

Certificate of Analysis

Structure:	
Name	2-(4-(((2-(1,1-dioxido-3,4-dihydro-2H-1,2,4,6-thiatriazin-5-yl)ethyl)sulfanyl)methyl)-1,3-thiazol-2-yl)guanidine maleate
Synonym(s)	Famotidine Impurity C1 maleate; Famotidine formaldehyde adduct maleate
Epichem Item #	EPL-AA167 Batch 1
CAS #	Not available (free base: 154754-59-3)
Molecular Formula	C ₉ H ₁₅ N ₇ O ₂ S ₃ ·C ₄ H ₄ O ₄
Molecular Weight	465.53 g/mol
Purity	94.7% (weight/weight) 95.4% at 266 nm by HPLC (assuming all components detected with the same response factor). Contains 0.3% Famotidine (free base equivalent, by standard curve). ¹ H NMR analysis showed trace ethanol and trace Famotidine. 0.65% water by Karl-Fischer method. 0.04% ash.
Combustion Analysis	Required (%): C: 33.5; H: 4.1; N: 21.1. Found (%): C: 33.0; H: 3.9; N: 20.8.
Appearance	White powder
Melting Point	187.0-188.0°C
Date of Manufacture	29 April 2015
Storage Requirements	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.

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