

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

CERTIFICATE OF ANALYSIS

PRODUCT NAME:

CHEMICAL: SILICA TYPE: LOT NUMBER:

ECQUEU12-MP

Specification Values

Mixture of MgSO4, CUPSA, CUCARB, CEC18 Irregular particles 40-63 micron, 60 Angstroms 072411-TK

Lot Analysis

		Specification values		Lot marysis
Test	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	504 m ² /g
Pore Volume (cm^3/g)	SOP82-4.042	0.70	0.85	$0.74 \text{ cm}^3/\text{g}$
Appearance	Visual	White I	Fine Powder	White Fine Powder
MgSO4 (lot#226040-BQ)				
Assay	Ignition	99.50%	100.5%	100.1%
• Total sorbent weight per pouch (150mg	;)	143	158	Conforms
CUPSA (lot#224160-HB)				
Carbon Analysis by Weight	SOP82-4.024	10.50%	12.50%	11.2%
(Organic Loading)				
Anion Exchange	SOP82-4.028	1.00	1.50	1.071meq/g
• Total sorbent weight per pouch (50mg)		48	53	Conforms
CUCARB (lot#225290-EU)				
Graphitized carbon	SOP82-4.042			133 m ² /g
• Total sorbent weight per pouch (50mg)		48	53	Conforms
CEC18 (lot#224170-CZ)				
Carbon Analysis by Weight	SOP82-4.024	20.50%	22.70%	21.07%
(Organic Loading)				
Endcapping	SOP82-4.027	0.00abs	0.90abs	0.485abs
• Total sorbent weight per pouch (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:** 11/30/2022

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