

DigiPREP sample digestion systems are manufactured with graphite block technology proven to meet harsh laboratory environments. DigiPREP systems have been sold worldwide to meet food, biological, agricultural, industrial, and environmental digestion applications. Together with innovative accessories, such as the sample temperature controlling DigiPROBE and disposable DigiTUBE vessels, DigiPREP digestion systems meet all the sample digestion and evaporation needs of analytical chemists and spectroscopists.

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Evaporation & Digestion Systems - DigiPREP Blocks

DigiPREP blocks are Teflon® coated to resist aggressive corrosive attack for guaranteed long life in harsh laboratory environments. Three sizes - 24-position *DigiPREP Jr.*, 48-position *DigiPREP MS*, and 72-position *DigiPREP LS* - offer the latest in graphite block digestion technology. *DigiPREPs* are effective for the digestion and evaporation of samples. All three *DigiPREP* blocks are accepted and used in Environmental Protection Agency (E.P.A.) Office of Water Methods (i.e. 200.2, 200.7, 200.8, 200.9, 245.1, and 365.1) and Office of Solid Waste SW846 Methods (i.e. 3010a, 3020b, 3050b, and 3060). Manufactured under an ISO 9001:2000 certified quality program. CE, UL and CSA approved.



DigiPREP Jr., *DigiPREP MS* and *DigiPREP LS* systems have a temperature range from ambient to 180°C. All systems have a sample-to-sample temperature uniformity of +/-1°C by directly coupling the graphite block to a specialized heating mat which covers the entire base of the block. The systems also provide temperature stability of +/-0.2°C from one corner of the block to the other. This is especially important for evaporation methods.

An over-temperature protection feature comes standard with each system to protect against a runaway temperature situation. The power to the heating mat is immediately shut-off and samples are saved from being evaporated to dryness. For optimum results, **SCP SCIENCE** offers *DigiTUBE*s (catalog no. 010-500-261) - disposable sample digestion vessels - which are designed to fit the sample wells of all three systems.



DigiPREP blocks operate with either the *DigiPREP KeyPad*, *Touch Screen* and *PC Classic* controller. Both controllers have programmable options such as: temperature set-point to 0.1°C, timer (in minutes) with shut off option, and operating language option (English, French, Japanese, Chinese*, Korean*, German, Italian, Spanish, Dutch). A **SCP SCIENCE** Technical Sales Representative or distributor, trained in the applications of *DigiPREP* systems, can suggest the right combination of block and controller to fit your needs.

* Available soon.

Method Development Guide:

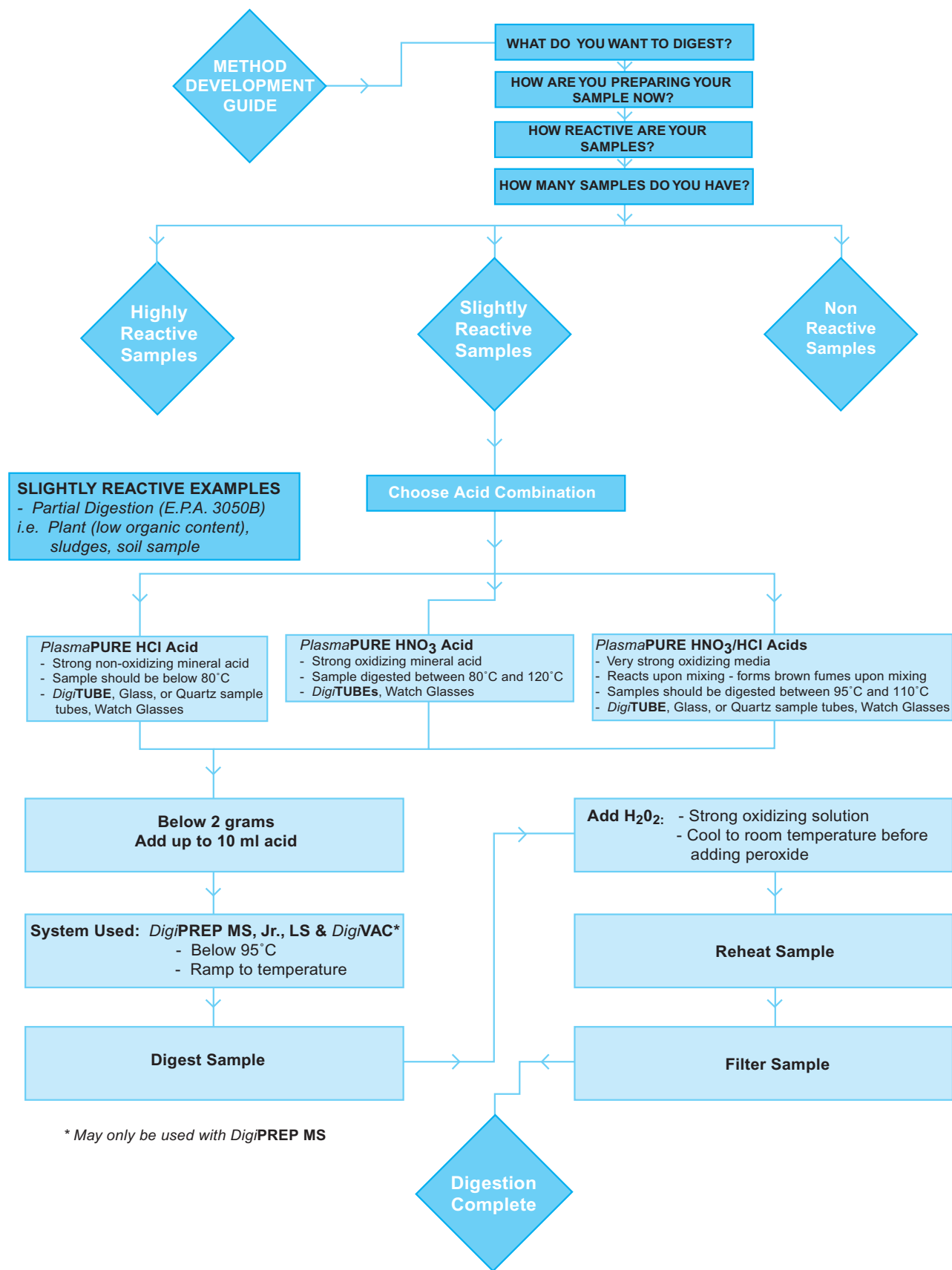
To offer added support in selecting the proper *DigiPREP* system and controller, our Research and Development lab has provided a detailed method development guide. Starting from the sample, determine its reactivity, type of acid to be used (i.e. HCl, HNO₃, H₂SO₄), and *DigiPREP* system. This is a valuable starting point to develop customized digestion applications. Contact your Sales Representative or local distributor for help in determining the right *DigiPREP* system and controller for your lab samples.

