

# Chem-Impex International, Inc.

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## Certificate of Analysis

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|--------------------------|---|
| <b>Catalogue Number</b>  | 03060   |
| <b>Product</b>           | <b>L-Glutamic acid dibenzyl ester 4-toluenesulfonate salt</b>                                   |
| <b>Lot Number</b>        | 000424-150627-16050<br>L-Glu(OBzl)-OBzl•TosOH   |
| <b>CAS Number</b>        | 2791-84-6   |
| <b>Molecular Formula</b> | C <sub>19</sub> H <sub>21</sub> NO <sub>4</sub> ·C <sub>7</sub> H <sub>8</sub> O <sub>3</sub> S |
| <b>Molecular Weight</b>  | 499.6   |

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|------------------------------------|--|
| <b>Appearance</b>                  | White powder   |
| <b>Solubility</b>                  | Clear solution (0.3 g in 2 mL MeOH)  |
| <b>Melting Point</b>               | 142.4-142.7°C  |
| <b>Water Content (Karl Fisher)</b> | 0.119%   |
| <b>Optical Rotation</b>            | +7.7° (C=1, MeOH)  |
| <b>Loss on Drying</b>              | 0.18%  |
| <b>Purity by HPLC</b>              | 99.04%   |
| <b>Storage</b>                     | Store at 0-8°C   |
| <b>Additional Information</b>      | Elemental analysis (C, H, N): < 5.0%   |
| <b>Remarks</b>                     | See material safety data sheet for additional information<br>For laboratory use only |

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



**Bala Kumar**  
Quality Control Manager