

Sample Preparation Block Systems

PerkinElmer offers a variety of sample preparation blocks and accessories for your lab needs.

Better laboratory practices demand modern techniques in sample preparation. In the past, hot plates were used to digest samples where common digestion problems involved rusting, cross contamination of digestion system to sample, and poor sample temperature control.

With no exposed metal components and an outer shell manufactured from acid-resistant thermoplastic, the SPB blocks reduce the chances of sample contamination. Each system is constructed with a solid, PTFE-coated, graphite block where a flat heater covers 95% of the block's base. This guarantees temperature uniformity and eliminates hot spots found in hot plates.

All PerkinElmer® sample preparation blocks are manufactured to specific tolerances which operates under a Quality Management System that is certified ISO 9001:2008.

"The major advantage of the PerkinElmer Sample Preparation Block is its ability to provide me with accurate temperature across the entire block.

With every run, I am confident that I have excellent recovery rates from my samples and there is no chance of contamination – which is critical when I'm conducting lead testing on my ICP-AES."

Michigan Department of Community Health Mark Knottnerus Trace Metals Manager



Features and Benefits

- Ideal for any digestion/heating method which requires a temperature below 180 $^{\circ}\mathrm{C}$
- Provides uniform temperature (±1.0 °C across the block)
- Delivers even sample evaporation results
- PTFE-coated graphite block resists aggressive, corrosive attack
- Choose from 8 different SPB blocks



Sample Preparation Blocks



The SPB series of block digestion systems offers the latest in graphite block technology in many different packages.

Graphite blocks are PTFE-coated to resist aggressive corrosive attack for quaranteed long life in harsh laboratory environments.

Our sample blocks operate with either a SPB Digital Controller or SPB Touch Controller*. Please select a controller below and the appropriate Start Up Kit* which includes RackLock DigiTUBE®s, disposable watch glasses, DigiFILTER™s and much more. Each SPB Block includes one set of racks.

Description	Capacity	Part No.
SPB 15-40, (115 V/230 V)	40 Tubes/15 mL	N9300800
SPB 15-108, (115 V/230 V)	108 Tubes/15 mL	N9300801
SPB 50-24, (115 V/230 V)	24 Tubes/50 mL	N9300802
SPB 100-12, (115 V/230 V)	12 Tubes/100 mL	N9300805
SPB 50-48, (115 V/230 V)	48 Tubes/50 mL	N9300803
SPB 100-30, (115 V/230 V)	30 Tubes/100 mL	N9300806
SPB 50-72, (230 V)	72 Tubes/50 mL	N9300804
SPB 100-42, (230 V)	42 Tubes/100 mL	N9300807

^{*}sold seperately.

Controllers



The user friendly SPB Digital Controller includes programmable features such as: temperature set-point to 0.1 °C, even sample heating and evaporation results, timer shutdown option, and programmable alarm for end of cycle.

The SPB Touch Controller includes all of the SPB Digital Controller features and more. Added features include: a graphical representation of the heating profile in real-time to identify the current stage of the method heating program. Safety features include the ability of the controller to monitor the heating cycle of the block to prevent run away situations. The controller allows for the SPB Probe to be calibrated to meet your SOP requirements.

The SPB Probe, used with either the Digital or Touch models, can directly monitor and control the block's heating rate via sample temperature feedback to the controller.

Description	Part No.
SPB Digital Controller	N9300808
SPB Touch Controller	N9300809

Temperature Probes



Why use a thermometer to monitor and manually adjust sample temperature when a SPB Probe will automatically do the job? The SPB Probe provides direct control and monitoring of actual sample temperature via a corrosion-resistant, PFA-coated temperature probe. Available with different holders in a 6" configuration for use with 50 and 100 mL DigiTUBE®s. Each probe is supplied with 5 Probe Watch Glasses and a probe holder.

Description	Quantity	Part No.
SPB Probe 6" for 15 mL Tubes	1	N9308707
SPB Probe 6" for 50 mL Tubes	1	N9308018
SPB Probe 6" for 100 mL Tubes	1	N9308009
SPB Probe Watch Glass (replacement) for 50 mL Tubes	25	N9308041
SPB Probe Watch Glass (replacement) for 100 mL Tubes	25	N9308073
SPB Probe Holder for DigiTUBES 15 mL	1	N9308703
SPB Probe Holder for DigiTUBES 50 mL	1	N9308044
SPB Probe Holder for DigiTUBES 100 mL	1	N9308045

Automatic Shut-Off System



Designed to shut-off SPB systems with no lab supervision. Ideal for overnight digestions and evaporations where samples require volume reductions (volume control ±2.5 mL). Increase lab efficiency by automatically digesting samples off-hours. Select appropriate Probe for Tube use.

Description	Quantity	Part No.
TempSET, without Probe	1	N9308020
TempSET Probe for 50 mL Tubes	1	N9308023
TempSET Probe for 100 mL Tubes	1	N9308029
TempSET Probe Holder for 100 mL Tubes	1	N9308065

Start Up Kits



PerkinElmer's SPB Start Up kits contain all consumable items required to operate the system including: RackLock DigiTUBE®s and Caps, disposable Watch Glasses, DigiFILTER™s, RackLock Racks and Storage Racks.