Specifications

Description	<i>DigiPREP Jr.</i>	<i>DigiPREP MS</i>	<i>DigiPREP LS</i>
Catalog Number (115V/230V)	010-505-205	010-500-205	010-500-210
Includes	RackLock rack (1), 24 position	RackLock rack (2), 24 position	RackLock rack (3), 24 position
Temperature	Ambient - 180°C	Ambient - 180°C	Ambient - 180°C
Uniformity	± 1.0°C (In <i>DigiTUBE</i> at 95°C)	± 1.0°C (In <i>DigiTUBE</i> at 95°C)	± 1.0°C (In <i>DigiTUBE</i> at 95°C)
Stability	± 0.2°C	± 0.2°C	± 0.2°C
Time to Temperature	25 min. ambient to 95°C	35 min. ambient to 95°C	35 min. ambient to 95°C
Recovery Time	40 min. ambient to 95°C	30 min. ambient to 95°C	35 min. ambient to 95°C
Over-Temp Protection	Yes	Yes	Yes
Heating Block	Teflon® Coated Graphite	Teflon® Coated Graphite	Teflon® Coated Graphite
Power	750 W	925 W	2625 W
Size (in.)	13W x 9.5D x 4.75H	18W x 14D x 4.75H	19W x 21D x 6H
Size (cm)	33W x 24D x 12H	46W x 36D x 12H	48W x 53D x 15H
Weight (lb/kg)	18.5/8.5	53/24	75/34

Method Development Guide - Slightly Reactive Samples

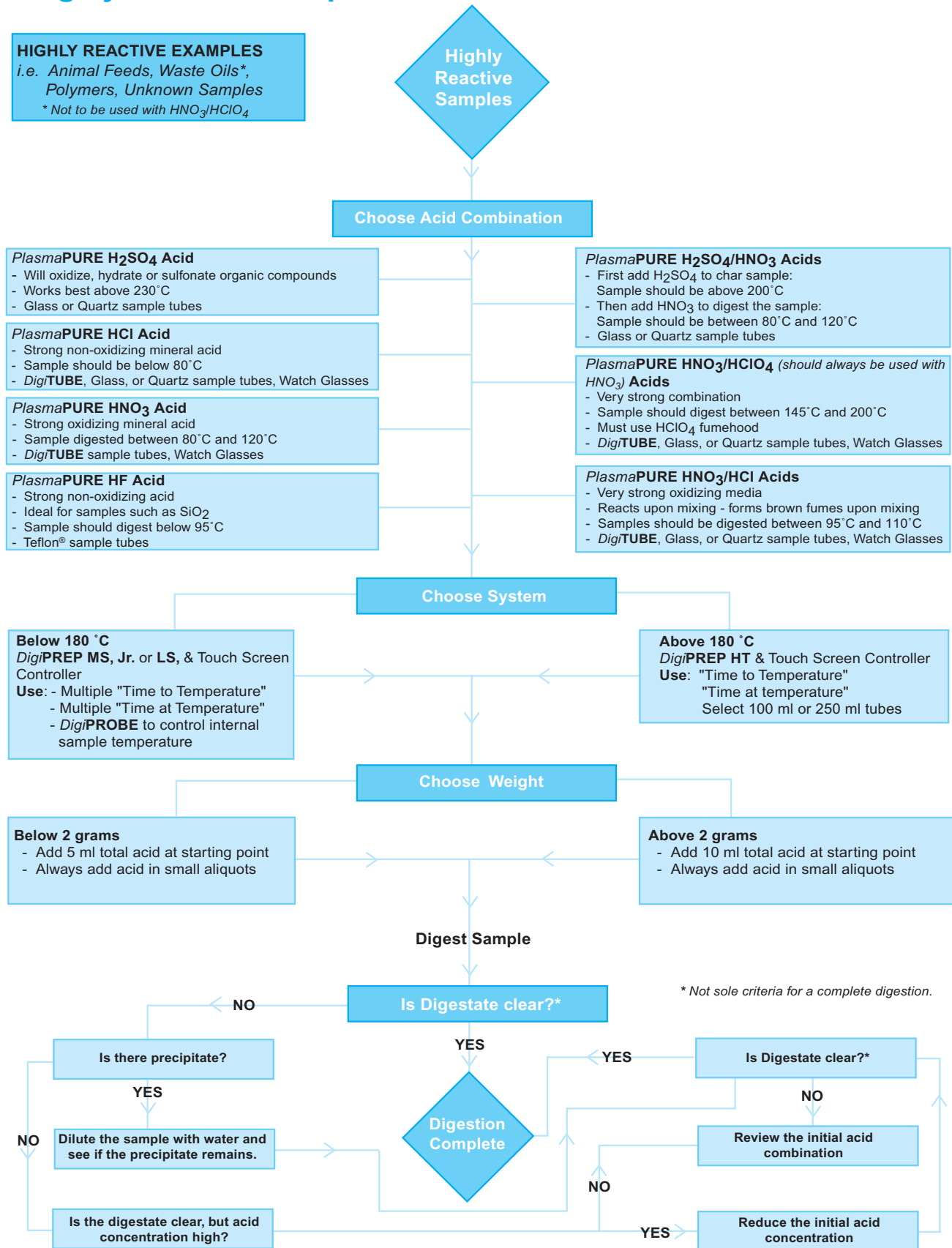
Evaporation & Digestion Systems



Method Development Guide - Highly Reactive Samples

HIGHLY REACTIVE EXAMPLES
i.e. *Animal Feeds, Waste Oils*,
Polymers, Unknown Samples*
** Not to be used with HNO₃/HClO₄*

Evaporation &
Digestion Systems



Method Development Guide - Non Reactive Samples

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NON REACTIVE EXAMPLES
i.e. Drinking Water, Waste Water Sample, (Hg analysis) - Water/Soil



Choose Acid Combination

PlasmaPURE HCl Acid
- Strong non-oxidizing mineral acid
- Sample should be between 65°C and 95°C
- DigiTUBE, Glass, or Quartz sample tubes, Watch Glasses

PlasmaPURE HNO₃ Acid
- Strong oxidizing mineral acid
- Sample digested between 65°C and 95°C
- DigiTUBEs, Watch Glasses

PlasmaPURE HNO₃/HCl Acids
- Very strong oxidizing media
- Reacts upon mixing - forms brown fumes upon mixing
- Samples should be digested between 65°C and 95°C
- DigiTUBE, Glass, or Quartz sample tubes, Watch Glasses

System Used: DigiPREP MS*
DigiPREP LS*
DigiPREP Jr.*
* Used with KeyPad, PC Classic or Touch Screen

SOLID

LIQUID

Suggestion for Hg in Water Only
To prevent pressure build-up, loosen the cap by 1/4 turn.

2 grams of solid sample
- max 10 ml acid

- 50 ml of liquid sample
- Can use closed caps *

Digest Sample

Digest and Concentrate

DigiSET
- used for unattended evaporation

Filter Sample (if necessary)



DigiPREP Jr. Digestion System

The 24 position *DigiPREP Jr.** responds to the needs of smaller labs with limited sample loads. The digestion system comes complete with one 24-position RackLock rack (catalog no. 010-505-021). A "COM" port facilitates the addition of a *DigiPROBE* for direct sample temperature control. Manufactured under an ISO 9001:2000 certified quality program. CE, UL, and CSA approved. Operates with a KeyPad, PC Classic or Touch Screen controller.



Catalog No. 010-505-205

- Teflon® coated graphite block and acid resistant Kydex exterior construction
 - Eliminates sample contamination from digestion system
 - Corrosion resistant for long life

* Requires KeyPad, Touch Screen or PC Classic Controller (see page 24 and 25).

Specifications

DigiPREP Jr.			
Catalog Number	010-505-205 (115V/230V)	Stability	± 0.2°C
Capacity	24 Tubes	Heating Block	Teflon® Coated Graphite
Tube Volume	65 or 115 ml tubes	Power	750 W
Temperature	Ambient - 180°C	Size (in.)	13W x 9.5D x 4.75H
Uniformity	±1.0°C (In <i>DigiTUBE</i> at 95°C)	Size (cm)	33W x 24D x 12H
Over-Temp Protection	Yes	Weight (lb/kg)	18.5/8.4
Time to Temperature	25 min. Ambient to 95°C	Certification	CE/UL/CSA

DigiPREP MS Digestion System

The 48-position *DigiPREP MS** responds to the needs of regular size labs. The digestion system comes complete with two 24-position RackLock racks (catalog no. 010-500-021). For optimum results, **SCP SCIENCE** recommends *DigiTUBES* (catalog no. 010-500-261) - disposable, sample digestion tubes - which are designed for intimate contact with the block for maximum heat transfer. Manufactured under an ISO 9001:2000 certified quality program. Block is CE, UL and CSA approved. Operates with a KeyPad, PC Classic or Touch Screen controller.



