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CERTIFICATE OF ANALYSIS

PRODUCT NAME:

CHEMICAL: SILICA TYPE: LOT NUMBER: ECOUUS2515CT

Mixture of MgSO4, CUPSA, CEC18, CUFLS, CUALB Irregular particles 40-63 micron, 60 Angstroms

039961-BD

		Specification Values		Lot Analysis
<u>Test</u>	Method	<u>Min</u>	<u>Max</u>	
Average Pore Size	SOP82-4.042	55Å	65Å	60Å
Surface Area (m ² /g)	SOP82-4.042	470	530	$508 \text{ m}^2/\text{g}$
Pore Volume (cm ³ /g)	SOP82-4.042	0.70	0.85	$0.79 \text{ cm}^3/\text{g}$
Appearance	Visual	White Fir	ne Powder White Fi	ne Powder
MgSO4 (lot#814160-BD)				
Assay	Ignition	99.50% 1	100.5%	99.90%
 Total sorbent weight per tube (175mg) 		166	184	Conforms
CUPSA (lot#812160-GA)				
Carbon Analysis by Weight (Organic Loading)	SOP82-4.024	10.00%	11.50%	11.98%
Anion Exchange	SOP82-4.028	1.00	1.20	1.020meq/g
 Total sorbent weight per tube (50mg) 		47	53	Conforms
CEC18 (lot#812121-BJ)				
Carbon Analysis by Weight (Organic Loading)	SOP82-4.024	20.50%	22.70%	20.66%
Endcapping	SOP82-4.027	0.00abs	0.90abs	0.698abs
 Total sorbent weight per tube (250mg) 		237	263	Conforms
CUFLS (lot#414011-CE)				
Carbon Analysis by Weight (Organic Loading)	SOP82-4.024	Report Only		1.66%
• Total sorbent weight per tube (250mg)		237	263	Conforms
CUALB (lot#111140-AL)				
pH		8.5		9.5
• Total sorbent weight per tube (500mg)		475	525	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: 02/22/2019

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