

Analytical Data Sheet

Lot number **1063113**
not for drug use

Catalog number **A-1465.0025**
Product number **4001265.0025**
Product **Boc- Lys(Z) - OH**
Molecular formula $C_{19}H_{28}N_2O_6$
Relative molecular mass 380.44

Tests	Results								
Appearance	white powder								
Appearance of solution	clear, colorless solution (50 mg/mL in methanol)								
Identification (elemental analysis)	<table> <thead> <tr> <th>Theory</th> <th>Found</th> </tr> </thead> <tbody> <tr> <td>C = 60.0 %</td> <td>C = 60.0 %</td> </tr> <tr> <td>H = 7.4 %</td> <td>H = 7.3 %</td> </tr> <tr> <td>N = 7.4 %</td> <td>N = 7.3 %</td> </tr> </tbody> </table>	Theory	Found	C = 60.0 %	C = 60.0 %	H = 7.4 %	H = 7.3 %	N = 7.4 %	N = 7.3 %
Theory	Found								
C = 60.0 %	C = 60.0 %								
H = 7.4 %	H = 7.3 %								
N = 7.4 %	N = 7.3 %								
Identification (TLC)	complies with authentic material								
Melting point	79 °C								
Specific optical rotation	$[\alpha]_D^{24} = -12.9^\circ$ (1 % in dimethylformamide)								
Purity (TLC)	> 99%								
Related impurities (TLC)	< 0.1% H-Lys(Z)-OH ≤ 0.1% Boc-Lys(Z)-Lys(Z)-OH								
TLC conditions	n-butanol/acetic acid/H ₂ O 4/2/2 toluene/dioxane/acetic acid 95/25/4 chloroform/methanol/toluene/H ₂ O 8/8/8/1 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, TMB								
Enantiomer content (GC)	< 0.1% D-enantiomer								
Assay (elemental analysis)	100.0% (Cth 59.99%, Cfd 59.97%)								
Assay (titration)	99.3% (TBAH)								
Water content (KF volumetric)	0.1%								