Description	DigiTUBE [®] s/Caps	Watch Glasses	Racks	Part No.
Start Up Kit for SPB 15-40	540	-	2	N9308704
Start Up Kit for SPB 15-108	540	-	2	N9308706
Start Up Kit for SPB 50-24	500	1000	1	N9308017
Start Up Kit for SPB 100-12	200	500	1	N9308011
Start Up Kit for SPB 50-48	500	1000	2	N9308002
Start Up Kit for SPB 100-30	200	500	2	N9308013
Start Up Kit for SPB 50-72	500	1000	3	N9308025
Start Up Kit for SPB 100-42	200	500	2	N9308015

DigiFILTER™



The vacuum assisted DigiFILTER™ assembly provides a quick and easy way to filter samples prior to analysis. Increase lab productivity by filtering particulates from digested samples in a matter of seconds directly from the digestion tube. Available with a 0.45 or 1.0 micron hydrophilic PTFE membrane. Field Filtration Kit conforms to Item 8.2 in the EPA 200.7, 200.8 and 200.9 Methods.

Description	Quantity	Part No.
DigiFILTER™ 0.45 micron for 50 mL DigiTUBE®s	100	N9308031
DigiFILTER [™] 1.0 micron for 50 mL DigiTUBE®s	100	N9308032
Field Filtration Kit 0.45 for 50 mL DigiTUBE®s*	1	N9308033
DigiFILTER™ Manifold	1	N9308034

*Contains: 25 DigiFILTER[™]s, 30 DigiTUBE®s, 1x 6 mL eyedropper bottle to dispense 2 to 3 drops of (1+1) PlasmaPURE® Nitric acid, 1 storage rack, 1 Sharpie® pen and 2x 60 mL plastic syringes to create a vacuum to filter samples from the collection vessel to the sample tube.

Tubes, Caps and Watch Glasses

PerkinElmer offers 50 and 100 mL, disposable, sample digestion tubes with easy-to-read graduations. Accurate 50 or 100 mL graduation is calibrated to meet Class A specifications to allow normalization directly in the tube. RackLock design allows for easy, one-handed closure of leak-free screw cap. All-in-one tubes eliminate the need for five separate vessels: Digestion beakers, volumetric flasks, graduated cylinders, autosampler tubes and storage containers.



Description	Quantity	Part No.
Tubes		
DigiTUBE®s 15 mL with RackLock (incl. caps)	1620	N9308711
DigiTUBE®s 15 mL with RackLock (no caps)	1620	N9308712
DigiTUBE®s 15 mL with RackLock (incl. caps)	540	N9308713
DigiTUBE®s 50 mL with RackLock (incl. caps)	750	N9308008
DigiTUBE®s 50 mL with RackLock (no caps)	750	N9308340
DgiTUBE®s 50 mL with non-RackLock (incl. caps)	750	N9308037
DigiTUBE®s 100 mL with RackLock (incl. caps)	300	N9308016
DigiTUBE*s 100 mL with non-RackLock (incl. caps)	300	N9308066
DigiTUBE®s 50 mL with RackLock (nocaps)	6	N9308050
PTFE Digestion Tube 50 mL (incl. blue caps)	6	N9308024
Tube, Quartz, 62.5 mL, Uncalibrated	6	N9308048
Tube, Borosilicate, 62.5 mL, Uncalibrated	6	N9308049
Tube, Borosilicate, 62.5 mL, Calibrated at 50 mL	6	N9308050
Caps		
Screw Caps, Blue, for 15 mL DigiTUBE®s	540	N9308705
Screw Caps, Clear, for 15 mL DigiTUBE®s	540	N9308708

250

250

250

250

Screw Caps, Orange, for 50 mL DigiTUBE®s

Screw Caps, Red, for 50 mL DigiTUBE®s

Screw Caps, Clear, for 50 mL DigiTUBE®s

Screw Caps, Yellow, for 50 mL DigiTUBE®s

Watch Glasses

PTFE Screw Cap for PTFE 50 mL, N9308024 replaces blue caps supplied

N9308058 N9308059

N9308060

N9308056

N9308027

Racks





For busy labs, additional acid resistant, polycarbonate Racks are available for all SPB systems. Exclusive RackLock feature locks DigiTUBE®s in position within the rack allowing for easy, one-handed closure of screw cap.

SPB Block Racks

Description	Quantity	Part No.
40 Position Rack for SPB 15-40, 15 mL	1	N9308700
54 Position Rack for SPB 15-108, 15 mL	1	N9308701
12 position Rack for SPB-100-12, 100 mL	1	N9308067
15 position Rack for SPB-100-30, 100 mL	1	N9308068
21 position Rack for SPB-100-42, 100 mL	1	N9308069
24 position Rack for SPB-50-24, 50 mL	1	N9308070
24 position Rack for SPB-50-48 and SPB-50-72, 50 mL	1	N9308042

Storage Racks

Description	Quantity	Part No.
Foam Storage Rack 15 mL	5	N9308702
Plastic Storage Rack 50 mL	5	N9308381
Foam Storage Rack 100 mL	5	N9308382

Fume Hoods and Accessories



The bench top fume hoods for SPB systems are the right choice for trace-metal digestions. Made from clear, acid resistant polycarbonate with a solid surface material base, the fume hood eliminates the risk of trace-metal contamination common with traditional fume hoods. HEPA® filters ensure clean input air. The fume hood can be connected to an in-house laboratory exhaust system or used with the SPB blower unit (N9308022). Fume hoods come flatpacked to save transport costs and can be assembled in minutes without tools.

Description	Part No.
Fume Hood for SPB 50-24/100-12, 50-48 / 100-30	N9308000
Fume Hood for SPB 50-72/100-42 Filter for SPB Fume Hoods N9308078	N9308001
Fume Hood II for AutoSampler	N9308036
DigiVAC™ Evacuation Hood, mounts directly on SPB 50-48/SPB 100-30	N9308021
SPB Blower Unit, for use with all systems	N9308022

For more details, call your local representative or visit www.perkinelmer.com/spbsupplies

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