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CERTIFICATE OF ANALYSIS

PRODUCT NAME: ECPURMPSMC

CHEMICAL: MgSO4 (top layer), CUPSA (bottom layer) SILICA TYPE: Irregular particles 40-63 micron, 60 Angstroms 040594-GE LOT NUMBER:

		Specification Values		Lot Analysis
<u>Test</u>	Method	<u>Min</u> 55Å	<u>Max</u> 65Å	
Average Pore Size	SOP82-4.042	55Å	65Å	60Å
Surface Area (m ² /g)	SOP82-4.042	470	530	$493 \text{ m}^2/\text{g}$
Pore Volume (cm ³ /g)	SOP82-4.042	0.70	0.85	$0.76 \text{ cm}^3/\text{g}$
Appearance	Visual	White Fine Powder		White Fine Powder
MgSO4 (lot#919010-BE)				
Assay	Ignition	99.50%	100.5%	100.0%
• Total sorbent weight per tube (190mg)		181	201	Conforms
CUPSA (lot#817221-GE)				
Carbon Analysis by Weight (Organic Loading)	SOP82-4.024	10.50%	12.50%	11.40%
Anion Exchange	SOP82-4.028	1.00	1.50	1.041 meg/g
 Total sorbent weight per tube (110mg) 	50102 4.020	105	116	Conforms
• Total sorbent weight per tube (110mg)		103	110	Comornis

[•] 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: 07/03/2019

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