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

CERTIFICATE OF ANALYSIS

PRODUCT NAME: CUMPSGG2CT

CHEMICAL: Mixture of CUPSA, MgSO4, Chloro Filtr® SILICA TYPE: Irregular particles 40-63 micron, 60 Angstroms LOT NUMBER: 039255-DF

		Specification Values		Lot Analysis
<u>Test</u>	Method	Min	<u>Max</u>	
Average Pore Size	SOP82-4.042	55Å	65Å	60Å
Surface Area (m ² /g)	SOP82-4.042	470	530	$520 \text{ m}^2/\text{g}$
Pore Volume (cm ³ /g)	SOP82-4.042	0.70	0.85	$0.79 \text{ cm}^3/\text{g}$
Appearance	Visual	White Fine Powder		White Fine Powder
CUPSA (lot#818011-GD)				
Carbon Analysis by Weight (Organic Loading)	SOP82-4.024	10.50%	12.50%	11.00%
Anion Exchange	SOP82-4.028	1.00	1.50	1.119meq/g
• Total sorbent weight per tube (50mg)		48	53	Conforms
MgSO4 (lot#814160-BD)				
Assay	Ignition	99.50%	100.5%	99.90%
• Total sorbent weight per tube (150mg)		143	158	Conforms
Chloro Filtr® (lot# 20180365) Total sorbent weight per tube (50mg)		Conforms 48 53		Conforms Conforms
- Total soldent weight per tube (sollig)				Comornio

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: 03/25/2019

 $2731\;Bartram\;Road\:/\:Bristol,\,PA\:19007\;USA\:/\:Phone\:215\text{--}781\text{--}9255\:/\:Fax\:215\text{--}785\text{--}1226$

Email: info@unitedchem.com Internet: HTTP://www.unitedchem.com