



## CERTIFICATE OF ANALYSIS

INVOICE: №121022

DATE: 12.10.22

<b>Product name: Phenylpiracetam</b>			
Batch No.	SN210101	Batch Quantity	100 kg
CAS No.	77472-70-9	Molecular Formula	C12H14N2O2
Mfg. Date	10/2021	Exp. Date	10/2026

No.	Test	Specification	Result
1	Description	White or white with a yellowish odorless crystalline powder	White odorless crystalline powder
2	Assay	99,0 to 100,5 % (calculated on the dried product)	99,5 %
3	Identification		
	3.1 IR	The IR spectrum of the product according to the position of the absorption bands should concordant to the standard IR spectrum	Conforms
	3.2 UV	The UV absorption spectrum of 0,05 % of the product solution in a mixture of 96 % al-cohol and 1 M solution of hydrochloric acid (9:1) in the range of 200 to 380 nm should have a maximum at (258±2) nm; absorption minimum at (240±2) nm; shoulder in the range from 251 nm to 257 nm	Conforms
	3.3 Qualitative reaction	Staining red litmus paper blue	Conforms
4	Solubility	Slightly soluble in water, sparingly soluble in alcohol 96 % and chloroform	Conforms
5	Melting point	128 °C to 134 °C	132,0
6	Clarity of solution	0,5 % solution of the product in water should be withstand comparison with the reference solution I	Withstand comparison with the reference solution I
7	Degree of coloration	0,5 % solution of the product in water should be withstand comparison with the reference solution Y7	Withstand comparison with the reference solution Y7
8	Impurities	Not more than 0,25 %	Less than 0,25 %
9	Sulphated ash	Not more than 0,1 %	0,06 %
10	Heavy metals	Not more than 0,001%	Less than 0,001 %
11	Loss on drying	Not more than 0,5 %	0,04 %
12	Storage	In the light protected place at a temperature no higher than 30°C	

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