

Analytical Data Sheet

Lot number **1068728**
not for drug use

Catalog number **C-2200.0005**
Product number **4001304.0005**
Product **Z- Lys- OH**
Molecular formula $C_{14}H_{20}N_2O_4$
Relative molecular mass 280.32

Tests	Results								
Appearance	white powder								
Appearance of solution	clear, colorless solution (50 mg/mL in 80% acetic acid)								
Identification (elemental analysis)	<table> <thead> <tr> <th>Theory</th> <th>Found</th> </tr> </thead> <tbody> <tr> <td>C = 59.9%</td> <td>C = 59.8%</td> </tr> <tr> <td>H = 7.2%</td> <td>H = 7.1%</td> </tr> <tr> <td>N = 10.0%</td> <td>N = 9.9%</td> </tr> </tbody> </table>	Theory	Found	C = 59.9%	C = 59.8%	H = 7.2%	H = 7.1%	N = 10.0%	N = 9.9%
Theory	Found								
C = 59.9%	C = 59.8%								
H = 7.2%	H = 7.1%								
N = 10.0%	N = 9.9%								
Identification (TLC)	complies with authentic material								
Specific optical rotation	$[\alpha]_D^{20} = -13.4^\circ$ (2% in 0.2 M HCl)								
Purity (TLC)	> 99%								
Related impurities (TLC)	<p>< 0.5% H-Lys(Z)-OH < 0.1% Z-Lys(Z)-OH < 0.1% H-Lys-OH</p>								
TLC conditions	<p>n-butanol/acetic acid/H₂O 4/2/2 chloroform/methanol/acetic acid 32% 5/3/1 ethylacetate/pyridine/acetic acid/H₂O 60/30/9/16.5 plate: silicagel 60 F₂₅₄ detected by: UV, ninhydrin, TMB</p>								
Enantiomer content (chiral chromatography)	< 0.1% D-enantiomer								
Assay (elemental analysis)	99.1% (Nth 9.99%, Nfd 9.90%)								
Water content (KF volumetric)	0.1%								

Latest update: November 15, 2016

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