Catalog No. 010-500-205

- Teflon® coated graphite block and acid resistant Kydex exterior construction
 - No sample contamination from digestion system
 - Corrosion resistant for long life

* Requires KeyPad, Touch Screen or PC Classic Controller (see page 24 and 25).

Specifications

DigiPREP MS			
Catalog Number	010-500-205 (115V/230V)	Stability	± 0.2°C
Capacity	48 Tubes	Heating Block	Teflon® Coated Graphite
Tube Volume	65 or 115 ml tubes	Power	925 W
Temperature	Ambient - 180°C	Size (in.)	18W x 14D x 4.75H
Uniformity	± 1.0°C (In <i>DigiTUBE</i> at 95°C)	Size (cm)	46W x 36D x 12H
Over-Temp Protection	Yes	Weight (lb/kg)	53/24
Time to Temperature	35 min. Ambient to 95°C	Certification	CE/UL/CSA

DigiPREP LS Digestion System

The 72 position *DigiPREP LS** provides maximum sample throughput levels for high production laboratories. The digestion system comes complete with three 24 position RackLock Racks (catalog no. 010-500-021). Manufactured under ISO 9001:2000 certified quality program. CE, UL and CSA approved. Operates with a Keypad, PC Classic or Touch Screen controller.

- Manufactured with a heating mat which covers the entire graphite block
 - Offers excellent heat uniformity
- Evaporate or digest 72 samples simultaneously
 - Allows for hundreds of samples to be digested per day

* Requires Keypad, Touch Screen or PC Classic Controller (see page 24 and 25).



Catalog No. 010-500-210

Evaporation & Digestion Systems

Specifications

DigiPREP LS			
Catalog Number	010-500-210 (230 V)	Stability	± 0.2°C
Capacity	72 Tubes	Heating Block	Teflon® Coated Graphite
Tube Volume	65 or 115 ml tubes	Power	2625 W
Temperature	Ambient - 180°C	Size (in.)	19W x 21D x 6H
Uniformity	±1.0°C (In DigiTUBE at 95°C)	Size (cm)	48W x 53D x 15H
Over-Temp Protection	Yes	Weight (lb/kg)	75/34
Time to Temperature	35 min. Ambient to 95°C	Certification	CE/UL/CSA

Start-up Kits For DigiPREP Systems

DigiPREP Jr. Start-up Kit (010-505-066)

Includes	Quantity	Catalog Number
RackLock DigiTUBEs	500	010-500-061
Disposable Watch Glasses	1000	010-500-081
24 Position RackLock Rack	1	010-505-021
Foam Storage Racks	5	010-500-028

DigiPREP MS Start-up Kit (010-500-067)

Includes	Quantity	Catalog Number
RackLock DigiTUBEs	500	010-500-061
Disposable Watch Glasses	1000	010-500-081
24 Position RackLock Racks	2	010-500-021
Foam Storage Racks	5	010-500-028

DigiPREP LS Start-up Kit (010-500-069)

Includes	Quantity	Catalog Number
RackLock DigiTUBEs	500	010-500-061
Disposable Watch Glasses	1000	010-500-081
24 Position RackLock Racks	3	010-500-021
Foam Storage Racks	10	010-500-028

DigiPREP Controllers & Accessories

Possible Configurations - Compatibility Chart

Instrument	Keypad Controller (see page 24)	Touch Screen Controller (see page 25)	PC Classic Controller (see page 25)	Go2TEMP Software (see page 30)	DigiREMOTE (see page 30)	DigiConnect (see page 30)	DigiPROBE (see page 27)	DigiSET (see page 28)	DigiMAC (see page 28)	DigiPREP Fume Hood (see page 29)	Universal Fume Scrubber (see page 34)
DigiPREP Jr.	X	X	X	X*	X	X	X	X	X		
DigiPREP MS	X	X	X	X*	X	X	X	X	X	X	X
DigiPREP LS	X	X	X	X*	X	X	X	X	X	X	
DigiPREP HT	X	X	X	X*	X	X					X
DigiPREP HP	X	X	X	X*	X	X	X	X	X	X	

* If used with PC Classic Controller

DigiPREP Controllers

DigiPREP KeyPad, Touch Screen and PC Classic controllers are used with **DigiPREP** digestion systems. Controllers may be placed inside or outside of the fume hood to minimize exposure to acid fumes and to provide ideal space arrangements. Each controller has programmable options such as: temperature set-point to 0.1°C and timer (in minutes) shut down option. **KeyPad** and **Touch Screen** controllers have an alarm for the end of the timed segment. They are manufactured using the same corrosion resistant material as the **DigiPREP** blocks to eliminate sample contamination and provide long corrosion free life. Manufactured under an ISO 9001:2000 certified quality program. CE, UL, and CSA approved.

DigiPREP KeyPad Controller

When an application requires a one-step set-point temperature (see chart 1), the KeyPad controller offers all the required features to respond to your needs. A total of 16 pre-defined keys which include a “target temperature” button to input the desired operating temperature; “target time” button to enter both the time required at the designated “target temperature” and the time delay before the alarm will sound if the alarm is activated; and an “audible alarm” button to activate the alarm. Inputting operating parameters is made simply and easily. A liquid crystal display (LCD) screen presents information clearly. A “Com” port at the back of the KeyPad provides the option of using **DigiSET** (catalog no. 010-500-014). For direct control and monitoring of actual sample temperature, we recommend the 6” **DigiPROBE** (catalog no. 010-505-115) for **DigiTUBEs** or the 10” **DigiPROBE** (catalog no. 010-505-116) for 115 ml borosilicate glass tube (catalog no. 010-520-068) calibrated at the 50 ml and 100 ml mark.



Catalog No. 010-500-220

- Programmable temperature set-point to 0.1°C
 - Control temperature parameters at your fingertips
- Usable in several different languages
(English, French, German, Japanese, Chinese*, Korean*, Italian, Spanish, and Dutch)
* Available soon

Specifications

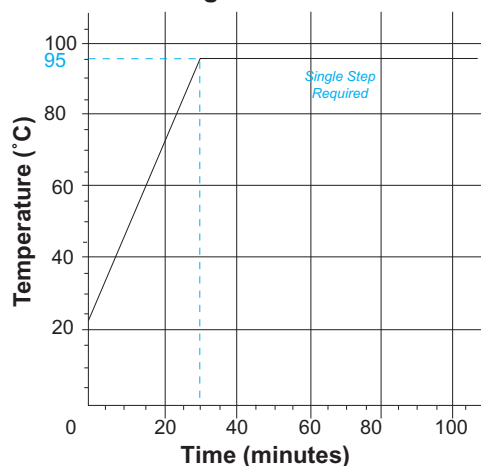
DigiPREP KeyPad*

Catalog Number (115V/230V)	010-500-220
Programmable	Time with shut down option Temperature set-point to 0.1°C Alarm for end of segment
Display	Actual sample temperature** Actual time remaining in sequence Seven different languages
Size (in./cm)	5.5W x 7.25D x 4.25H / 14W x 43.8D x 10.2H
Weight (lb/kg)	2.6/1.5
Certification	CE/UL/CSA

* For use with the **DigiPREP Jr., MS, LS, HP, & HT.**

** If **DigiPROBE** option is used (sold separately)

Chart 1: Typical KeyPad Controller Program for Drinking Water



Application Notes

Our Application Chemists have created application notes to help laboratories optimize sample digestions with **DigiPREP Jr., MS, LS** and **HT** systems.

