



# " clyzo " - Monograph Comparison



<b>Product Name</b>	Calcium Carbonate precipitated (USP, BP, Ph. Eur.) pure, pharma grade		<b>Issue Date</b>	March-23
<b>Product Code</b>	141212		<b>Prepared by</b>	Sr. Tech Lead
<b>CAS NO.</b>	471-34-1		<b>Reviewed by</b>	Manager Technical
<b>Manufacturer Name</b>	PanReac AppliChem		<b>Version no.</b>	CLYZO/PAN/141212/01

Sr. No.	Test	Manufacturer COA	Pharmacopeial Specifications		
		Complies USP, BP, Ph. Eur	USP 2022	EP Version 11.0	JP 18
1	Description	Fine white powder	Fine, white, odorless, tasteless, microcrystalline powder. It is stable in air.	White or almost white powder.	White, fine crystalline powder. It is odorless and tasteless.
2	Solubility	Very slightly soluble in water	Practically insoluble in water. Its solubility in water is increased by the presence of any ammonium salt or of carbon dioxide. The presence of any alkali hydroxide reduces its solubility. Insoluble in alcohol. Dissolves with effervescence in 1 N acetic acid, in 3 N hydrochloric acid, and in 2 N nitric acid.	Practically insoluble in water.	It is practically insoluble in water, but its solubility in water is increased in the presence of carbon dioxide. Practically insoluble in ethanol (95) and in diethyl ether. Dissolves with effervescence in dilute acetic acid, in dilute hydrochloric acid and in dilute nitric acid.
3	Identification Calcium	Passes The Test	Upon the addition of ammonium oxalate TS to sample solution, a white precipitate is formed. This precipitate is insoluble when 6 N acetic acid is added but dissolves in hydrochloric acid.	1. The chloroform layer becomes red coloured. 2. After addition of 0.5 mL of potassium ferrocyanide solution, the solution remains clear. Add about 50 mg of ammonium chloride, a white, crystalline precipitate is formed.	1. In flame test sample gives a yellow colour flame 2. With addition of ammonium carbonate TS, white precipitate is produced 3. With the addition of ammonium oxalate TS a white precipitate is produced. The precipitate does not dissolve in dilute acetic acid, but dissolves in dilute hydrochloric acid. 4. When the sample solution is mixed and heated 10 drops of potassium chromate TS, no precipitate is produced (separation from strontium salts).
4	Identification Carbonates	Passes The Test	The addition of acetic acid to sample produces effervescence	The solution or the suspension becomes effervescent after addition of dilute acetic acid and gives off a colourless and odourless gas. The generated gas when collected in barium hydroxide solution, a white precipitate is formed that dissolves on addition of an excess of hydrochloric acid	1. Sample produces effervesce upon addition of dilute hydrochloric acid, generating a gas, which produces a white precipitate immediately, when passed into calcium hydroxide 2. When magnesium sulfate TS is added, a white precipitate, which dissolves by addition of dilute acetic acid TS 3. Cold solutions of sample solution exhibit a red color with 1 drop of phenolphthalein TS (discrimination from bicarbonates).
5	Acid Insoluble substance	NMT 0.2%	NMT 0.2%	NMT 0.2%	NMT 0.2%
6	Chloride	NMT 0.033%	Not mentioned	NMT 330 ppm	Not mentioned
7	Sulfate	NMT 0.25%	Not mentioned	NMT 0.25%	Not mentioned
8	Iron	NMT 0.02%	NMT 0.1%	NMT 200 ppm	Not mentioned
9	Heavy metals	NMT 0.002%	Not mentioned	Not mentioned	NMT 20ppm
10	Barium	Passes The Test	No green color appears	Not mentioned	No green color appears
11	Lead	NMT 0.00005%	NMT 3 ppm	Not mentioned	Not mentioned
12	Limit of Fluoride	NMT 0.005%	NMT 50 ppm	Not mentioned	Not mentioned
13	Mercury	NMT 0.00005%	NMT 0.5 ppm	Not mentioned	Not mentioned
14	Magnesium and alkali metals	NMT 1.0%	NMT 1.0%	NMT 1.5%	NMT 1.0%
15	Arsenic	NMT 0.00015%	NMT 3 ppm	Not mentioned	NMT 5ppm
16	Cadmium	NMT 0.00005%	Not mentioned	Not mentioned	Not mentioned
17	Loss on drying	NMT 2.0%	NMT 2.0%	NMT 2.0%	NMT 1.0%
18	Assay (dried basis)	Between 98.0 % and 100.5 %	Between 98.0 % and 100.5 %	Between 98.0 % and 100.5 %	NLT 98.5%

19	Residual solvents	Passes The Test	Not mentioned	Not mentioned	Not mentioned
20	Elemental impurities		Not mentioned	Not mentioned	Not mentioned
	Pb	NMT 0.8 ppm			
	Tl	NMT 2 ppm			
	Storage	Store at room temperature	Preserve in well closed containers	Not mentioned	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.