide.	Should produce a white, curdy precipitate of silver chloride with silver nitrate TS, which is insoluble in nitric acid. After being washed with water, this precipitate should be soluble in a slight excess of 6 N ammonium hydroxide.		
4	Identification 2	With addition of ammonium sulfide TS, should form a salmon-colored precipitate which dissolves in acetic acid.	With addition of ammonium sulfide TS, should form a salmon-colored precipitate which dissolves in acetic acid.		
5	sulfate	NMT 0.005%	NMT 0.005%		
6	Iron	NMT 5 ppm	NMT 5 ppm		
7	Zinc	No turbidity should be produced within 5 minutes	No turbidity should be produced within 5 minutes		
8	Insoluble matter	NMT 0.005%	NMT 0.005%		
	Substances not precipitated by ammonium sulfide	NMT 0.2% (as sulfate)	NMT 0.2% (as sulfate)		
9	pH	Between 3.5 and 6.0	Between 3.5 and 6.0		
10	Loss on drying	Between 36.0% and 38.5%	Between 36.0% and 38.5%		
11	Assay (dried basis)	Between 98.0% and 101.0%	Between 98.0% and 101.0%		
13	Elemental impurities		Not mentioned		
	Cd	NMT 10 ppm			
	Pb	NMT 10 ppm			
	As	NMT 1.5 ppm			
	Hg	NMT 10 ppm			
	CO	NMT 30 ppm			
	V	NMT 100 ppm			
	Ni	NMT 20 ppm			
	Au	NMT 50 ppm			
	Pd	NMT 10 ppm			
	Os	NMT 25 ppm			
	Rh	NMT 10 ppm			
	Ru	NMT 10 ppm			

	Se	NMT 150 ppm		
	Ag	NMT 15 ppm		
	Pt	NMT 50 ppm		
	Li	NMT 55 ppm		
	Sb	NMT 120 ppm		
	Ba	NMT 140 ppm		
	Mo	NMT 25 ppm		
	Cu	NMT 250 ppm		
	Cr	NMT 25 ppm		
14	Residual solvent	Passes the test	Not mentioned	
	Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.	Preserve in tight containers	

Note - If you need any additional testing, you may use our Additional Testing Feature on the product page or contact your Clyzo representative.

Disclaimer - The information above is solely for your consideration. We do not recommend or affirm the suitability for any specific end use. We suggest the users should research & verify the specifications in accordance with their intended usage.