

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

CERTIFICATE OF ANALYSIS

PRODUCT NAME:

CHEMICAL: SILICA TYPE: LOT NUMBER: ECQUAS615CT

Specification Values

Mixture of MgSO4, CUPSA, CUCARB, CEC18 Irregular particles 40-63 micron, 60 Angstroms 044122-CY

Lot Analysis

		Specification values		Lot mary sis
Test	Method	Min	<u>Max</u>	
Average Pore Size	SOP82-4.042	<u>Min</u> 55Å	65Å	60Å
Surface Area (m ² /g)	SOP82-4.042	470	530	508 m ² /g
Pore Volume (cm^3/g)	SOP82-4.042	0.70	0.85	$0.79 \text{ cm}^3/\text{g}$
Appearance	Visual	White F	ine Powder	White Fine Powder
MgSO4 (lot#919010-BE)				
Assay	Ignition	99.50%	100.5%	100.0%
• Total sorbent weight per tube (900mg)		855	945	Conforms
CUPSA (lot#916060-GH)				
Carbon Analysis by Weight	SOP82-4.024	10.50%	12.50%	11.14%
(Organic Loading)				
Anion Exchange	SOP82-4.028	1.00	1.50	1.024 meq/g
• Total sorbent weight per tube (450mg)		428	473	Conforms
CUCARB (lot#816021-DU)				100 2
Graphitized carbon	SOP82-4.042	10	5 0	$133 \text{ m}^2/\text{g}$
• Total sorbent weight per tube (50mg)		48	53	Conforms
CEC18 (lot#812121-BJ)		2 0 5 00/	22 5000	20 6604
Carbon Analysis by Weight	SOP82-4.024	20.50%	22.70%	20.66%
(Organic Loading)	00000 1000	0.00.1	0.00.1	0 (00 1
Endcapping	SOP82-4.027		0.90abs	0.698 abs
• Total sorbent weight per tube (300mg)		285	315	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: 07/25/2019

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