

StableWeigh™ TDS HotBlock®



Catalog Number	Description
TDS024	StableWeigh TDS HotBlock, 24 position, 120V
TDS024-240	StableWeigh TDS HotBlock, 24 position, 240V

Environmental Express has developed the StableWeigh TDS HotBlock to provide a time saving solution for the initial evaporation step when using our revolutionary StableWeigh vessels for either Total Solids (TS) or Total Dissolved Solids (TDS). The 23rd edition of *Standard Methods* allows for the use of a HotBlock during the initial evaporation step for TS samples and TDS sample filtrates. The unique holes in the TDS HotBlock facilitate the opening of the vessels to ensure thorough evaporation of liquid. Once the samples have evaporated, the vessels can be easily removed from the block and placed in our modular oven rack for transfer in and out of the drying oven and desiccator.

The utilization of the TDS HotBlock allows for expedited sample processing when compared to the typical practice of overnight drying. An independent study was performed by a national, commercial laboratory on the weight stability of the StableWeigh TDS Vessels and their evaporation times using the TDS HotBlock. As shown in the spreadsheet below, the sample (filtrate) volumes used can reduce the evaporation times to 3 ¼ to 5 ½ hours. Though some time cannot be reduced due to method requirements, StableWeigh vessels, in combination with the TDS HotBlock, offer a significant time savings in the washing, drying, weighing, and evaporation times. Too much time between preparation and final analysis leaves room for errors and can delay the reporting of final results, thereby reducing laboratory efficiency.

EE Disposable TDS StableWeigh Bags w/ TDS HotBlock Evaluation

Date Filtered	Sample ID	Vessel #	Initial Weight (g)	Sample Volume	Final Weight #1 (g)	Final Weight #2 (g)	Final Weight #3 (g)	Residue (mg)	Final Results (mg/L)	% Recovery
04.19.17	1000 mg/L Std	A0026500	3.8793	100	3.9787	3.9788		99.5	995	99.5%
04.19.17	1000 mg/L Std	A0026501	3.8679	100	3.9678	3.9676		99.7	997	99.7%
04.19.17	1000 mg/L Std	A0026502	3.8879	100	3.9869	3.9868		98.9	989	98.9%
04.19.17	1000 mg/L Std	A0026503	3.8677	100	3.9673	3.967		99.3	993	99.3%
04.19.17	Blank	A0026505	3.8672	100	3.8673	3.8674		0.2	2	NA
04.19.17	1000 mg/L Std	A0026506	3.8946	50	3.9413	3.9412		46.6	932	93.2%
04.19.17	1000 mg/L Std	A0026507	3.8872	50	3.9396	3.9394		52.2	1044	104.4%
04.19.17	1000 mg/L Std	A0026508	3.8853	50	3.9379	3.9382		52.9	1058	105.8%
04.19.17	1000 mg/L Std	A0026509	3.8792	50	3.9301	3.9302		51	1020	102.0%
04.19.17	Blank	A0026510	3.8799	50	3.8802	3.88		0.1	2	NA
04.19.17	1000 mg/L Std	A0026511	3.8761	25	3.8999	3.8997		23.6	944	94.4%
04.19.17	1000 mg/L Std	A0026512	3.8941	25	3.9201	3.92		25.9	1036	103.6%
04.19.17	1000 mg/L Std	A0026513	3.8872	25	3.913	3.913		25.8	1032	103.2%
04.19.17	1000 mg/L Std	A0026514	3.8851	25	3.9114	3.9113		26.2	1048	104.8%
04.19.17	Blank	A0026515	3.8819	25	3.8821	3.8823	external residue	0.4	16	NA
04.19.17	1000 mg/L Std	A0026516	3.877	10	3.8879	3.8876		10.6	1060	106.0%
04.19.17	1000 mg/L Std	A0026517	3.874	10	3.8842	3.8841		10.1	1010	101.0%
04.19.17	1000 mg/L Std	A0026518	3.8912	10	3.9014	3.9013		10.1	1010	101.0%
04.19.17	1000 mg/L Std	A0026519	3.8858	10	3.8963	3.8961		10.3	1030	103.0%
04.19.17	Blank	A0026520	3.8859	10	3.8857	3.8858		-0.1	-10	NA

TDS HotBlock SN:	TDS0541L-01
Date/Time In:	04/19/2017 10:10
Block Temp In:	104
Thermo ID #	IH00070
180 OVEN ID #	PTD-01
Bag Lot #	012617LR-7026
Filter Pad Lot #	600013-6032T
TDS Std Lot #	Pace04182017
Balance ID:	50408310
Std True Value	1000 mg/L

Constant Weight 180 ± 2°C Oven Cycle Info				
Date/Time In	4.19.17 3:45	Oven In Temp	179.6	1st Wt
Date/Time Out	4.20.17 8:15	Oven Temp Out	180.6	
Out of Desiccator	4.20.17 9:30			
Date/Time In	4.20.17 9:50	Oven In Temp	178.8	2nd Wt
Date/Time Out	4.20.17 11:15	Oven Temp Out	180.6	
Out of Desiccator	4.20.17 12:15			
Date/Time In	Constant	Oven In Temp	Constant	3rd Wt
Date/Time Out	Constant	Oven Temp Out	Constant	
Out of Desiccator	Constant			

Volume	Time on Block*
100 mL	5.45 hours
50 mL	4.25 hours
25 mL	3.25 hours
10 mL	3.25 hours

*done in open lab environment and not inside fume hood