

## Analytical Data Sheet

Lot number **1075618**  
not for drug use

Retest date N/A  
 Catalog number **C-1295.0005**  
 Product number **4009614.0005**  
 Product **Z- D- Arg- OH**  
 Molecular formula  $C_{14}H_{20}N_4O_4$   
 Relative molecular mass 308.34

Tests	Results								
Appearance	white powder								
Appearance of solution	clear, colorless solution (50 mg/ml in AcOH 80 %)								
Identification (elemental analysis)	<table> <thead> <tr> <th>Theory</th> <th>Found</th> </tr> </thead> <tbody> <tr> <td>C = 54.03 %</td> <td>C = 54.11 %</td> </tr> <tr> <td>H = 6.58 %</td> <td>H = 6.53 %</td> </tr> <tr> <td>N = 18.00 %</td> <td>N = 18.12 %</td> </tr> </tbody> </table> <p>calc. as 0.16 H<sub>2</sub>O (0.93 %)</p>	Theory	Found	C = 54.03 %	C = 54.11 %	H = 6.58 %	H = 6.53 %	N = 18.00 %	N = 18.12 %
Theory	Found								
C = 54.03 %	C = 54.11 %								
H = 6.58 %	H = 6.53 %								
N = 18.00 %	N = 18.12 %								
Identification (TLC)	conforms with authentic material								
Melting point	175.3 °C								
Specific optical rotation	$[\alpha]_D^{24} = +10.9^\circ$ (1 % in 0.2 N HCl)								
Purity (TLC)	> 99%								
TLC conditions	ethylacetate/pyridine/acetic acid/H <sub>2</sub> O 6/5/1/3 chloroform/methanol/acetic acid 32% 5/3/1 plate: silicagel 60 F <sub>254</sub> detected by: UV, ninhydrin, chlorine-tolidine								
Assay (elemental analysis)	99.7% (Nth 18.17 %, Nfd 18.12 %)								
Water content (KF volumetric)	1.1%								

Latest update: February 12, 2018

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