



# " clyzo " - Monograph Comparison



## AS PER CURRENT USP 2022/EP11/JP18

<b>Product Name</b>	Sulfuric Acid 95-98% (USP-NF, BP, Ph. Eur.) pure, pharma grade)		<b>Issue Date</b>	March-23
<b>Product Code</b>	141058		<b>Prepared by</b>	Sr. Tech Lead
<b>CAS NO.</b>	7664-93-9		<b>Reviewed by</b>	Manager Technical
<b>Manufacturer Name</b>	PanReac AppliChem		<b>Version no.</b>	CLYZO/PAN/141058/01

Sr. No.	Test	Manufacturer COA	Pharmacopeial Specifications		
		<i>Complies USP-NF, BP, Ph. Eur.</i>	<i>USP 2022</i>	<i>EP Version 11.0</i>	<i>JP 18</i>
1	Description	Clear colorless liquid	Clear, colorless, oily liquid. It is very caustic and corrosive	Colourless, caustic liquid with an oily consistency, highly hygroscopic	
2	Solubility	Miscible with water	Miscible with water and with alcohol with the generation of much heat.	Miscible with water and with ethanol (96 per cent) producing intense heat.	
3	Identification 1	Passes test	1. After addition of BaCl <sub>2</sub> a white precipitate which is insoluble in HCl and in HNO <sub>3</sub> should be produced 2. With lead acetate TS, should develop a white precipitate which is soluble in ammonium acetate TS. 3. With HCl should not produce precipitate.	1. After addition of BaCl <sub>2</sub> solution, a white precipitate should be formed. 2. To the suspension obtained during reaction (1), add 0.1 mL of 0.05 M iodine. The suspension remains yellow (distinction from sulfites and dithionites), but is decolorised by adding dropwise stannous chloride solution (distinction from iodates). Boil the mixture. No coloured precipitate is formed (distinction from selenates and tungstates).	
4	Appearance of solution	Passes test	Not mentioned	Sample should be clear and colorless	
5	Reducing substances to KMnO <sub>4</sub>	Passes test	Sample solution should remain pink for 5 minutes	Not mentioned	
6	Oxidisable substances	Not mentioned	Not mentioned	The violet colour should persist for at least 5 minutes	
7	Density/specific gravity	Not mentioned	Not mentioned	Between 1.834 and 1.837	
8	Heavy metals	Not mentioned	Not mentioned	NMT 2 ppm	
9	Residue on ignition	NMT 0.0002%	NMT 0.005%	NMT 0.001%	
10	Chloride	NMT 0.001%	NMT 50 ppm	NMT 0.5 ppm	
11	Arsenic	NMT 0.0001%	NMT 1 ppm	NMT 0.02 ppm	
12	Nitrates	Passes test	Not mentioned	NMT 0.5 ppm	
13	Iron	NMT 0.0025%	Not mentioned	NMT 1 ppm	
14	Ammonium	NMT 0.001%	Not mentioned	NMT 2 ppm	
15	Assay	Between 95.0% and 98.0%	Between 95.0% and 98.0%	Between 95.0% and 97.0%	
	Elemental Impurities				
	Cd	0.5 ppm			
	Pb	0.5 ppm			
	As	1.5 ppm			
	Hg	1.5 ppm			
	Co	5 ppm			
	V	10 ppm			
	Ni	20 ppm			
	Tl	5 ppm			
	Au	10 ppm			
	Pd	10 ppm			

Product Not Official in Japanese Pharmacopoeia

16	Ir	10 ppm	Not mentioned	Not mentioned
	Os	10 ppm		
	Rh	10 ppm		
	Ru	10 ppm		
	Se	15 ppm		
	Ag	15 ppm		
	Pt	10 ppm		
	Li	55 ppm		
	Sb	120 ppm		
	Ba	140 ppm		
	Mo	25 ppm		
	Cu	5 ppm		
	Sn	600 ppm		
	Cr	25 ppm		
17	Residual solvents	Passes Test	Not mentioned	Not mentioned
	Storage	Room Temperature	Preserve in tight containers	In a ground-glass-stoppered container made of glass or other inert material.

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.