



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

## CERTIFICATE OF ANALYSIS

**PRODUCT NAME:** ECQUEU2415CT  
**CHEMICAL:** Mixture of MgSO<sub>4</sub>, CUPSA, CEC18  
**SILICA TYPE:** Irregular particles 40-63 micron, 60 Angstroms  
**LOT NUMBER:** 039821-NK

<u>Test</u>	<u>Method</u>	<u>Specification Values</u>		<u>Lot Analysis</u>
		<u>Min</u>	<u>Max</u>	
Average Pore Size	SOP82-4.042	55Å	65Å	60Å
Surface Area (m <sup>2</sup> /g)	SOP82-4.042	470	530	508 m <sup>2</sup> /g
Pore Volume (cm <sup>3</sup> /g)	SOP82-4.042	0.70	0.85	0.79 cm <sup>3</sup> /g
Appearance	Visual	White Fine Powder		White Fine Powder
<b>MgSO<sub>4</sub> (lot#513201-AX)</b>				
Assay	Ignition	99.50%	100.5%	100.0%
● Total sorbent weight per tube (450mg)		428	473	Conforms
<b>CUPSA (lot#519111-FK)</b>				
Carbon Analysis by Weight (Organic Loading)	SOP82-4.024	10.50%	12.50%	10.82%
Anion Exchange	SOP82-4.028	1.00	1.50	1.097meq/g
● Total sorbent weight per tube (450mg)		428	473	Conforms
<b>CEC18 (lot#517121-ZV)</b>				
Carbon Analysis by Weight (Organic Loading)	SOP82-4.024	20.50%	22.70%	21.02%
Endcapping	SOP82-4.047	0.00abs	0.90abs	0.657abs
● Total sorbent weight per tube (150mg)		143	158	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:** 02-19-2019

2731 Bartram Road / Bristol, PA 19007 USA / Phone 215-781-9255 / Fax 215-785-1226Email:  
[info@unitedchem.com](mailto:info@unitedchem.com) Internet: [HTTP://www.unitedchem.com](http://www.unitedchem.com)