

Chem-Impex International, Inc.

Tel: (630) 766-2112

E-mail: sales@chemimpex.com

Shipping and Correspondence:

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218

Web site: www.chemimpex.com

Manufacturing site:

825 Dillon Drive

Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number	23209
Lot Number	000424-150411-16723
Product	L-Glutamic acid diallyl ester tosylate Glu(OAll)-OAll·TosOH
CAS Number	20845-16-3
Molecular Formula	C ₁₁ H ₁₇ NO ₄ ·C ₇ H ₈ O ₃ S
Molecular Weight	399.46

Appearance	White powder
Solubility	Clear solution (0.3 g in 2 mL DMF)
Melting Point	94.2-94.4 °C
Water Content (Karl Fisher)	0.176%
Optical Rotation	[α] _D ²⁰ = +5.0° (C=1 in DMF)
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	0.34% (40 °C, 2 hour)
¹H NMR	Conforms to structure
Purity by HPLC	98.05%
Storage	Store at 0-8 °C
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