- A valuable starting point to develop customized digestion applications
- Contact your Sales Representative or local distributor to inquire about an application note for your lab samples



DigiPREP

Touch Screen Controller

Applications which have multiple “target temperature” stages are facilitated by the use of the Touch Screen Controller. A touch-sensitive, liquid crystal display (LCD) monitor (size: 4 3/4” x 2 2/3”) provides information at your fingertips. The Touch Screen controller offers all the features included in the KeyPad controller such as multiple user language settings (English, French, German, Japanese, Chinese*, Korean*, Italian, Spanish and Dutch). In addition, a programmable menu screen gives the option of entering 10 complete digestion application profiles. In each profile, 3 programmable levels of “Time to Temperature” and “Time at Temperature” may be set. This offers more flexibility in creating digestion applications. A “Com” port located at the back of the Touch Screen controller provides the option of using *DigiSET* (catalog no. 010-500-014) for automated shut-off at a preset volume during evaporation. For direct control and monitoring of actual sample temperature, we recommend the 6” *DigiPROBE* (catalog no. 010-505-115) for *DigiTUBEs* or the 10” *DigiPROBE* (catalog no 010-505-116) for 115 ml borosilicate glass tubes (catalog no. 010-520-068) that are calibrated at the 50 ml and 100 ml marks.

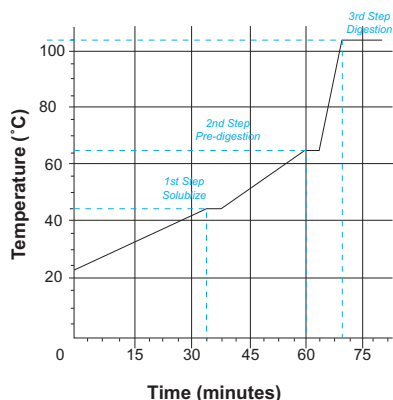
*Available soon

- Ramped, multi-stage and variable temperature heating control
 - Automate complex temperature profiles
- Ideal for difficult sample digestion applications:
 - Animal feed, human hair, tobacco leaves, plastics



Catalog No. 010-500-225

Chart 2: Typical Touch Screen Controller Program for Animal Feed



Specifications

DigiPREP Touch Screen**	
Catalog Number (115V/230V)	010-500-225
Description	Includes all <i>DigiPREP</i> KeyPad features, plus; <ul style="list-style-type: none"> - 10 programmable methods can be created, stored, and recalled - each method offers 3 programmable levels of: <ul style="list-style-type: none"> • Time to temperature (ramp) • Time at temperature (soak)
Size (in./cm)	10W x 7.5D x 7H / 25W x 18D x 17.5H
Weight (lb/kg)	5.5/2.5
Certification	CE/UL/CSA

** For use with *DigiPREP* Jr., MS, LS, HT & HP

PC Classic Controller

Facilitate PC control of *DigiPREP* systems with the **PC Classic** controller. Used in combination with *Go2Temp*® software (see page 29), digestions are monitored, controlled and temperature profiles can be data logged for up to 16 systems simultaneously.

- Connect up to sixteen *DigiPREP* systems to form a PC data station*
 - Save set-up time for multiple application methods
- Program and monitor remote *DigiPREP* digestion systems
 - Control and monitor temperature parameters of multiple and remote *DigiPREP* systems

Specifications

PC Classic Controller**			
Catalog Number	010-500-280	Size (cm)	17.8W x 15.2D x 20.3H
Description	80 - 240 V	Weight (lb/kg)	15/6.8
Size (in.)	7W x 6D x 8H	Certification	CE/UL/CSA

* *Go2Temp*® or *DigiREMOTE* software must be installed on to the desktop computer (sold separately).

** For use with *DigiPREP* Jr., MS, LS, HP & HT



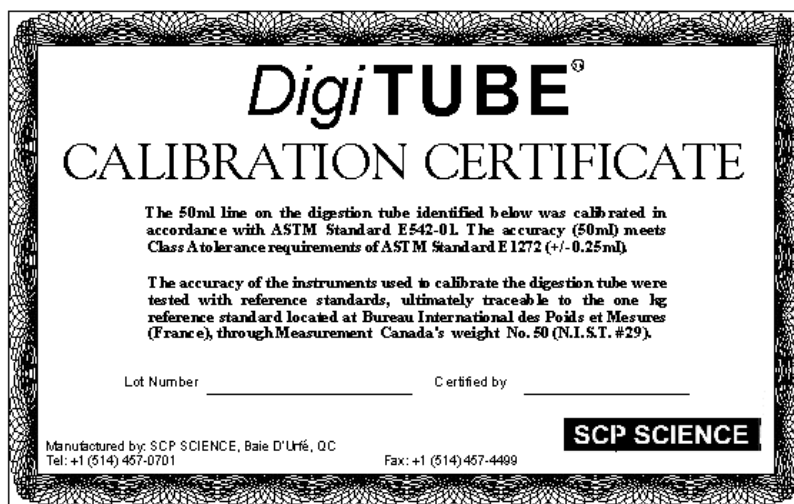
Catalog No. 010-500-280

Evaporation & Digestion Systems

DigiPREP Accessories - DigiTUBEs

DigiTUBEs are recognized as the best disposable digestion vessels on the market. Manufactured using virgin polypropylene which has been verified for leachable metals by ICP-MS. Low leachable catalytic/additive metal content, excellent visibility and good acid resistance are guaranteed. *DigiTUBEs* come complete with leak free, polyethylene screw caps with no metallic additives.

In 2005, **SCP SCIENCE** introduced its second generation *DigiTUBE* (catalog no. 010-500-261). Tubes are graduated, in 5 ml increments, up to the 50 ml graduation mark. The 50 ml graduation mark is certified accurate to +/- 0.25 ml in accordance with ASTM Class "A" volumetric standards. This reduces and eliminates the need for graduated cylinders and volumetric flasks. In fact, a *DigiTUBE* replaces 5 vessels in the lab (i.e. digestion beaker, graduated cylinder, volumetric flask, autosampler tube, and storage container). Save time and lower costs with the use of *DigiTUBEs*.



Second generation *DigiTUBEs* offer a flatter bottom than previous models providing a more intimate contact with the base of the *DigiPREP* well. This results in faster heat up times and faster sample temperature response times. For critical applications, *DigiTUBEs* are available in shrink-wrapped bundles, Handy-Pak (catalog no. 010-500-362), to protect against dust infiltration during storage and handling. To promote gentle refluxing, disposable watch glasses (catalog no. 010-500-081) are available.

