

# Chem-Impex International, Inc.

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825 Dillon Drive

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## Certificate of Analysis

|                          |  |
|--------------------------|--|
| <b>Catalogue Number</b>  | 02214  |
| <b>Lot Number</b>        | 000424-130814-13447  |
| <b>Product</b>           | <b><i>N</i><sup>ε</sup>-<b>Z</b>-D-lysine methyl ester hydrochloride</b> |
|                          | D-Lys(Z)-OMe•HCl   |
| <b>CAS Number</b>        | 145586-17-0  |
| <b>Molecular Formula</b> | C <sub>15</sub> H <sub>22</sub> N <sub>2</sub> O <sub>4</sub> •HCl       |
| <b>Molecular Weight</b>  | 330.8  |

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|                                    |   |
|------------------------------------|---|
| <b>Appearance</b>                  | White powder  |
| <b>Solubility</b>                  | Clear solution (0.3 g in 2 mL Water)                              |
| <b>Melting Point</b>               | 116.7-116.9 °C  |
| <b>Water Content (Karl Fisher)</b> | 0.197%  |
| <b>Optical Rotation</b>            | [α] <sub>D</sub> <sup>20</sup> = -14.9° (C=2 in H <sub>2</sub> O) |
| <b>Infrared Spectrum</b>           | Conforms to structure   |
| <b>Analysis by Mass Spectra</b>    | Conforms to standard  |
| <b>Loss on Drying</b>              | 0.4% (50 °C, 2h)  |
| <b><sup>1</sup>H NMR</b>           | Conforms to structure   |
| <b>Purity by HPLC</b>              | 99.22%  |
| <b>Storage</b>                     | Store at 0-8 °C   |

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**Remarks**

See material safety data sheet for additional information

For laboratory use only

**The foregoing is a copy of the Certificate of Analysis as provided by our supplier**



**Bala Kumar**  
**Quality Control Manager**