

# Analytical Data Sheet

Lot number

## 1027443

not for drug use

<b>Catalog Number</b>	E-3290.0005
<b>Product number</b>	4026444.0005
<b>Product</b>	H- Thr- OtBu · HCl
<b>Molecular formula</b>	C <sub>8</sub> H <sub>17</sub> NO <sub>3</sub> · HCl
<b>Relative molecular mass</b>	211.69

Tests	Results								
<b>Appearance</b>	white powder								
<b>Appearance of solution</b>	clear, colorless solution (50 mg/mL in methanol)								
<b>Identification (elemental analysis)</b>	<table> <tr> <td>Theory</td> <td>Found</td> </tr> <tr> <td>C = 45.4 %</td> <td>C = 45.1 %</td> </tr> <tr> <td>H = 8.6 %</td> <td>H = 8.6 %</td> </tr> <tr> <td>N = 6.6 %</td> <td>N = 6.5 %</td> </tr> </table>	Theory	Found	C = 45.4 %	C = 45.1 %	H = 8.6 %	H = 8.6 %	N = 6.6 %	N = 6.5 %
Theory	Found								
C = 45.4 %	C = 45.1 %								
H = 8.6 %	H = 8.6 %								
N = 6.6 %	N = 6.5 %								
<b>Identification (TLC)</b>	complies with authentic material								
<b>Melting point</b>	147 °C								
<b>Specific optical rotation</b>	$[\alpha]_D^{24} = -8.5^\circ$ ( 1% EtOH abs.)								
<b>Purity (TLC)</b>	> 99%								
<b>Related impurities (TLC)</b>	< 0.1% H-Thr-OH								
<b>TLC conditions</b>	chloroform/methanol/toluene/H <sub>2</sub> O 8/8/8/1 chloroform/methanol/acetic acid 32% 5/3/1 plate: silicagel 60 F <sub>254</sub> detected by: UV, ninhydrin, TMB								
<b>Enantiomer content (GC)</b>	> 99.7% L-Thr < 0.1% D-Thr < 0.1% L-allo-Thr < 0.1% D-allo-Thr								
<b>Other amino acids (GC)</b>	< 0.3%								
<b>Assay (elemental analysis)</b>	98.6% (Cth 45.39%, Cfd 44.77%)								
<b>Chloride content (titration)</b>	17.0% (AgNO <sub>3</sub> )								

Latest update: November 06, 2009

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