



" clyzo " - Monograph Comparison



AS PER CURRENT USP 2022/EP11/JP18

Product Name	Zinc Sulfate 1-hydrate (USP, Ph. Eur., BP) pure, pharma grade	 PanReac AppliChem ITW Reagents	Issue Date	March-23
Product Code	141788		Prepared by	Sr. Tech Lead
CAS NO.	7446-19-7		Reviewed by	Manager Technical
Manufacturer Name	PanReac AppliChem		Version no.	CLYZO/PAN/141788/01

Sr. No.	Test	Manufacturer COA		Pharmacopeial Specifications	
		Complies USP, Ph. Eur., BP	USP 2022	EP Version 11.0	JP 18
1	Description	Small white crystals	Colorless, transparent prisms, or small needles. May occur as a white, granular, crystalline powder. Is odorless and is efflorescent in dry air. Its solutions are acid to litmus.	White or almost white, crystalline powder or colourless, transparent crystals, efflorescent.	
2	Solubility	Soluble in water	Very soluble in water and in glycerin; practically insoluble in alcohol.	Very soluble in water, practically insoluble in ethanol (96 %).	
3	Identification 1	passes test	In assay test, the retention time of the zinc peak of the Sample solution corresponds to that of the Standard solution	Should comply by a flocculant white precipitate formation	
4	Identification 2	passes test	1. With barium chloride TS a white precipitate, which is insoluble in HCl and HNO3. 2. After addition of lead (II) acetate TS a white precipitate should be formed. 3. With equal volume of HCl no precipitate should be formed (discrimination from thiosulfates)	1. With addition of dilute HCl and BaCl2 a white precipitate should be formed. 2. In the suspension obtained in identification (1) add Iodine,suspension remains yellow (distinction from sulfites and dithionites), but should be decolorised by adding dropwise stannous chloride solution (distinction from iodates). Boil the mixture. No coloured precipitate should be formed (distinction from selenates and tungstates).	
5	Identification 3	passes test	Not mentioned	It should comply with the limits of the assay.	
6	Appearance of solution	passes test	Not mentioned	Sample solution should be clear and colourless	
7	Acidity	passes test	The sample solution should not colored pink by methyl orange TS.	Not mentioned	
8	pH	Between 4.0 and 5.6	NA	Between 4.0 and 5.6	
9	Alkalies and alkali earth	NMT 0.9%	NMT 0.9 %	Not mentioned	
10	Arsenic	NMT 0.0001 %	NMT 14 ppm	Not mentioned	
11	Iron	NMT 0.01%	NA	NMT 100 ppm	
12	Heavy metals (Lead)	NMT 0.00005 %	NMT 20 ppm	Not mentioned	
13	Chlorides	NMT 0.03%	NA	NMT 300 ppm	
14	Loss on drying	Not mentioned	Not mentioned	Not mentioned	
15	Assay (as zinc sulfate monohydrate)	Between 99.0% and 100.5%	Between 99.0% and 100.5%	Between 99.0% and 101.0 %	
	Elemental Impurities		Not mentioned	Not mentioned	
	Cd	NMT 0.5 ppm			
	Pb	NMT 0.5 ppm			
	As	NMT 1 ppm			
	Hg	NMT 1.5 ppm			
	CO	NMT 5 ppm			
	V	NMT 10 ppm			
	Ni	NMT 20 ppm			
	Tl	NMT 0.8 ppm			

Product Not Official in Japanese Pharmacopoeia

16	Au	NMT 10 ppm		
	Pd	NMT 10 ppm		
	Ir	NMT 10 ppm		
	Os	NMT 10 ppm		
	Rh	NMT 10 ppm		
	Ru	NMT 10 ppm		
	Se	NMT 15 ppm		
	Ag	NMT 15 ppm		
	Pt	NMT 10 ppm		
	Li	NMT 55 ppm		
	Sb	NMT 120 ppm		
	Ba	NMT 140 ppm		
	Mo	NMT 25 ppm		
	Cu	NMT 250 ppm		
Sn	NMT 600 ppm			
Cr	NMT 25 ppm			
17	Residual solvents	passes test	Not mentioned	Not mentioned
	Storage	Keep container tightly closed in a dry and well-ventilated place.	Preserve in tight containers.	In a non-metallic, airtight container.
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.				