



# INDOFINE Chemical Company, Inc.

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## *Certificate of Analysis*

Catalogue Number	04-262
Lot Number	000127-1039918
Product	<b>Lysinoalanine•2HCl (diastereomeric mixture: LL + LD)</b> H-Lys(DL-2-amino-2-carboxyethyl)-OH•2HCl
CAS Number	4418-81-9
Molecular Formula	C <sub>9</sub> H <sub>19</sub> N <sub>3</sub> O <sub>4</sub> •2HCl
Molecular Weight	306.19

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Appearance	White powder
Solubility	Clear, colorless solution (50mg/mL in H <sub>2</sub> O)
Melting Point	180 °C
Elemental Analysis (Theory)	C = 35.3%; H = 6.9%; N = 13.7%
Elemental Analysis (Found)	C = 35.1%; H = 7.3%; N = 13.7%
Water Content (Karl Fisher)	1.5%
TLC System	Isopropanol/Ammonia conc. (1:1) Methanol/Chloroform/Ammonia 17% (2:2:1) Plate: silicagel 60 F <sub>254</sub> Detected by: UV, ninhydrin, chlorine-tolidine
Optical Rotation	[α] <sub>D</sub> <sup>24</sup> = +9.6° (C=2 in 1M HCl)
Assay	99.6% (Nth 13.72%, Nfd 13.66%)
Assay by titration	21.1% (Chloride content: AgNO <sub>3</sub> )
Purity by TLC	> 99%
Storage	Store at 0-8 °C