



" clyzo " - Monograph Comparison



AS PER CURRENT USP 2022/EP11/JP18

Product Name	L-Tyrosine (Ph. Eur., USP) pure, pharma grade			Issue Date	March-23
Product Code	A1677			Prepared by	Sr. Tech Lead
CAS NO.	60-18-4			Reviewed by	Manager Technical
Manufacturer Name	PanReac AppliChem			Version no.	CLYZO/PAN/A1677/01
Sr. No.	Test	Manufacturer COA Complies Ph. Eur., USP	USP 2022	Pharmacopeial Specifications	
				EP Version 11.0	JP 18
1	Description	Solid	White, odorless, tasteless crystals or crystalline powder	White or almost white, crystalline powder or colourless crystals	White, crystals or a crystalline powder
2	Solubility	Soluble in water	Very slightly soluble in water; insoluble in alcohol and in ether	Very slightly soluble in water, practically insoluble in ethanol (96 per cent). It dissolves in dilute mineral acids and in dilute solutions of alkali hydroxides	Freely soluble in formic acid, and practically insoluble in water and in ethanol (99.5). It dissolves in dilute hydrochloric acid and in ammonia TS
3	Identification 1	Passes test	The Infrared absorption spectrum obtained with sample should be concordant with spectrum obtained with Tyrosine reference standard/working standard	The Infrared absorption spectrum obtained with sample should be concordant with spectrum obtained with Tyrosine reference standard/working standard	The Infrared absorption spectrum obtained with sample should be concordant with spectrum obtained with Tyrosine reference standard/working standard
4	Identification 2	Passes test	Not mentioned	Should comply with specific optical rotation test	UV absorption spectrum obtained with sample should exhibit maxima at same wavelength and similar intensity as standard
5	Identification 3	Passes test	Not mentioned	By TLC, the principal spot in the chromatogram obtained with the test solution is similar in position, colour and size to the principal spot in the chromatogram obtained with the reference solution	Not mentioned
6	Identification 4	Passes test	Not mentioned	A dark red colour should be produced	Not mentioned
7	Identification 5	Passes test	Not mentioned	An orange-red colour should be produced	Not mentioned
8	Appearance of solution	Passes test	Not mentioned	Sample solution should be clear and not more intensely coloured than reference solution Y7	Sample solution should be clear and colorless
9	Specific optical rotation	Between -11.2° and -9.8° (at 25 deg) Between -12.3° and -11.0° (at 20 deg)	Between -11.2° and -9.8°	Between -12.3° and -11.0°	Between -12.5° and -10.5°
10	Heavy metals	NMT. 0.0015 %	Not mentioned	Not mentioned	NMT 10 ppm
11	Residue on Ignition	NA	NMT 0.4%	Not mentioned	NMT 0.1%
12	Sulfated ash	NMT 0.1 %	Not mentioned	NMT 0.1%	Not mentioned
13	Loss on drying	NMT 0.3%	NMT 0.3%	NMT 0.5%	NMT 0.3%
14	Chlorides	NMT 0.02 %	NMT 0.04%	NMT 200 ppm	NMT 0.021%
15	Ammonium	NMT 0.02 %	Not mentioned	NMT 0.02%	NMT 0.02%
16	Sulfate	NMT 0.03 %	NMT 0.04%	NMT 300 pppm	NMT 0.028%
17	Iron	NMT 0.001 %	NMT 30 ppm	NMT 10 ppm	NMT 10 ppm
18	Ninhydrin positive substances /related substances	Impurity A: NMT 0.5% Maximum unknown impurity: NMT 0.2% Total impurities: NMT 0.6% y TLC Maximum unknown impurity: NMT 0.5% Total impurities: NMT 2.0%	Maximum unknown impurity: NMT 0.5% Total impurities: NMT 2.0%	Impurity A: NMT 0.5% Maximum unknown impurity: NMT 0.2% Total impurities: NMT 0.6%	NMT 0.2%
19	Assay (dried basis)	Between 99.0 % and 101.0 %	Between 98.5% and 101.5%	Between 99.0 % and 101.0 %	Between 99.0 % and 101.0 %
	Storage	Keep container tightly closed in a dry and well-ventilated place	Preserve in well-closed containers	Protected from light	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.