

# Analytical Data Sheet

Lot number

## 1031027

not for drug use

|                                |  |
|--------------------------------|--|
| <b>Catalog Number</b>          | F-4100.0005  |
| <b>Product number</b>          | 4041546.0005   |
| <b>Product</b>                 | N- Me- D- Ala- OtBu · HCl                            |
| <b>Molecular formula</b>       | C <sub>8</sub> H <sub>17</sub> NO <sub>2</sub> · HCl |
| <b>Relative molecular mass</b> | 195.69   |

| 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 border="0"> <tr> <td>Theory</td> <td>Found</td> </tr> <tr> <td>C = 49.1%</td> <td>C = 48.7%</td> </tr> <tr> <td>H = 9.3%</td> <td>H = 9.1%</td> </tr> <tr> <td>N = 7.2%</td> <td>N = 7.1%</td> </tr> </table>   | Theory | Found | C = 49.1% | C = 48.7% | H = 9.3% | H = 9.1% | N = 7.2% | N = 7.1% |
| Theory                                     | Found  |        |       |           |           |          |          |          |          |
| C = 49.1%                                  | C = 48.7%  |        |       |           |           |          |          |          |          |
| H = 9.3%                                   | H = 9.1%   |        |       |           |           |          |          |          |          |
| N = 7.2%                                   | N = 7.1%   |        |       |           |           |          |          |          |          |
| <b>Identification (TLC)</b>                | complies with authentic material   |        |       |           |           |          |          |          |          |
| <b>Melting point</b>                       | 135 °C   |        |       |           |           |          |          |          |          |
| <b>Specific optical rotation</b>           | $[\alpha]_D^{24} = +8.9^\circ$ (1% in dimethylformamide)   |        |       |           |           |          |          |          |          |
| <b>Purity (TLC)</b>                        | > 99%  |        |       |           |           |          |          |          |          |
| <b>TLC conditions</b>                      | chloroform/methanol/acetic acid/H <sub>2</sub> O 45/13/1/2<br>chloroform/methanol/toluene/H <sub>2</sub> O 8/8/8/1<br>chloroform/methanol/acetic acid/H <sub>2</sub> O 70/42/0.5/10<br>plate: silicagel 60 F <sub>254</sub><br>detected by: UV, ninhydrin, chlorine-tolidine |        |       |           |           |          |          |          |          |
| <b>Assay (elemental analysis)</b>          | 99.2% (Cth 49.10%, Cfd 48.71%)   |        |       |           |           |          |          |          |          |
| <b>Chloride content (titration)</b>        | 18.2%  |        |       |           |           |          |          |          |          |

Latest update: July 22, 2010

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