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### CERTIFICATE OF ANALYSIS

Analysis Date:

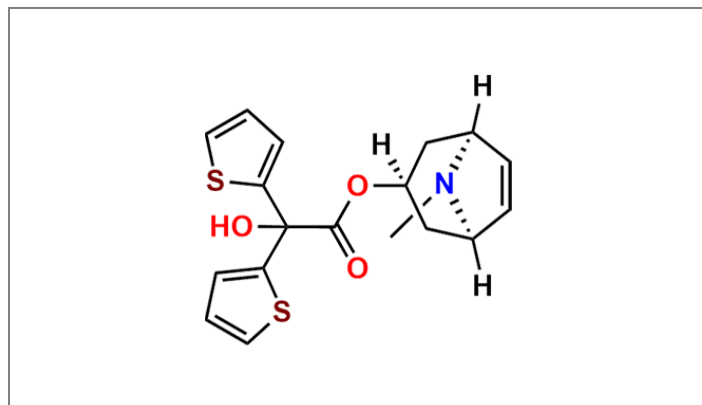
Re-test Date:

**Product Name: Tiotropium EP Impurity D**

#### Identification:

Chemical Name: (1R,3S,5S)-8-Methyl-8-azabicyclo[3.2.1]oct-6-en-3-yl 2-hydroxy-2,2-dithiophen-2-ylacetate

Synonyms : NA  
CAS Number : 136310-66-2  
CAT Number : CP-T22004  
Molecular Formula : C<sub>18</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>S<sub>2</sub>  
Molecular Weight : 361.47



#### Analytical Information:

Sr. No.	Test	Result
1)	Description	Solid
2)	Solubility	Soluble in Methanol/DMSO
3)	MASS By LCMS	Confirm to structure
4)	Purity By HPLC	>95%
5)	H1NMR	Confirm to structure



**Prepared and Reviewed By**

Ms Priyanka Salunkhe  
(Manager QC Analytical)

**Approved By**

Ms Rohini Gagare  
(QA Head)

Note: Product supplied by Chemicea are for R&D purpose only and not for human consumptions.