

# Chem-Impex International, Inc.

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## Certificate of Analysis

<b>Catalogue Number</b>	16613
<b>Lot Number</b>	001415-42476
<b>Product</b>	<b>Methyl-(S)-(+)-mandelate</b>  (S)-(+)- $\alpha$ -Hydroxyphenylacetic acid methyl ester
<b>CAS Number</b>	21210-43-5
<b>Molecular Formula</b>	C <sub>9</sub> H <sub>10</sub> O <sub>3</sub>
<b>Molecular Weight</b>	166.17

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<b>Appearance</b>	Off-white crystalline chunks
<b>Melting Point</b>	49-54 °C
<b>Optical Rotation</b>	[ $\alpha$ ] <sub>D</sub> <sup>20</sup> = +127.6° (C=2 in MeOH)
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Purity by GC</b>	99.7%
<b>Storage</b>	Store at 0-8°C
<b>Remarks</b>	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