

# Chem-Impex International, Inc.

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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

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## Certificate of Analysis

<b>Catalogue Number</b>	38251
<b>Lot Number</b>	003533-0613615
<b>Product</b>	<b>Santonin</b> (3S,3aS,5aS,9bS)-3a,5,5a,9b-Tetrahydro-3,5a,9-
<b>CAS Number</b>	481-06-1
<b>Molecular Formula</b>	C <sub>15</sub> H <sub>18</sub> O <sub>3</sub>
<b>Molecular Weight</b>	246.31

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<b>Appearance</b>	White to almost white powder
<b>Melting Point</b>	169 - 171 °C
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>20</sup> = -180 °
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	[M+H] <sup>+</sup> = 247.1
<b>UV Ratios</b>	λ max : 241 nm
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Purity by HPLC</b>	99.8%
<b>Purity by TLC</b>	100%
<b>Storage</b>	Store at 2 - 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