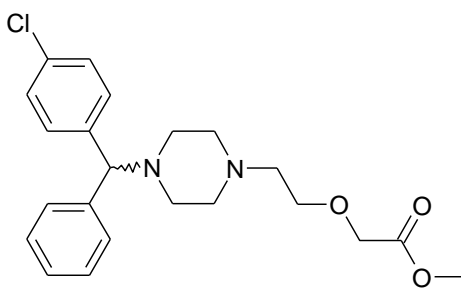


Certificate of Analysis

Structure: 	
Name	Cetirizine methyl ester
Synonym(s)	methyl (<i>RS</i>)-(2-(4-((4-chlorophenyl)phenylmethyl)-1-piperazinyl)ethoxy)acetate
Epichem Item #	EPL-AA93 Batch 2
CAS #	83881-46-3
Molecular Formula	C ₂₂ H ₂₇ ClN ₂ O ₃
Molecular Weight	402.93 g/mol
Purity	97.9% (weight/weight) 99.0% by HPLC at 220nm (assuming all components have the same response factor). ¹ H NMR analysis detected 0.88% chloroform (wt/wt). 0.25% water by Karl-Fischer method. 0.01% ash.
Combustion Analysis	Required (%): C:65.6; H:6.8; N:7.0. Found (%): C:64.5; H:6.9; N:6.9.
Appearance	Pale brown syrup
Date of Manufacture	2 December 2015
Storage Requirements	Store in refrigerator. Protect from heat, light and moisture
Special Precautions	This compound is for laboratory use only. Its toxicological properties may not have been fully established. It should be handled only by suitably qualified personnel.

John Moursounidis, PhD
 Head Fine Chemicals and Technical Services
 2 December 2015