

# Analytical Data Sheet

Lot number **1076316**  
not for drug use

Catalog number **F-1195.0050**  
Product number **4008365.0050**  
Product **Lysinoalanine · 2 HCl (diastereomeric mixture: LL + LD)**  
H- Lys(DL- 2- amino- 2- carboxyethyl) - OH · 2 HCl  
Molecular formula **C<sub>9</sub>H<sub>19</sub>N<sub>3</sub>O<sub>4</sub> · 2 HCl**  
Relative molecular mass **306.19**

Tests	Results								
Appearance	white powder								
Appearance of solution	clear, colorless solution (50mg/mL in H <sub>2</sub> O)								
Identification (ESI-MS)	m = 233.3u (average mass)								
Identification (elemental analysis)	<table> <thead> <tr> <th>Theory</th> <th>Found</th> </tr> </thead> <tbody> <tr> <td>C = 35.3%</td> <td>C = 35.1%</td> </tr> <tr> <td>H = 6.9%</td> <td>H = 7.3%</td> </tr> <tr> <td>N = 13.7%</td> <td>N = 13.7%</td> </tr> </tbody> </table>	Theory	Found	C = 35.3%	C = 35.1%	H = 6.9%	H = 7.3%	N = 13.7%	N = 13.7%
Theory	Found								
C = 35.3%	C = 35.1%								
H = 6.9%	H = 7.3%								
N = 13.7%	N = 13.7%								
Identification (TLC)	complies with authentic material								
Melting point	180 °C								
Specific optical rotation	$[\alpha]_D^{24} = +9.6^\circ$ (2% in HCl 1M)								
Purity (TLC)	> 99%								
TLC conditions	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								
Assay (elemental analysis)	99.6% (Nth 13.72%, Nfd 13.66%)								
Water content (KF volumetric)	1.5%								
Chloride content (titration)	21.1% (AgNO <sub>3</sub> )								

Latest update: April 17, 2018

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