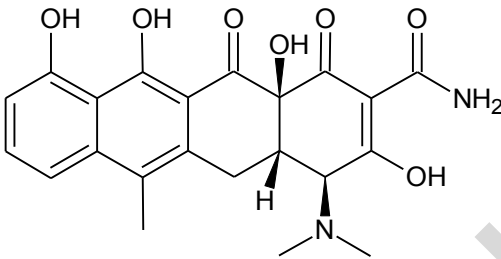


Certificate Of Analysis

*Revised 23 November 2015

*Revised 26 November 2015

Structure:	
	
Name	(4 <i>S</i> ,4 <i>aS</i> ,12 <i>aS</i>)-4-(dimethylamino)-3,10,11,12a-tetrahydroxy-6-methyl-1,12-dioxo-1,4,4 <i>a</i> ,5,12,12 <i>a</i> -hexahydro-tetracycline-2-carboxamide hydrochloride*
BP Name	Tetracycline Hydrochloride Impurity C hydrochloride*
Synonym(s)	anhydrotetracycline hydrochloride; 5 <i>a</i> ,6-anhydrotetracycline hydrochloride; (4 <i>S</i> ,4 <i>aS</i> ,12 <i>aS</i>)-4-(dimethylamino)-1,4,4 <i>a</i> ,5,12,12 <i>a</i> -hexahydro-3,10,11,12a-tetrahydroxy-6-methyl-1,12-dioxo-2-naphthacenecarboxamide hydrochloride.*
Epichem Item #	EPL-AA145 Batch 1
CAS #	13803-65-1
Molecular Formula	C ₂₂ H ₂₂ N ₂ O ₇ ·HCl
Molecular Weight	462.89 g/mol
Purity	93.9% (weight/weight)* 97.1% by HPLC at 274nm (assuming all components detected with the same response factor).* ¹ H NMR analysis detected 0.5% (wt/wt) acetonitrile and trace unknown impurity. 2.4% water by Karl Fischer method. 0.3% ash.
Combustion Analysis	Required (%): C:57.1; H:5.0; N:6.0. Found (%): C:55.8; H:5.2; N:5.8.
Appearance	Yellow solid
Melting Point	218.0-220.0°C
Date of Manufacture	26 March 2013
Storage Requirements	Hygroscopic. 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
26 November 2015