

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

CERTIFICATE OF ANALYSIS

PRODUCT NAME: CHEMICAL: SILICA TYPE: LOT NUMBER:

ECQUUS2515CT

Specification Values

Mixture of MgSO4, CUPSA, CEC18, CUFLS, CUALB Irregular particles 40-63 micron, 60 Angstroms 073886-BQ

Lot Analysis

Test	Method	Min	Max			
Average Pore Size	SOP82-4.042	55Å	65Å		60Å	
Surface Area (m^2/g)	SOP82-4.042	470	530		$504 \text{ m}^2/\text{g}$	
Pore Volume (cm^{3}/g)	SOP82-4.042	0.70	0.85		$0.74 \text{ cm}^{3}/\text{g}$	
Appearance	Visual	White Fir	White Fine Powder		White Fine Powder	
MgSO4 (lot#226040-BQ)						
Assay	Ignition	99.50%	99.50% 100.5%		100.1%	
• Total sorbent weight per tube (175mg)		166	184		Conforms	
CUPSA (lot#224160-HB)						
Carbon Analysis by Weight	SOP82-4.024	10.00%	11.50%		11.20%	
(Organic Loading)						
Anion Exchange	SOP82-4.028	1.00	1.20		1.071meq/g	
 Total sorbent weight per tube (50mg) 		47	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 tube (250mg)		237	263		Conforms	
CUFLS (lot#029070-CS)						
Carbon Analysis by Weight	SOP82-4.024	Report Only		1.00%		
(Organic Loading)						
• Total sorbent weight per tube (250mg)		237	263		Conforms	
CUALB (lot#617270-BA)						
pH		8.5			10.1	
• 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: D. Kearns

TITLE: QC Analyst

Certificate issue DATE: 02/16/2023

2731 Bartram Road / Bristol, PA 19007 USA / Phone 215-781-9255 / Fax 215-785-1226 Email: <u>info@unitedchem.com</u> Internet: HTTP://www.unitedchem.com