

# Chem-Impex International, Inc.

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## Certificate of Analysis

<b>Catalogue Number</b>	04456
<b>Lot Number</b>	001902-450-1
<b>Product</b>	<b>L-Tyrosine allyl ester 4-toluenesulfonate salt</b> L-Tyr-OAll•TosOH
<b>CAS Number</b>	125441-05-6
<b>Molecular Formula</b>	C <sub>12</sub> H <sub>15</sub> NO <sub>3</sub> ·C <sub>7</sub> H <sub>8</sub> O <sub>3</sub> S
<b>Molecular Weight</b>	393.5

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<b>Appearance</b>	White powder
<b>Water Content (Karl Fisher)</b>	0.3%
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>20</sup> = 9.3 ° (C=5 in DMF)
<b>Related Substances</b>	< 0.5%, H-Tyr-OH
<b>Assay by titration</b>	101.9% (NaOH)
<b>D-Enantiomer</b>	< 0.1%
<b>Purity by TLC</b>	Conforms to reference
<b>Chiral Purity</b>	≥ 99.9% (ee)
<b>Storage</b>	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