2731 Bartram Road Bristol, PA 19007-6893 800.385.3153 www.unitedchem.com

## **CERTIFICATE OF ANALYSIS**

**PRODUCT NAME:** CUMPSGGC182CT

CHEMICAL: Mixture of MgSO4, CUPSA, EEC18, ChloroFiltr SILICA TYPE: Irregular particles 40-63 micron, 60 Angstroms LOT NUMBER: 041613-AA

		<b>Specification Values</b>		<b>Lot Analysis</b>	
<u>Test</u>	<b>Method</b>	<u>Min</u>	Max		
Average Pore Size	SOP82-4.042	55Å	65Å		60Å
Surface Area (m <sup>2</sup> /g)	SOP82-4.042	470	530		$530 \text{ m}^2/\text{g}$
Pore Volume (cm <sup>3</sup> /g)	SOP82-4.042	0.70	0.85		$0.75 \text{ cm}^3/\text{g}$
Appearance	Visual	White Fir	ne Powder	White Fig	ne Powder
MgSO4 (lot#814160-BD)					
Assay	Ignition	99.50%	100.5%		99.90%
• Total sorbent weight per tube (150mg)		143	158		Conforms
<b>CUPSA</b> (lot#818011-GD)					
Carbon Analysis by Weight	SOP82-4.024	10.50%	12.50%		11.00%
(Organic Loading)					
Anion Exchange	SOP82-4.028	1.00	1.50		1.119meq/g
• Total sorbent weight per tube (50mg)		48	53		Conforms
<b>EEC18</b> (lot#818020-BB)					
Carbon Analysis by Weight	SOP82-4.024	20.50%	22.70%		20.72%
(Organic Loading)					
Endcapping	SOP82-4.027	0.00abs	2.00abs		0.737abs
• Total sorbent weight per tube (50mg)		48	53		Conforms
<b>Chloro Filtr</b> ® (lot#20180365)		Conform	S		Conforms
• Total sorbent weight per tube (50mg)		48	53		Conforms

 All components of this product are individually weighed. The mass of each raw material meets method required tolerances.

The shelf life is only valid if the material is stored in the original unopened container. The specifications and lot analysis are only valid using the listed methods. The test methods and specifications were current when the product was lotted.

## **CERTIFIED BY: NAME:** L. Bender

TITLE: QC ANALYST

Certificate issue DATE: 04/17/2019

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