

CERTIFICATION OF ANALYSIS

LOT FROM MINIMUM 99% NICOTINE RESULTS

LOT NO GH1269000054RRR

ANALYSIS	SPECIFICATION	RESULTS
Product name/Formula/Formula weight	Nicotine/ C ₁₀ H ₁₄ N ₂ /162.2	Complies
Appearance	liquid	liquid
Odor	Characteristic	Complies
Specific Optical Rotation ([α] _D ²⁰ , in ethanol)	-142° to -152°	Complies
Nicotine Identity -U.V. (0.002% in 0.1M HCl)	Spectrum conforms to reference (End. 1) I max 257 to 261 nm A (1%, 1cm) 331-357	Complies
Solubility	Clear and complete	complies
Density,G/ML	1.008-1.012	1.010
PH	6-7	6.8l
Nicotine Identity IR	Spectrum conforms to reference (End. 2)	Complies
Residual Solvents	≤ 0.05% (v/v) Cyclohexane	Complies
Waters(Karl Fischer)	≤ 0.5%	0.12%
Heavy Metals	≤ 10ppm	Complies
Arsenic	≤ 1ppm	Complies
Assay Non Aqueous Titration	99.0 to 101.0%	99.83%
Related Substances(HPLC)		
Cotinine	≤ 0.2%	Complies
β-nicotyrine	≤ 0.2%	Complies
Myosmine	≤ 0.2%	Complies
Unspecified Single Impurities	≤ 0.10%	Complies
Sum Total Nicotine—N—Oxides	≤ 0.2%	Complies
Sum Total Impurities (Specified and unspecified)	≤ 0.5%	Complies
Conclusion	Conform with specification	
Storage	Under nitrogen, in an airtight container, protected from light.	
Shelf life	1 years when properly stored	

ANALYSIS SERVICES