

# Certificate of Analysis

Part Name: QCG-X2 RAAGP0005A

Producing Date: 2021.10.13

Analysis Date: 2021.10.13

Item	Spec	Analysis Result	Analyzer	Evaluation Result	
Particle Size (dmin) , $\mu\text{m}$	$\geq 2.0$	5.2	Checker 13	OK	
Particle Size (d10) , $\mu\text{m}$	$8.3 \pm 2.0$	9.1	Checker 13	OK	
Particle Size (d50) , $\mu\text{m}$	$14.3 \pm 2.0$	14.7	Checker 13	OK	
Particle Size (d90) , $\mu\text{m}$	$24.0 \pm 4.0$	23.3	Checker 13	OK	
Particle Size (dmax) , $\mu\text{m}$	$\leq 50.0$	35.3	Checker 13	OK	
Tap Density , $\text{g}/\text{cm}^3$	$1.02 \pm 0.10$	1.04	Checker 10	OK	
Surface Area , $\text{m}^2/\text{g}$	$0.9 \pm 0.4$	0.91	Checker 10	OK	
Ash Content , %	$\leq 0.10$	0.01	Checker 12	OK	
Water Content , wt%	$\leq 0.10$	0.01	Checker 12	OK	
Bulk Density , $\text{g}/\text{cm}^3$	$0.65 \pm 0.10$	0.63	Checker 8	OK	
Residue on sieve 325 mesh, ppm	$\leq 100$	6	Checker 19	OK	
Fe , ppm	$\leq 50$	3.94	Checker 4	OK	
S , ppm	$\leq 50$	7.79	Checker 4	OK	
Ni , ppm	$\leq 25$	0.89	Checker 4	OK	
Cu , ppm	$\leq 25$	N.D.	Checker 4	OK	
Al , ppm	$\leq 20$	N.D.	Checker 4	OK	
Zn , ppm	$\leq 10$	N.D.	Checker 4	OK	
Fe+Cr+Ni+Zn , ppm	$\leq 0.3$	0.045	Checker 4	OK	
For Reference	Discharge Capacity (mAh/g)	$\geq 348.5$	349.9	Checker 21	OK
	First Discharge Efficiency (%)	$\geq 91.0$	92.2	Checker 21	OK