

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

## CERTIFICATE OF ANALYSIS

PRODUCT NAME:

CHEMICAL: SILICA TYPE: LOT NUMBER: CUMPS15C18CT

Mixture of MgSO4, CUPSA, CEC18

Irregular particles 40-63 micron, 60 Angstroms

041675-NK

		<b>Specification Values</b>		<b>Lot Analysis</b>
Test	<b>Method</b>	Min	Max	
Average Pore Size	SOP82-4.042	55Å	65Å	60Å
Surface Area (m <sup>2</sup> /g)	SOP82-4.042	470	530	$508 \text{ m}^2/\text{g}$
Pore Volume (cm <sup>3</sup> /g)	SOP82-4.042	0.70	0.85	$0.79 \text{ cm}^3/\text{g}$
Appearance	Visual	White F	ine Powder	White Fine Powder
<b>MgSO4</b> (lot#513201-AX)				
Assay	Ignition	99.50%	100.5%	100.0%
• Total sorbent weight per tube (150mg)		143	158	Conforms
<b>CUPSA</b> (lot#519111-FK)				
Carbon Analysis by Weight	SOP82-4.024	10.50%	12.50%	10.82%
(Organic Loading)				4.00=
Anion Exchange	SOP82-4.028	1.00	1.50	1.097meq/g
• Total sorbent weight per tube (150mg)		143	158	Conforms
<b>CEC18</b> (lot#517121-ZV)				
Carbon Analysis by Weight (Organic Loading)	SOP82-4.024	20.50%	22.70%	21.02%
Endcapping	SOP82-4.027	0.00abs	0.90abs	0.657abs
• 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:** D. Shawn Ream

TITLE: QC MANAGER

Certificate issue DATE: 06/07/2019

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