



" clyzo " - Monograph Comparison



AS PER CURRENT USP 2022/EP11/JP18

Product Name	Sodium Thiosulfate 5-hydrate (USP, BP, Ph. Eur.) pure, pharma grade		Issue Date	March-23
Product Code	141721		Prepared by	Sr. Tech Lead
CAS NO.	10102-17-7		Reviewed by	Manager Technical
Manufacturer Name	PanReac AppliChem		Version no.	CLYZO/PAN/141721/01

Sr. No.	Test	Pharmacopeial Specifications			
		Manufacturer COA <i>Complies USP, BP, Ph. Eur.</i>	USP 2022	EP Version 11.0	JP 18
1	Description	crystals, White. Hygroscopic	Large, colorless crystals or coarse, crystalline powder.	Transparent, colourless crystals, efflorescent in dry air.	colorless, crystals or crystalline powder. It is odorless. It effloresces in dry air, and is deliquescent in moist air.
2	Solubility	very soluble in water	Is deliquescent in moist air and effloresces in dry air at temperatures exceeding 33°. Its solutions are neutral or faintly alkaline to litmus. Very soluble in water; insoluble in alcohol	Very soluble in water, practically insoluble in ethanol 96 %. It dissolves in its water of crystallisation at about 49 °C.	It is very soluble in water, and practically insoluble in ethanol (99.5).
3	Identification 1	Passes The Test	The infrared absorption spectrum obtained with sample should be concordant with spectrum obtained with Sodium Thiosulfate 5-hydrate reference/working standard	Should decolorise iodinated potassium iodide solution .	1.Should comply by fading color of reagent. 2. Should evolve the odor of sulfur dioxide, and produce a white turbidity, which changes to yellow on standing. 3. Should comply by formation of white precipitate, which changes to black on standing.
4	Identification 2 (Sodium)	Passes The Test	Should comply by a dense precipitate formation	1.Should comply by a dense white precipitate formation. 2.Should comply by a voluminous, white, crystalline precipitate formation	1. Should impart yellow colored flame during flame test 2. Should produce a white, crystalline precipitate with potassium hexahydroxoantimonate (V) TS.
5	Identification 3	Passes The Test	Not mentioned	Should comply by a precipitate of sulfur formation and gas is evolved which should give a blue colour to starch iodate paper .	Not mentioned
6	Identification 4	Passes The Test	Not mentioned	Should comply by a white precipitate formation which rapidly becomes yellowish and then black.	Not mentioned
7	pH	Between 6.0 and 8.4	Not mentioned	Between 6.0 and 8.4	Between 6.0 and 8.0
8	Appearance of solution	Passes The Test	Not mentioned	Sample solution should be clear and colourless	Sample solution should be clear and colorless.
9	Chloride	NMT 0.02 %	Not mentioned	Not mentioned	Not mentioned
10	Nitrogen compounds (as N)	NMT 0.01 %	Not mentioned	Not mentioned	Not mentioned
11	Sulfide	Passes The Test	Not mentioned	The solution should not become violet.	Not mentioned
12	Sulfate and sulfite	NMT 0.2 %	Not mentioned	NMT 0.2 %	Not mentioned
13	Calcium	Passes The Test	No turbidity should be produced.	Not mentioned	No turbidity should be produced.
14	Iron	NMT 0.001 %	Not mentioned	Not mentioned	Not mentioned
15	Magnesium	NMT 0.01 %	Not mentioned	Not mentioned	Not mentioned
16	Arsenic	Not mentioned	Not mentioned	Not mentioned	NMT 5 ppm
17	Heavy Metals	Not mentioned	Not mentioned	Not mentioned	NMT 20 ppm
18	Water	Not mentioned	Between 32.0% and 37.0%	Not mentioned	Not mentioned

19	Loss on drying	Between 32.0% and 37.0 %	Not mentioned	Not mentioned	Between 32.0% and 37.0 %
20	Assay	Between 99.0% and 100.5% Between 99.0% and 101.0%	Between 99.0% and 100.5%	Between 99.0 % and 101.0 %	Between 99.0 % and 101.0 %
21	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 0.8 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 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				
22	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.	Containers—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.