- Made from virgin polypropylene
 - Offer ultra low leachable metal content
- Provide a 50 ml graduation mark with accuracy equal to ASTM Class "A" specifications
 - Reduces the need for graduated cylinders and volumetric flasks
 - Certificate included with each case
- Manufactured with a RackLock Design - **Exclusive**
 - Locks *DigiTUBE* in position within a rack allowing easy, one-handed closure of the screw cap



Ordering Information

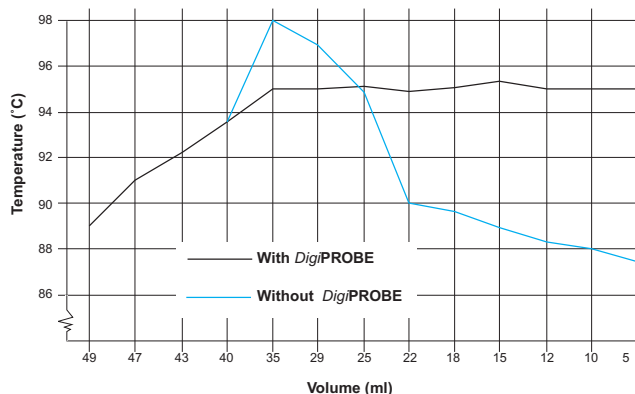
Description	Quantity	Catalog Number
<i>DigiTUBE</i> , RackLock	750	010-500-261
<i>DigiTUBE</i> , RackLock, w/o caps	750	010-500-262
<i>DigiTUBE</i> , Non RackLock	750	010-500-263
<i>DigiTUBE</i> , Non RackLock, w/o caps	750	010-500-264
<i>DigiTUBE</i> , RackLock, Handy-Pak	30 x 25	010-500-362
<i>DigiTUBE</i> , Non RackLock, Handy-Pak	30 x 25	010-500-364
Watch Glasses, Disposable	1000	010-500-081

DigiPREP Accessories - DigiPROBE

DigiPROBE is a PFA coated temperature probe which provides direct control and monitoring of the sample temperature when placed in a **DigiTUBE** (catalog no. 010-500-261). During evaporation or digestion, sample temperature may deviate from the “Target Temperature” of the **DigiPREP** system without **DigiPROBE** (see chart 3). **DigiPROBE** provides direct sample temperature feedback to the controller which can then adjust the temperature of **DigiPREP** block on a continuous basis.

The 6” **DigiPROBE** (catalog no. 010-505-115) is used with **DigiTUBES** (catalog no. 010-500-261 and 010-500-264) and the 10” **DigiPROBE** (catalog no. 010-505-116) is used with 115 ml borosilicate glass tubes (catalog no. 010-500-068) that are calibrated at the 50 ml and 100 ml marks.

Chart 3: Sample Temperature vs Sample Volume During Evaporation*



* **DigiPREP** system’s “Target Temperature” is set to 95°C.

DigiPROBEs are supplied with acid resistant **DigiPROBE** holders to support and position the **DigiPROBE** in the tube.

DigiPROBEs:

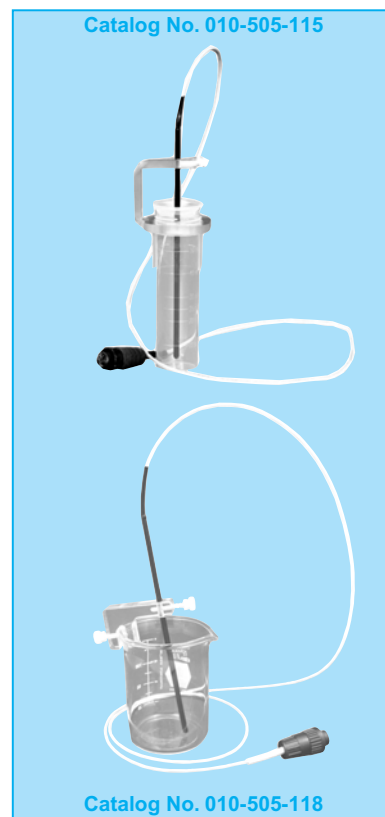
- Provide constant sample temperature control throughout the entire digestion process
 - Offer consistent sample evaporation and digestion results
- Monitor the sample temperature automatically
 - No longer a need to manually monitor sample temperature to ensure samples are processed at

Ordering Information

Description	Quantity	Catalog Number
6” DigiPROBE (for beakers)	1	010-505-117
10” DigiPROBE (for beakers)	1	010-505-118
6” DigiPROBE (for DigiTUBES)	1	010-505-115
10” DigiPROBE (for 115 ml borosilicate glass tubes)	1	010-505-116

Accessories

Description	Quantity	Catalog Number
DigiPROBE Watch Glasses (For use with all DigiPROBEs)	25	010-500-019
DigiPROBE Holder for DigiTUBES , replacement	1	010-500-035
DigiPROBE Holder for DigiPREP HP	1	010-505-036
DigiPROBE Holder for 115 ml Tubes, replacement	1	010-500-038
Glass Storage Wells for DigiPREP Jr./MS/LS	10	010-500-041
Dongle for DigiPROBE port (4 pin male)	1	010-505-052



Evaporation & Digestion Systems

DigiFILTERS and Accessories

Filter wastewater, soil or dirty samples with *DigiFILTERs* prior to AA or ICP analysis. Made from virgin polypropylene, *DigiFILTERs* offer low leachable metal content. An acid washed, ashless, qualitative filter paper is inserted into every *DigiFILTER* to guarantee 98% particulate retention. *DigiFILTERs* with alternative media are currently in development. Please inquire for additional information.



Catalog No. 010-500-070

- Made from disposable virgin polypropylene
 - Reduce metal contamination
- Delivers vacuum assisted sample filtration (VAF)
 - Offers a faster and more complete filtration
- Filter up to 12 dirty samples simultaneously per *DigiFILTER* manifold
 - Lower sample preparation time and improve productivity levels

Up to twelve *DigiFILTERs* connect to one *DigiFILTER* manifold. The manifold draws suction from a sturdy vacuum pump to help filter a dirty sample into a clean *DigiTUBE*. Tests have shown consistent sample filtrations at each position across the manifold. For busy labs, the *DigiFILTER* manifold may be connected in a daisy chain to multiple *DigiFILTER* manifolds. Manufactured under an ISO 9001:2000 certified quality program.



Catalog No. 010-500-230



Catalog No. 010-500-235



Catalog No. 010-790-503*

* Not exactly as shown

	<i>DigiFILTER</i>	<i>DigiFILTER</i> Manifold	Vacuum Pump	Collection Vessel
Catalog Number	010-500-070	010-500-230	010-500-235	010-790-503
Description	Dual-head polypropylene cup with a filter paper	For use with <i>DigiFILTER</i> , connect up to 4 <i>DigiFILTER</i> manifolds in series, made of polypropylene	Provide excellent suction for <i>DigiFILTER</i> system	To hold excess liquid
Size (in.)	1.6W x 1.3D x 1.3H	7W x 14D x 10H	4W x 7.5D x 6.75H	7.9W x 7.9D x 13.8H
Size (cm)	4.2W x 3.4D x 3.2H	18W x 35.5D x 25H	10W x 21D x 17H	18W x 18D x 35H
Weight (lb/kg)	4.4 / 2.0	2.1 / 0.45	3 / 1.36	1.1/2.3
Quantity	100/pk	1	1	1
Certification	---	---	CE/UL/CSA	---

DigiTUBES - Disposable Digestion Vessels

Manufactured using virgin polypropylene which has been verified for leachable metals by ICP-MS.

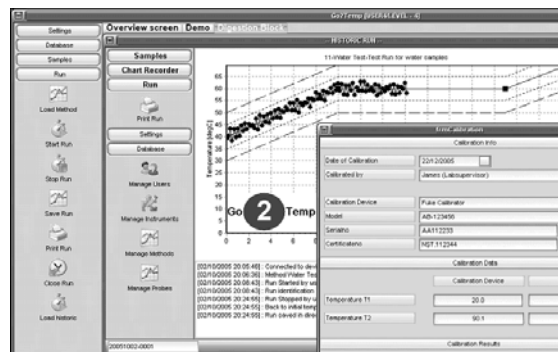
- Provide a 50 ml graduation mark with accuracy equal to ASTM Class "A" specifications
 - Reduces the need for graduated cylinders and volumetric flasks
- Manufactured with a RackLock design - *Exclusive*



DigiPREP Software - Go2Temp[®] Temperature Control Software

Install Go2Temp[®] software on your desktop to simultaneously control up to sixteen *DigiPREP* systems. Fully database driven; one can input temperature methods and instrument settings to facilitate multiple *DigiPREP* digestions systems or evaporations simultaneously. Requires at least one *DigiPREP* digestion block and *DigiPREP PC Classic* controller (see page 25).

