

## Analytical Data Sheet

Lot number **1000018995**  
not for drug use

Catalog number **F-1195.0250**  
Product number **4008365.0250**  
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 (50 mg/mL in H <sub>2</sub> O)  |
| Identification (ESI-MS)       | m = 233.1u (monoisotopic mass)  |
| Identification (TLC)          | complies with authentic material  |
| Specific optical rotation     | $[\alpha]_{365}^{24} = +32.2^\circ$ (2% in HCl 1M)  |
| Purity (TLC)                  | > 99%   |
| TLC conditions                | isopropanol/ammonia conc. 1/1<br>methanol/chloroform/ammonia 17% 2/2/1<br>plate: silicagel 60 F <sub>254</sub><br>detected by: UV, ninhydrin, TMB |
| Assay (elemental analysis)    | 99.2% (Nth 13.72%, Nfd 13.60%)  |
| Water content (KF volumetric) | 2.2%  |
| Chloride content (titration)  | 20.9% (AgNO <sub>3</sub> )  |

Latest update: July 25, 2019

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