



" clyzo " - Monograph Comparison



AS PER CURRENT USP 2022/EP11/JP18

Product Name	1,2 Propylene Glycole USP/NF, Ph. Eur.		Issue Date	July-23
Product Code	340049		Prepared by	Sr. Tech Lead
CAS NO.	57-55-6		Reviewed by	Manager Technical
Manufacturer Name	CG Chemikalein GmbH & Co KG		Version no.	CLYZO/CG/340049/01

Sr. No.	Test	Manufacturer COA		Pharmacopeial Specifications	
		Complies BP	USP 2022	EP Version 11.0	JP 18
1	Description	Viscous, clear, colourless hygroscopic liquid	Clear, colorless, viscous liquid having a slight, characteristic taste. It is practically odorless. Absorbs moisture when exposed to moist air.	A viscous, clear, colourless, hygroscopic liquid,	Clear Colourless viscous liquid, Odourless and has a slightly bitter taste. It is hygroscopic
2	Solubility	Not mentioned	Miscible with water, with acetone, and with chloroform. Soluble in ether and will dissolve in many essential oils, but is immiscible with fixed oils.	Miscible with water and with ethanol (96 %).	Miscible with methanol, with ethanol (90%), and with pyridine. It is freely soluble in diethyl ether
3	Identification 1	Not mentioned	The Infrared absorption spectrum obtained with sample should be concordant with spectrum obtained with Propylene glycol reference standard/working standard	Should comply by relative density test	Residue should melt between 174-178 ° C.
4	Identification 2	Ethylene Glycol- NMT 0.10%, Diethylene Glycol NMT 0.10%	Ethylene Glycol- NMT 0.10%, Diethylene Glycol NMT 0.10%	Should comply by refractive index test	A characteristic odour is evolved
5	Identification 3	Not mentioned	In the test of ethylene glycol & diethylene glycol, the retention time of peak due to propylene glycol in the sample should solution corresponds to peak in standard	Should boil between 184 to 189 ° C	Not mentioned
6	Identification 4	Not mentioned	Not mentioned	Residue should melt between 121-128 ° C.	Not mentioned
7	Appearance	NMT 0.1%	Not mentioned	Sample solution should be clear and colourless	Not mentioned
8	Specific gravity	Between 1.035 and 1.037 (@ 25 ° C) Between 1.035 and 1.040 (@ 20 ° C)	Between 1.035 and 1.037 (@ 25 ° C)	Between 1.035 and 1.040 (@ 20 ° C)	Between 1.035 and 1.045 (@ 20 ° C)
9	Refractive Index	Between 1.431 and 1.433	Not mentioned	Between 1.431 and 1.433	Not mentioned
10	Acidity	Should comply the test	NMT 0.20 ml of 0.01N NaOH is required	NMT 0.05 ml of 0.1M NaOH is required to change the colour of indicator to blue	The solution has a red colour
11	Oxidising Substances	NMT 0.2 ml of 0.05M Na2S2O3 is required	Not mentioned	NMT 0.2 ml of 0.05M Na2S2O3 is required	Not mentioned
12	Reducing substances	Should comply the test	Not mentioned	The solution does not change its appearance	Not mentioned
13	Chloride	NMT 70 ppm	NMT 70 ppm	Not mentioned	NMT 0.007%
14	Sulphate	NMT 60 ppm	NMT 60 ppm	Not mentioned	NMT 0.002%
15	Heavy metals	Should comply the test	Not mentioned	Not mentioned	NMT 5 ppm
16	Arsenic	Not mentioned	Not mentioned	Not mentioned	NMT 2 ppm
17	Glycerin	Not mentioned	Not mentioned	Not mentioned	No odour of acrolin should be perceptible
18	Ethylene glycol, diethylene glycol & related substances	Ethylene Glycol- NMT 0.10%, Diethylene Glycol NMT 0.10% (as per identification test B)	Ethylene Glycol- NMT 0.10%, Diethylene Glycol NMT 0.10% (as per identification test B)	Not mentioned	Ethylene glycol NMT 0.1%, Diethylene Glycol NMT 0.1%, Total impurities NMT 1.0%
19	Water content	NMT 0.2%	NMT 0.2%	NMT 0.2%	NMT 0.5%
20	Residue on ignition	NMT 0.007%	NMT 0.007%	Not mentioned	NMT 0.005%
21	Sulphated Ash	Not mentioned	Not mentioned	NMT 0.01%	Not mentioned

22	Distilling Range	Not mentioned	Not mentioned	Not mentioned	NLT 95% distill between 184-189° C	
23	Assay	NLT 99.5% of C3H8O2	NLT 99.5% of C3H8O2	Not mentioned	Not mentioned	
24	Microbial limit test Total aerobic microbial count Total yeast and molds count E.Coli Pseudomonas aeruginosa Staphylococcus aureus Salmonella	100 CFU/g 50 cfu/g Absent/g Absent/g Absent/25 g	NMT NMT Absent/g	Not mentioned	Not mentioned	Not mentioned
	Storage	Not mentioned	Preserve in tight containers	Airtight 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.