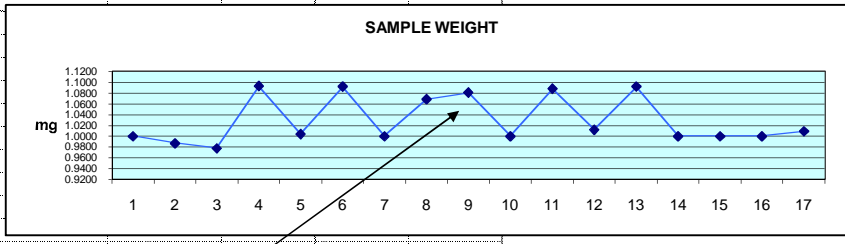


Customer							Date	9/16/2005
							rh	55%
Material	Sugar substitute #2			Bulk Density	.53 - 6.6 gm/cc	Particle size	5 -10 micron	
Desired Sample size	1 mg.			Pipette Size	.125 dia.	Filter Cup porosity	5 micron	
Desired accuracy	+/-1.0% Repeatability							

Micrometer setting	Sample weight		Control unit settings	
	0.05	mg	Vacuum (in hg)	Air (psi)
sharp		1.000	5	8
edge		0.987		
scraper		0.978		

Material is	1.004
hygroscopic,	1.091
bulk density	1.000
changes over	1.068
time.	1.080
	1.000
	1.087
	1.012
	1.091
	1.000
	1.000
	1.000
	1.000
	1.009
	1.029 Av
	1.029 Mean
	0.043 Std Dev
	1.092 Range Hi
	0.978 low
	10.440 %



Large Tap Density variation caused by pipette packing due to small amount of sample powder

Notes:

- 1.0 Resolution limited to Analytical balance scale accurate to 4 places to right of decimal.
- 2.0 Powder Condition: Fine white powder, some granular clumps. Somewhat hygroscopic causing a weight gain over time after opening and distributing sample.
- 2.1 Clumps, as a significant of the sample volume, cause the sample weight to vary more than if the powder particulate size were more uniform.
- 3.0 Samples tended to pack using the scraper plate. Change of tap density. Used sharp edge of scraper/leveling plate.
- 3.1 Would not be an issue for sample weights >5 mg.
- 3.2 Suggest sharp edge or wire to level tip end for small samples.
- 4.0 Cycle time: Sample to sample 4 - 5 seconds after initial calibration.