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## CERTIFICATE OF ANALYSIS

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Product	L-Norvaline
Grade	Reagent
Product Code	N4058
Formula	C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub>
MW	117.4
CAS#	6600-40-4
Lot No	

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Test Items	Specifications	Results
Appearance	White crystals or crystalline powder	
Assay	98.5% - 101.0%	
Specific rotation $[\alpha]_D^{20}$	+23.0° ~ +25.0°	
Chloride (Cl)	≤0.020%	
Sulfate (SO <sub>4</sub> )	≤0.020%	
Heavy metals (as Pb)	≤10ppm	
Loss on drying	≤0.50%	
Residue on ignition	≤0.10%	

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Storage: R.T.