- Generate reports containing graphical representation and realized temperature of the application method
 - Ideal for audit purposes
- Define four different user levels (Normal, Super, Systems Administration & Service Engineer)
 - Provide added security to important information
- Connect up to 16 *DigiPREP* systems with Go2Temp[®]-LX



Catalog No. 010-500-185

PC Recommendations:

Windows[®] 2000/XP, Minimum Pentium/900 MHz, 256 MB RAM, 1024 x 768 pixels, 64K colors (16 Bit - High Color), and USB port.

Each Go2Temp[®] run is saved on the hard disk or LIMS and contains a full temperature profile, alarms and log files (i.e. limit violations, start/stop info, errors and user names). Ideal for audit trailing. Information may be stored in Microsoft[®] Excel, XML or Acrobat PDF formats.

Access forty skins to change the appearance of the software and personalize the set-up. Optional electronic signature for signing each run by a supervisor (license add-on module) for added security. Complete with one year *Free* Internet support and software updates. View complete details at www.go2temp.com.

Specifications

Name	Description	Catalog Number
Go2Temp[®]-L1	Software to control up to 16 <i>DigiPREP</i> heating systems Includes: 1 line cord to connect to <i>DigiPREP</i> system 1 external robust industrial USB to RS485 connector Software card for CAL controller 25" (8 meters) of communication cable (extra lengths available)	010-500-185
Go2Temp[®]-Lx	2nd to 16th <i>DigiPREP</i> add-on for Go2Temp [®] -L1 software Includes: RS485 software card for CAL Controller 25" (8 meters) of communication cable (extra lengths available)	010-500-186
Go2Temp[®]-Au	Licence add-on for Enhanced Authorization (Electronic Signature)	010-500-187
Go2Temp[®]-IM	Licence add-on for Import Sample list from LIMS or External Drive	010-500-188
Go2Temp[®]-SC	Licence add-on Module for scheduling a run, so the run starts at a later date/time	010-500-189
Go2Temp[®]-SU	3-Year Service/Support Subscription for Internet Support and Free updates	010-500-190
Communication Cable	Additional length of communication cable (per foot)	010-500-012

DigiPREP PC Classic Controller

Facilitate PC control of your *DigiPREP* system with the PC Classic controller.

- Programmable temperature set-point to 0.1°C
 - Control temperature parameters at your fingertips
- To be used in combination with Go2Temp[®] software
 - Can connect up to 16 *DigiPREP* systems simultaneously



Evaporation & Digestion Systems

DigiPREP Accessories - Automatic Shut-off System - DigiSET

Designed to shut off *DigiPREP* heating systems once a predetermined volume of sample is reached in a *DigiTUBE*. Combining a visual alarm with auto shut-off, *DigiSET* offers a level of sample preparation control not available with any other graphite block digestion system. *DigiSET* is designed for evaporation methods where samples require volume reduction (volume control ± 2.5 ml). Manufactured under an ISO 9001:2000 certified quality program. CE, UL and CSA approved.



Catalog No. 010-500-014

- Automatic shut-off of *DigiPREP* system with no lab supervision
 - Allows for overnight digestions and evaporations
 - Increase lab efficiency by automatically processing samples off-hours
- Manufactured with a corrosion resistant case
 - Eliminates sample contamination from instrument
 - Corrosion resistant for long life

Ordering Information

Description	Quantity	Catalog Number
<i>DigiSET</i> (85V to 240V)	1	010-500-014

Accessories

Description	Quantity	Catalog Number
<i>DigiSET</i> Probe Holder, replacement	1	010-500-036
<i>DigiSET</i> Probe for use with <i>DigiTUBE</i> s (6")	1	010-500-037
<i>DigiSET</i> Probe for use with <i>DigiVAC</i>	1	010-500-058
Dongle for <i>DigiSET</i> Port (2 pin female)	1	010-500-051

DigiPREP Accessories - DigiVAC Fume System

A lower cost alternative to the use of a traditional fume hood for metal digestions and perfect for mobile environmental laboratories. Manufactured with three distinct "airfoils" to direct air flow patterns ensuring constant volume reduction during evaporation with no cross contamination. The system is installed by replacing the standard Corian ring with the pre-assembled *DigiVAC* Housing Corian base. Comes complete with a clear Lexan® hood which covers the graphite block. May be connected to an in-house evacuation system.



Catalog No. 010-500-032

Catalog No. 010-500-031

Ordering Information

Description	Quantity	Catalog Number
<i>DigiVAC</i> Hood, Corian Ring & 2 <i>DigiVAC</i> Racks, 24 position	1	010-500-033

The withdrawal of acid fumes is facilitated by use of a variable speed blower unit (catalog no. 010-500-032). Comes complete with an acid resistant hose to connect the variable speed blower unit to the *DigiVAC* hood; and a second length hose to connect the blower to a fume duct or fume hood.

Ordering Information

Description	Quantity	Catalog Number
New <i>DigiVAC</i> Blower System (115V/230V),	1	010-500-032
- Exhaust hose w/90° elbow to connect hood & blower unit, 3 foot	1	
- Exhaust hose to connect blower unit to fume hood or fume duct, 6 foot	1	
<i>DigiVAC</i> Exhaust Hose, 10 feet, extra	1	010-500-034

DigiPREP Accessories - HEPA Filtering Fume Hood System

To eliminate trace metal contamination from lab environments or corroding fume hoods, the *DigiPREP* Fume Hood is the right choice for trace metal digestions. An ergonomic, bench-top fume hood designed for *DigiPREP* HP, *DigiPREP* Jr., *DigiPREP* MS, and *DigiPREP* LS. Also can be used for the storage of clean ICP-MS supplies (i.e. torches, spray chambers, cones, etc...). Ambient air is drawn through HEPA filter ports (2) offering clean and even air circulation. The hood is exhausted from the top port which may be connected to a 10 foot exhaust hose (sold separately, see 010-500-034). An optional variable speed blower (catalog no. 010-500-032) may be connected to the top of the exit port for additional suction.

A front mounted, integrated Lexan® door slides effortlessly for easy access to samples. Universal ports (2) offer a means to insert power cords or a *DigiSET* probe (catalog no. 010-500-014) to enhance the efficiency of *DigiPREP* systems or lab instruments without compromising air quality. Manufactured under an ISO 9001:2000 certified quality program. The Fume Hood is shipped flat and be assembled in 90 seconds without tools.

- Filter air through HEPA filter disks for cleaner air flow
- Integrated “roll back” door
 - Slides effortlessly for easy access
- Constructed from Lexan®
 - Provides durable and see-through construction



Catalog No. 010-500-039
(*DigiPREP* MS and Keypad controller are sold separately)

Specifications

DigiPREP Fume Hood System	
Catalog Number	010-500-039
Material	Corian and Lexan®
Size (in.)	26L x 23.5D x 20H
Size (cm)	66L x 60W x 51H
Weight (lb/kg)	49/22.7

Accessories

Description	Quantity	Catalog Number
New variable speed blower unit (115V/230V)	1	010-500-031
- 3 foot exhaust hose w/90° elbow to connect hood & blower unit	1	
- 6 foot exhaust hose to connect blower unit to fume hood or fume duct	1	
10" Exhaust Hose Extension	1	010-500-034
HEPA Filter Disks	12/pk	010-500-040

Autosampler Hood

Offers an effective and economical means to protect samples from laboratory air contamination and to contain sample vapors.

