



# " clyzo " - Monograph Comparison



## AS PER CURRENT USP 2022/EP11/JP18

<b>Product Name</b>	Iron(II) Sulfate 7-hydrate (USP, BP, Ph. Eur.) pure, pharma grade		<b>Issue Date</b>	March-23
<b>Product Code</b>	141362		<b>Prepared by</b>	Sr. Tech Lead
<b>CAS NO.</b>	7782-63-0		<b>Reviewed by</b>	Manager Technical
<b>Manufacturer Name</b>	PanReac AppliChem		<b>Version no.</b>	CLYZO/PAN/141362/01

Sr. No.	Test	Pharmacopeial Specifications			
		Manufacturer COA <i>Complies (USP, BP, Ph. Eur.)</i>	USP 2022	EP Version 11.0	JP 18
1	Description	Green-bluish crystals	Pale, bluish-green crystals or granules. Is odorless and is efflorescent in dry air. Oxidizes readily in moist air to form brownish yellow basic ferric sulfate. 10% solution is acid to litmus, having a pH of about 3.7	Light green, crystalline powder or bluish-green crystals, efflorescent in air. It is oxidised in moist air, becoming brown.	Pale green, crystals or crystalline powder. It is odorless, and has an astringent taste. It is efflorescent in dry air, and its surface becomes yellowish brown in moist air.
2	Solubility	Freely soluble in water	Very soluble in boiling water; freely soluble in water; insoluble in alcohol	Freely soluble in water, very soluble in boiling water, practically insoluble in ethanol (96 %)	Freely soluble in water, and practically insoluble in ethanol (95%) and in diethyl
3	Identification 1 (Iron)	Passes The Test	1. Should comply by a dark blue precipitate formation. 2. A greenish-white precipitate should be formed;	1. A blue precipitate should be formed that does not dissolve on addition of 5 mL of dilute HCl	1. Should comply by a blue precipitate formation. 2. A grayish green, gelatinous precipitate should be developed .3. A deep red color should exhibit
4	Identification 2 (Sulfate)	Passes The Test	1. Should develop a white precipitate 2. Should yield a white precipitate 3. After addition of HCl produces no precipitate when added to solutions of sulfates (distinction from thiosulfates).	1. A white precipitate should be formed 2. No coloured precipitate should be formed (distinction from selenates and tungstates).	1. A white precipitate should be formed, 2. Should develop a white precipitate .3. Should not develop white turbidity (discrimination from thiosulfates), and should not evolve the odor of sulfur dioxide (discrimination from sulfites).
5	Identification 3	Passes The Test	Not mentioned	Should comply with the limits of the assay	Not mentioned
6	Clarity and colour of solution	Passes The Test	Not mentioned	Not mentioned	Sample solution should be clear
7	Insoluble matter in H <sub>2</sub> O	Passes The Test	Not mentioned	Not mentioned	Not mentioned
8	Acidity	Not mentioned	Not mentioned	Not mentioned	After addition of 0.5 mL dilute NaOH, a blue colour should be developed
9	Mercury	NMT 0.00015 %	NMT 3 ppm	Not mentioned	Not mentioned
10	Arsenic	NMT 0.00015 %	NMT 3ppm	Not mentioned	NMT 2 ppm
11	Heavy metals	Not mentioned	Not mentioned	Not mentioned	NMT 25 ppm
12	Lead	NMT 0.00005 %	NMT 10ppm	Not mentioned	Not mentioned
13	pH	Between 3.0 and 4.0	Not mentioned	Between 3.0 and 4.0	Not mentioned
14	Chlorides	NMT 0.02 %	Not mentioned	NMT 200 ppm	Not mentioned
15	Phosphate	NMT 0.003%	Not mentioned	Not mentioned	Not mentioned
16	Ferric ion	NMT 0.3 %	Not mentioned	NMT 0.3%	Not mentioned

17	Magnesium	NMT 0.025 %	Not mentioned	Not mentioned	Not mentioned
18	Manganese	NMT 0.1 %	Not mentioned	NMT 0.1%	Not mentioned
19	Zinc	NMT 0.005 %	Not mentioned	NMT 50 ppm	Not mentioned
20	Assay	Between 99.5% and 104.5%	Between 99.5% and 104.5%	Between 98.0% and 105.0%	Between 98.0% and 104.0%
21	Chromium	NMT 0.0025 %	NA	NMT 50 ppm	Not mentioned
22	Cobalt	Not mentioned	NA	NMT 25 ppm	Not mentioned
23	Copper	NMT 0.005 %	NA	NMT 50 ppm	Not mentioned
24	Nickel	NMT 0.002%	NA	NMT 50 ppm	Not mentioned
25	Elemental Impurities		Not mentioned	Not mentioned	Not mentioned
	Cd	NMT 0.5 ppm			
	Pb	NMT 0.5 ppm			
	As	NMT 1.5 ppm			
	Hg	NMT 1.5 ppm			
	CO	NMT 5 ppm			
	V	NMT 10 ppm			
	Ni	NMT 20 ppm			
	Tl	NMT 50 ppm			
	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 50 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				
26	Residual solvents	Passes The Test	Not mentioned	Not mentioned	Not mentioned
	Storage	Storage away from direct light	Preserve in tight containers	In an airtight container	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.