Agilent Technologies

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Certificate of Analysis

Sulfa Drug LCMS OQPV Standard

Agilent Part Number: **5188-6523** **Sample Lot Number:** **LC06999**
Storage Conditions: **Room Temperature**

This is a set of standards to be used in the Universal LCMS Compliance deliveries. There are five different standard concentrations that are included in this kit. The concentration of these standards is listed below.

Sulfa Drug LCMS OQPV Standard #1 0.0100 ug/ml
Sulfa Drug LCMS OQPV Standard #2 0.0250 ug/ml
Sulfa Drug LCMS OQPV Standard #3 0.1000 ug/ml
Sulfa Drug LCMS OQPV Standard #4 0.5000 ug/ml
Sulfa Drug LCMS OQPV Standard #5 1.0000 ug/ml

Below is a list of the purity and/or grade of the components that are added in equal proportion to each standard. The solvent for each standard is Methanol/Di Water (30%:70%).

Neat Material		Neat material Purity and/or Grade
Sulfamethizole (CAS NO.: 144-82-1)		Vetranal, analytical std, >99%
Sulfamethazine (CAS NO.: 57-68-1)		Vetranal, analytical std, >99%
Sulfachloropyridazine (CAS NO.: 80-32-0)		Vetranal, analytical std, >99%
Sulfadimethoxine (CAS NO.: 122-11-2)		Vetranal, analytical std, >99%
Solvent Composition:		
Methanol (CAS NO.: 67-56-1)	30%	HR-GC 99.9%
DI Water (CAS NO.: 7732-18-5)	70%	Millipore, 18.2 Mohm

Gravimetric Preparation of Analytical Standards

Stock Solution (actual weight reported of each compound, units: gram)

Sulfamethizole	0.02505
Sulfamethazine	0.02505
Sulfachloropyridazine	0.02503
Sulfadimethoxine	0.02503
Solvent	500 ml

Final Standard Preparation

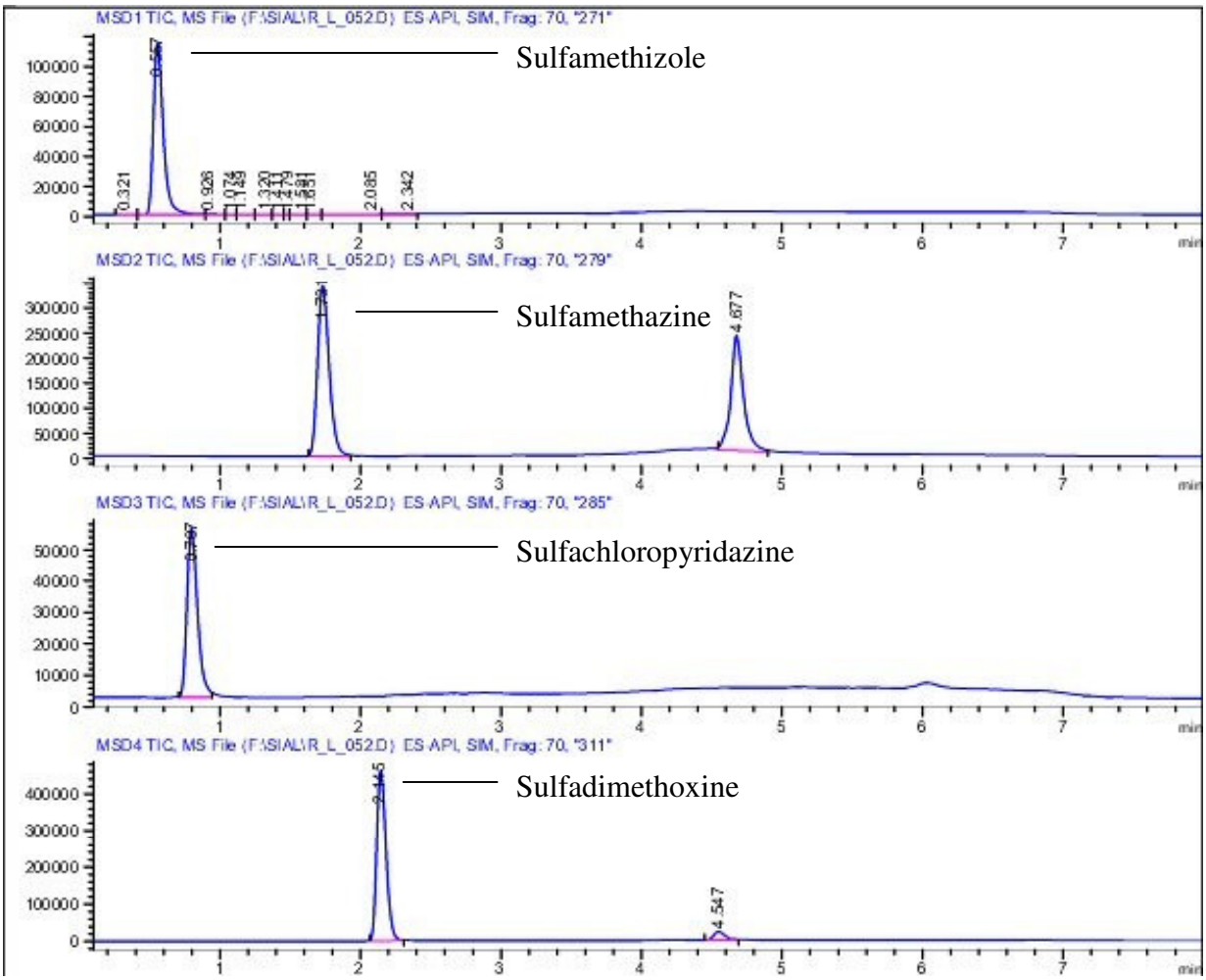
Std 1	0.010ug/ml	0.10 ml of Stock Solution diluted with 499.9 ml solvent.
Std 2	0.025ug/ml	0.25 ml of Stock Solution diluted with 499.75 ml solvent.
Std 3	0.100ug/ml	1.0 ml of Stock Solution diluted with 499.5 ml solvent.
Std 4	0.500ug/ml	1.0 ml of Stock Solution diluted with 99.0 ml solvent.
Std 5	1.000ug/ml	2.0 ml of Stock Solution diluted with 98.0 ml solvent.

Traceability:

These standards have been produced gravimetrically (weight to volume) using ISO9001 quality procedures. Balances used are calibrated regularly and meet the requirements of ISO. Concentration of analytes in solution is ug/ml +/- 0.5%, uncertainty based upon balance and Class A volumetric glassware.

The standards have been analyzed with high-performance liquid chromatography mass spectroscopy. Analytical concentration is +/- 10.0% of the stated concentration.

Analytical Spectrum of Individual Sulfonamides:



Date of Manufacture: 4 APRIL 2014
Date of Expiration: 4 SEPTEMBER 2015

Duane Funk

Duane Funk
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