

Customer	Contact	Date	01-Sep-09
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Date 4-Mar-09 TEST 2

1 cc VIAL	tare	Bulk density gm/cc	Tap density gm/cc
3.519	2.2998	1.2192	1.3815
3.692	2.3105		

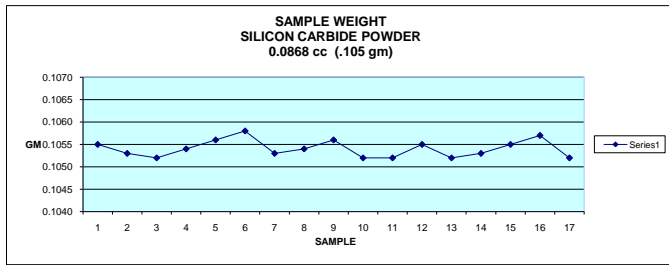
Material	Silicon Carbide	Material condition			Bulk Density (gm/cc)			Bulk Density (gm/cc)	
		Particulate size	Fines	From Table	Measured	Tap Density	From Table	Measured	Tap Density
Desired Sample size	0.0868 cc 0.0344 cc 0.0278 cc	Unk <10 micron	>10%	NA	1.2192	1.3815			

Desired accuracy	Std +/-% Best	See Notes and Cust CD Mp	rh	55%
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Pipette Size	0.125 dia.	Filter Cup:	Filter cup mesh	10 micron
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Micrometer setting	Set	Sample weight gm
0.95		0.1058
		0.1055
		0.1053
		0.1052
		0.1054
		0.1056
		0.1058
		0.1053
		0.1054
		0.1056
		0.1052
		0.1052
		0.1055
		0.1052
		0.1053
		0.1055
		0.1057
		0.1052

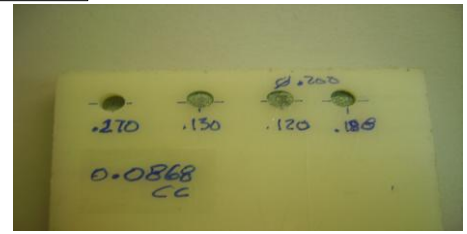
Control unit settings
Vacuum (in hg) 14
Air (psi) 4



0.1054	Av
0.1054	Mean
0.0002	Std Dev
0.1058	High
0.1052	Low
0.5703	%

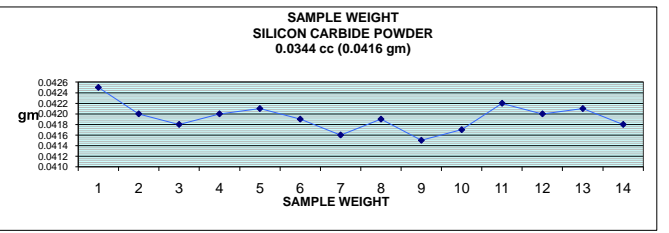
Cycle time (sec)	Aspirate	Level	Dispense	total
	1	1	1	4

Range



Micrometer setting

set	Sample weight gm
	0.0425
	0.0420
	0.0418
	0.0420
	0.0421
	0.0419
	0.0416
	0.0419
	0.0415
	0.0417
	0.0422
	0.0420
	0.0421
	0.0418
	0.0417



0.0419	Av
0.0419	Mean
0.0003	Std Dev

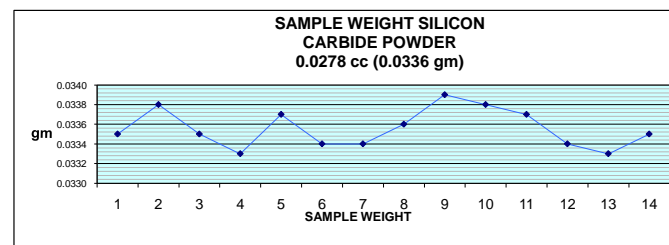
Cycle time (sec)	Aspirate	Level	Dispense	total
	1	1	1	4

Range

Micrometer setting

set	Sample weight gm
	0.0336
	0.0335
	0.0338
	0.0335
	0.0333
	0.0337
	0.0334
	0.0334
	0.0336
	0.0339
	0.0338
	0.0337
	0.0334
	0.0333
	0.0335

Vacuum (in hg) 14	Air (psi) 4
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0.0336	Av
0.0336	Mean
0.0002	Std Dev

Cycle time (sec)	Aspirate	Level	Dispense	total
	1	1	1	4

Range

1.4793 %

Notes/observations

Silicon Carbide

Dark green, med. fine particle, Very dense powder

Volumes converted to weight. (Volume X measured bulk density = sample weight) for testing.

1a. Samples will eject from pipette into cylindrical cavity at very low, 3 - 4 psi, without blowback, aerosol, or flying dust particles.

1.b. Repeatability test performed with .125 dia pipette.

Recommend the .125 dia. pipette tip to dispensed the powder in smaller opening cavities.

Ideal material for pipette dispensing. No aerosol. Uniform particulate size.

Note: Proto cavities were not optimized for this powder. Cavities fabricated to accept approximatly a full charge of the powder @ largest sample weight.