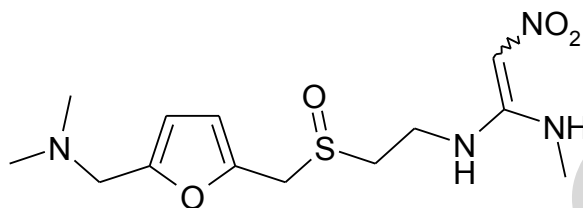


Certificate of Analysis

*Revised 19 September 2014

Structure:



Name	Ranitidine Impurity C*
BP Name	Ranitidine Impurity C
Chemical Name	<i>N</i> -(2-(((5-((dimethylamino)methyl)furan-2-yl)methyl)sulfinyl)ethyl)- <i>N'</i> -methyl-2-nitroethene-1,1-diamine
Synonym(s)	Ranitidine S-oxide, Ranitidine Related Compound C (USP)*
Epichem Item #	EPL-AA60 Batch 1
CAS #	73851-70-4*
Molecular Formula	C ₁₃ H ₂₂ N ₄ O ₄ S
Molecular Weight	330.41 g/mol
Purity	97.4% (weight/weight) 100.0% by HPLC at 220 nm, 230 nm, 254 nm and 280 nm (assuming all components detected with the same response factor). No significant impurity detected by ¹ H NMR analysis. 0.30% water by Karl-Fischer method. 2.3% ash.
Combustion Analysis	Required (%): C:47.3; H:6.7; N:17.0; S:9.7. Found (%): C:47.2; H:6.8; N:17.0; S:9.5.
Appearance	Pale orange foam
Date of Manufacture	18 January 2010
Storage Requirements	-20°C. Protect from heat, light and moisture (hygroscopic).*
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.

Wayne Best
Managing Director
19 September 2014