- Increase in height by 6" compared to the standard *DigiPREP* Fume Hood system
 - Made to accommodate movement of autosampler arm
- Constructed from Lexan® to eliminate rusting seen in conventional fume hoods



Evaporation & Digestion Systems

DigiPREP Digestion Vessels & Accessories

Teflon® Digestion Tubes, 65 ml Tubes



Catalog No. 010-500-066

For special applications which use hydrofluoric acid, use Teflon® (or PTFE) digestion tubes. Manufactured with an exclusive “view lens” to allow visibility of the 50 ml graduation mark. Comes complete with leak free polyethylene screw caps, tinted blue, with no metallic additives.

Description	Quantity	Catalog Number
Digestion Tubes 50 ml, PTFE	6/pk	010-500-066
Screw Caps for Digestion Tubes	250/pk	010-500-060

Disposable Watch Glasses, 35 mm



Catalog No. 010-500-081

Unique ribbed watch glasses are designed to fit *DigiTUBEs* (catalog no. 010-500-261) and Teflon® tubes (catalog no. 010-500-066) to help promote gentle refluxing. Manufactured using virgin polypropylene with ultra low metal content.

Description	Quantity	Catalog Number
Watch Glasses, disposable	1000/box	010-500-081

Borosilicate Glass Tubes



Catalog No. 010-500-068

For analysis above 130°C, use Borosilicate Glass Tubes. The 115 ml volume tubes are calibrated at the 50 ml and 100 ml marks which conforms to ASTM class “A” tolerance.

Description	Quantity	Catalog Number
Glass Digestion Tubes, 115 ml, Class ‘A’ Calibrated at 50 & 100 ml mark	6/pk	010-500-068
Glass Digestion Tubes, 65 ml, uncalibrated	6/pk	010-500-077
Glass Digestion Tubes, 65 ml, calibrated at 50 ml	6/pk	010-500-079

DigiTUBE Racks



Catalog No. 010-500-021

Facilitate the handling of samples with *DigiTUBE* racks which hold 24 *DigiTUBEs* or Teflon® vessels. Racks are made from Lexan and are acid and heat resistant. Exclusive RackLock feature locks tube in position within rack allowing for easy, one-handed closure of screw cap.

Description	Quantity	Catalog Number
24 position RackLock Rack for <i>DigiPREP</i> Jr.	1	010-505-021
24 position RackLock Rack for <i>DigiPREP</i> MS & LS	1	010-500-021
18 position RackLock Rack for HotBlock® Users	1	010-500-025

Borosilicate Glass Tube Racks

Keep samples safe and secure in the 2-Tier rack for 115 ml borosilicate glass tubes (catalog no. 010-500-068). Racks are made from Lexan and are acid and heat resistant

Description	Quantity	Catalog Number
24 position 2-Tier rack, for <i>DigiPREP Jr.</i>	1	010-505-023
24 position 2-Tier rack, for <i>DigiPREP MS/LS</i>	1	010-500-023



Storage Racks for *DigiTUBEs*

After analysis, retain the digested samples using convenient styrofoam storage racks. Racks holds up to 24 *DigiTUBEs* and may be stacked to save bench space.

Description	Quantity	Catalog Number
Foam Storage Racks, 24 position	5/pk	010-500-028



Autosampler Racks

Compatible autosampler racks for CETAC, Gilson, and SPECTRO autosamplers. Convenience of using 65 ml *DigiTUBEs* (catalog no. 010-500-261) as autosampler tubes to eliminate sample transfer. Custom racks for your autosampler are available.

Description	Quantity	Catalog Number
Autosampler Racks for Gilson & SPECTRO (12 position)	1	010-510-050
Autosampler Racks for CETAC (24 position)	1	010-510-051



16 mm Inserts

Acid resistant, Teflon® coated, graphite inserts are designed to fit into the 30 mm wells of *DigiPREP Jr.*, **MS**, and **LS**. Inserts allow for micro-digestions for Hg, PO₄, and Chemical Oxygen Demand (COD) analysis using conventional 16 mm glass tubes.

Description	Quantity	Catalog Number
Acid Resistant Inserts	6/pk	010-500-090



Evaporation & Digestion Systems

High Temperature Digestion System - DigiPREP HT

DigiPREP HT incorporates several state-of-the-art design features in an affordable package. Available in two models: *DigiPREP HT 100* with a capacity of 40 tubes; and *DigiPREP HT 250* with a capacity of 20 tubes. Comes complete with a *DigiPREP HT* block dual zone tube rack, Teflon® exhaust manifold, and Teflon® tube adapters. *DigiPREP HT* systems have a temperature range from ambient to 450°C.

DigiPREP HT is constructed with an all-Teflon® manifold exhaust system, which eliminates breakage typical with all-glass manifolds. The manifold's Teflon® tube adapters float in each digestion tube eliminating sample loss while removing fumes resulting from the digestion process. Teflon manifold® is used in conjunction with a running water jet (010-520-030, included with instrument) or the **SCP SCIENCE** Universal Scrubber System. *DigiPREP HT* digestion systems were designed to minimize bench space with small "footprint" and all movement of components (manifold, tube rack) up and down while using the specially constructed up-right positions.

DigiPREP HT is uniquely engineered with a corrosion resistant, graphite heating block. The graphite block's heating mat is tuned to distribute heat evenly across the entire surface and maintain a temperature uniformity of $\pm 3^\circ\text{C}$ resulting in reproducible digestions. Compared to heating blocks constructed from aluminum, *DigiPREP HT* graphite blocks will not warp, bend or corrode.



Catalog No. 010-500-225

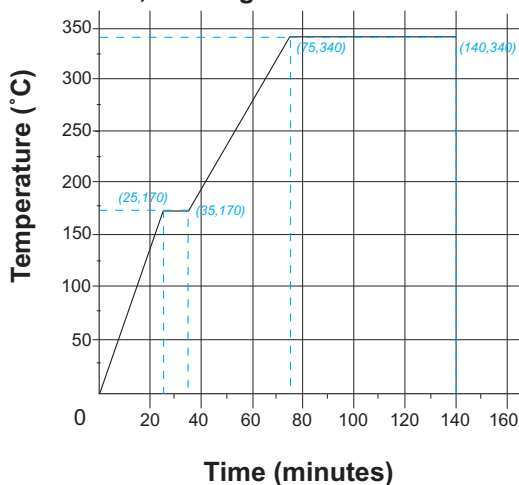
Catalog No. 010-520-222

- Manufactured with an all-Teflon® manifold
 - Prevents toxic fumes from escaping and promotes refluxing
 - Eliminates cross contamination
 - Eliminates broken glass manifolds
- Complete with a sturdy two-tier dual zone tube rack
 - Reduce valuable fume hood space requirements
 - Includes viewing window to monitor digestion progress

Specifications

Description	<i>DigiPREP HT 100</i>	<i>DigiPREP HT 250</i>
Catalog Number	010-520-202	010-520-222
Capacity	40 samples	20 samples
Tube Capacity (Nominal)	100 ml	250 ml
Tube Capacity (Max)	115 ml	300 ml
Temperature (Max)	450°C	450°C
Temperature Uniformity	$\pm 3.0^\circ\text{C}$	$\pm 3.0^\circ\text{C}$
Over-Temp Protection	Yes	Yes
Heating Block	Coated Graphite	Coated Graphite
Power	2760 W	2760 W
Fume Scrubber	Optional	Optional
Voltage	230V, 50/60 Hz. 12A	230V, 50/60 Hz. 12A
Size (in.)	17W x 17.5D x 27H	17W x 17.5D x 27H
Size (cm)	43.2W x 44.5D x 68.6H	43.2W x 44.5D x 68.6H
Weight (lb/kg)	49 / 22	46 / 21
Certification	CE/UL/CSA	CE/UL/CSA

