



" clyzo " - Monograph Comparison



AS PER CURRENT USP 2022/EP11/JP18

Product Name	Hydrochloric Acid 37% (USP-NF, BP, Ph. Eur.) pure, pharma grade		Issue Date	March-23
Product Code	141020		Prepared by	Sr. Tech Lead
CAS NO.	7647-01-0		Reviewed by	Manager Technical
Manufacturer Name	PanReac AppliChem		Version no.	CLYZO/PAN/141020/01

Sr. No.	Test	Pharmacopeial Specifications			
		Manufacturer COA <i>Complies USP, BP, Ph. Eur</i>	USP 2022	EP Version 11.0	JP 18
1	Description	Clear, colorless liquid	Colorless, fuming liquid having a pungent odor. It ceases to fume when it is diluted with 2 volumes of water. Specific gravity is about 1.18	Clear, colourless, fuming liquid. Relative density is about 1.18.	Colorless liquid having a pungent odor. It is fuming but ceases to fume when it is diluted with 2 volumes of water. Specific gravity @ 200C is about 1.18.
2	Solubility	Miscible with water	Not mentioned	Miscible with water.	Not mentioned
3	Identification 1	Passes The Test	After addition of silver nitrate TS, should develop a white, curdy precipitate which is insoluble in nitric acid but is soluble in a slight excess of 6 N NH4OH	Should comply by a curdled, white precipitate is formed which dissolves in ammonia	1. When mixed and heated with H2SO4 & KMnO4 should evolve an odor of chlorine 2. After addition of AgNO3 TS & dilute HNO3, should yield a white precipitate which is not soluble in dilute HNO3 but when excess of ammonia is added, dissolves
4	Identification 2	Passes The Test	Not mentioned	Should comply with assay test	Remarkable white smoke should evolve when brought near Ammonia TS
5	Colour of Solution	Passes The Test	Not mentioned	Sample solution should be clear and colourless	Not mentioned
6	Bromide or iodide	Passes The Test	The chloroform should remains free from even a transient yellow, orange, or violet color.	Not mentioned	The chloroform layer should remains colorless.
7	Bromin or Chlorine	Passes The Test	The chloroform should remain free from any violet color for at least 1 min.	Not mentioned	chloroform layer should remains free from a purple color.
8	Residue on Ignition/evaporation	NMT 0.005%	NMT 0.008%	NMT 0.001%	NMT 0.001%
9	Arsenic	Not mentioned	Not mentioned	Not mentioned	NMT 1ppm
10	Mercury	Not mentioned	Not mentioned	Not mentioned	NMT 0.04 ppm
11	Heavy metals	Not mentioned	Not mentioned	Not mentioned	NMT 5 ppm
12	Sulfate (SO4)	NMT 0.5%	Neither turbidity nor precipitate should appears within 1 hour	NMT 20ppm	No Turbidity should be produced
13	Sulfite (SO3)	Passes The Test	Neither turbidity nor decolorization of the iodine should occurs.	Not mentioned	The color of iodine TS should not disappear.
14	Free chloride/Chloride	NMT 0.0004%	Not mentioned	NMT 4 ppm	Not mentioned
15	Non Volatile matter	NMT 0.01%	Not mentioned	Not mentioned	Not mentioned
16	Ammonium	NMT 0.001%	Not mentioned	Not mentioned	Not mentioned
17	Assay (w/w)	Between 36.5% and 38.0%	Between 36.5% and 38.0%	Between 35.0% and 39.0%	Between 35.0% and 38.0%
18	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			
19	Residual solvents	Passes The Test	Not mentioned	Not mentioned	Not mentioned
	Storage	Store at room temperature away from oxidizing substances and metals. Keep container tightly sealed. Protect from heat and direct sunlight.	Preserve in tight containers.	In a stoppered container made of glass or another inert material, at a temperature not exceeding 30 °C.	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.					
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