



CERTIFICATE OF ANALYSIS

The Power to Question

Catalog Number: sc-396970
Lot Number: SAMPLE
Product Name: nor-Binaltorphimine dihydrochloride
CAS Number: 105618-26-6
Molecular Formula: $C_{40}H_{43}N_3O_6 \cdot 2HCl$
Molecular Weight: 734.71

Test	Specification	Result
Appearance (Color)	White to tan	White
Appearance (Form)	Powder or lyophilized powder	Lyophilized powder
Identification (NMR)	Consistent with structure	Complies
Purity (TLC)	$\geq 98.00\%$	99.50%
Residual Solvents	Ethylacetate: $\leq 1.00\%$ Diethylether: $\leq 1.00\%$ Total Resid. solvents: $\leq 1.00\%$	Ethylacetate: 0.00% Diethylether: 0.00% Total Resid. solvents: 0.00%
Solution (Color)	Colorless to Yellow at 9.80 - 10.20 mg/ml in Dimethylsulfoxide	Colorless at 9.80 - 10.20 mg/ml in Dimethylsulfoxide
Solution (Turbidity)	Clear at 9.80 - 10.20 mg/ml in Dimethylsulfoxide	Complies
Carbon Content	64.89 - 65.89 %	65.17 %
Nitrogen Content	5.22 - 6.22 %	5.74 %
Water Content (KF)	$\leq 12.20\%$	11.99%

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.

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