Chart 3: Typical Touch Screen Controller Program for Determination of Cd, Cr, Pb & Hg in Plastics



Applications

Agriculture: Grains, compost, feed pellets, soils, compost
Biology: Grass, wood, leaves, cellulose/paper
Chemistry & Plastics: Plastics (PET, PP, PVC, etc.), resins, synthetic fibers
Food: Protein (Kjeldahl digestions)
Medicine & Pharmaceutical: Plant Tissue
Mineralogy and Metallurgy: Carbon, coal, gold
Environment: Kjeldahl (TKN), sewage sludge, Total Phosphorous
Industry: WEEE RoHS, Electrical components, waste products

High Temperature Digestion System - DigiPREP HT

DigiPREP HT blocks operate with the KeyPad, PC Classic or Touch Screen controller. All controllers have programmable options such as: temperature set-point to 0.1°C, timer with shut off option (in minutes), and operating language* options (English, French, Japanese, Chinese**, Korean**, German, Italian, Spanish, and Dutch). Your **SCP SCIENCE** Technical Sales Representative or distributor trained in the applications of high temperature digestion systems, can suggest the right combination of DigiPREP and controller to fit your needs.

* Available only for KeyPad and Touch Screen controller.

** Available soon

DigiPREP HT 100 and 250 Components

System Catalog Number	Component Catalog Number	Component Quality	Component Description
010-520-202	<i>DigiPREP HT 100 (230V) consists of:</i>		
	010-520-010	1	DigiPREP HT 100 Insert Rack
	010-520-100	1	Exhaust Manifold Rack, 100 ml
	010-520-205	1	DigiPREP HT 100 (230V) block with Hi-rise
	010-520-300	1	Glass Water Jet
	010-520-302	40/pk	Boiling Rods
010-520-222	<i>DigiPREP HT 250 (230V) consists of:</i>		
	010-520-030	1	DigiPREP HT 250 Insert Rack
	010-520-225	1	DigiPREP HT 250 (230V) block with Hi-rise
	010-520-250	1	Exhaust Manifold Rack, 250 ml
	010-520-300	1	Glass Water Jet
	010-520-302	40/pk	Boiling Rods

DigiPREP HT Controllers

Controller	Catalog Number
KeyPad	010-500-220
Touch Screen	010-500-225
PC Classic	010-500-180

Please see page 24 - 25 for more information.

DigiPREP HT Options

Description	Catalog Number
Universal Fume Scrubber	010-520-060
DigiPREP Chiller System	010-520-072

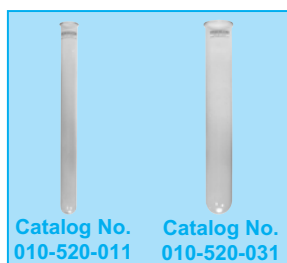
Please see page 36 for more information.

DigiPREP HT 100 Accessories

Description	Quantity	Catalog Number
HT 100 Digestion Tubes, uncalibrated	1	010-520-011
HT 100 Digestion Tubes, calibrated* - calibrated at the 100 ml mark	1	010-520-111
HT 100 Digestion Tubes, Quartz	1	010-520-085
Glass Water Jet, Extra	1	010-520-300
Boiling Rods, Extra	40/pk	010-520-302
Dual Probe for HT**	1	010-520-310
Ball Glass Condenser	1	010-520-318
Releasing Agent, WEEE RoHS	1	250-240-103

* Custom calibrations available upon request.

** Replaces existing thermal probe to allow user validation of temperature control system with an external temperature display.



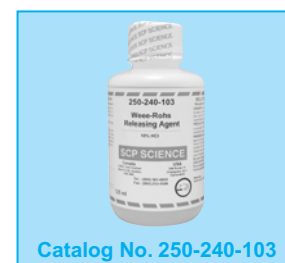
Catalog No. 010-520-011 Catalog No. 010-520-031



Catalog No. 010-520-316



Catalog No. 010-520-312



Catalog No. 250-240-103

DigiPREP HT 250 Accessories

Description	Quantity	Catalog Number
HT 250 Digestion Tubes, uncalibrated	1	010-520-031
HT 250 Digestion Tubes, calibrated* - calibrated at the 250 ml mark	1	010-520-131
HT 250 Digestion Tubes, Quartz	1	010-520-087
Glass Water Jet, Extra	1	010-520-300
Boiling Rods, Extra	40/pk	010-520-302
Dual Probe for HT**	1	010-520-310
Ball Glass Condenser	1	010-520-312
Releasing Agent, WEEE RoHS	1	250-240-103
Cooling Finger, Ground Glass, w/Male Joint	1	010-520-316
Digestion Tube, Ground Glass, w/Female Joint	1	010-520-320

* Custom calibrations available upon request.

** Replaces existing thermal probe to allow user validation of temperature control system with an external temperature display.

Evaporation & Digestion Systems

Digestion System - Universal Fume Scrubber

Remove and neutralize acid fumes in TKN or other digestions easily and safely. Acid fumes travel through a series of bottles in a vacuum environment. The generated fumes are first drawn through a NaOH solution for neutralization. Fumes then enter a condensing unit* to remove the remaining moisture from the air stream. The third bottle in the series is used to collect the condensate. An adapter is included to connect the Universal Fume Scrubber to a *DigiPREP HT 100* or *HT 250*. CE, UL, and CSA approved.



Catalog No. 010-520-060

- Manufactured with corrosion resistant material
 - Offers low maintenance for many years
- Low water consumption with optional Chiller system (catalog no. 010-520-072)
 - Save money and be more environmentally friendly

Specifications

Universal Fume Scrubber	
Catalog Number	010-520-060
Vacuum	42 CFM draw (at 0" H ₂ O) 33 CFM draw (at 10" H ₂ O)
Sound rating	55 db-c
Power	115V/230V (user selectable)
Size - Bottle (in./cm)	8.5 x 25 / 22 x 63
- Pump (in./cm)	12 x 12 / 30 x 30
Certification	CE/UL/CSA

* Tap water or a chiller system (sold separately) must be used to cool the condenser.

DigiPREP Chiller System

Lightweight, CFC-free chiller for use with the *DigiPREP* Universal Fume Scrubber system (catalog no. 010-520-060). Provides excellent cooling capacity and reliability. Hot gas by-pass system provides a stable flow of coolant eliminating on/off cycling to extend compressor life span. CE approved.



Catalog No. 010-520-072

- Compact size
 - Save valuable bench space

Specifications

DigiPREP Chiller			
Catalog Number	010-520-072 (115 V)	Flow Rate at 15 psi	4.5L/min
Catalog Number	010-520-074 (230 V)	Size (in.)	19.3W x 8.3D x 19.3H
Temperature Range	0 - 35°C	Size (cm)	49W x 21.1D x 49H
Cooling Capacity	500 W	Weight (lb/kg)	55/25
Stability	± 0.3°C	Certification	CE

DigiPREP Touch Screen Controller

A touch-sensitive, liquid crystal display (LCD) monitor provides information at your fingertips.

- Allow for ramped multi-stage / variable temperature heating
 - Automated complex temperature profiles
- Ideal for difficult sample digestion applications such as:
 - WEEE, RoHS, protein (Kjeldahl), tobacco leaves, plastics,

