

Modified Substitution Data Sheet

Laboratory data and conditions:

Operator	GH		
Date	12/15/02	Temperature	21.3 °C
Balance	PM 2000 MC	Pressure	750.2 mm Hg
Load	1 kg	Relative Humidity	48 %
Standard deviation of the process, from control chart, s_p			0.80 mg

Mass standard(s) data:

ID	Nominal	Mass Correction* (mg Conventional)	Expanded Unc: From Cal. Rpt. (mg)	Unc: k factor	Density g/cm ³
S (W1K)	1 kg	4.0	0.50	2	---
S_c (C1K)	1 kg	12.2	0.75	2	---
sw	1 g	0.0085	0.000 47	2	---
X 14) 1 kg set Q98V1	1 kg	TBD	TBD	2	---

*Mass Correction = *True Mass* if using buoyancy correction. Mass Correction = *Conventional Mass* if NOT using buoyancy correction. Density is used only with buoyancy corrections.

Observations:

Observation No.	Weights	Balance Observations, Units = g
Time: 2:00 p.m.		
1 (O_1) (W1K)	S	0000
2 (O_2)	$S + sw$	1001
Error < 2 percent of optical scale or electronic range? Yes No		
3 (O_3)	S	0000
4 (O_4) (C1K)	S_c	0008
5 (O_5)	X_1	0023
6 (O_6)	X_2	0085
7 (O_7)	X_3	-0017
8 (O_8)	X_4	0108
9 (O_9)	X_5	-0079
10 (O_{10})	X_6	-2353
11 (O_{11})	X_7	0049
12 (O_{12})	S	0007
13 (O_{13})	X_8	0053
14 (O_{14})	X_9	-0017
15 (O_{15})	X_{10}	-0043
16 (O_{16})	X_{11}	0009
17 (O_{17})	X_{12}	0037
18 (O_{18})	X_{13}	0071
19 (O_{19})	X_{14}	0042
20 (O_{20})	S	0005
Time: 2:40 p.m.		Drift < 1/10 Tol. ? : Yes No

Up to 10 unknown weights may be checked with this procedure between each check of the standard if the drift is less than 1/10 of the tolerance.