PINAACLE 500/900 AA CONSUMABLES AND SUPPLIES





# INTRODUCTION AND OVERVIEW

PinAAcle 500/900 Atomic Absorption (AA) consumables and supplies are designed with your instrument in mind. Each part is fit to perform and manufactured with the highest quality materials available. Whether you are looking for sample introduction components or standards, we have the consumables you need to keep your PinAAcle 500 and 900 up and running smoothly and efficiently.



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# Hollow Cathode and Electrodeless Discharge Lamps

Whether it is a Lumina<sup>™</sup> HCL or System 2 EDL every genuine PerkinElmer lamp is designed for use with and tested on our AA spectrometers to assure compatibility and the highest performance. **Please visit our website at www.perkinelmer.com/AAlamps for a complete listing.** 

Single-Element Lumina HCLs and System 2 EDLs			
Element Name	Symbol	Lumina HCL Part No.	System 2 EDL Part No.
Aluminum	Al	N3050103	
Antimony	Sb	N3050170	N3050670
Arsenic	As	N3050105	N3050605
Cadmium	Cd	N3050115	N3050615
Calcium	Ca	N3050114	
Chromium	Cr	N3050119	
Copper	Cu	N3050121	
Gold	Au	N3050107	
Iron	Fe	N3050126	
Lead	Pb	N3050157	N3050657
Magnesium	Mg	N3050144	
Manganese	Mn	N3050145	
Mercury	Hg	N3050134	N3050634
Nickel	Ni	N3050152	
Potassium	K	N3050139	
Selenium	Se	N3050172	N3050672
Sodium	Na	N3050148	
Zinc	Zn	N3050191	N3050691
EDL Driver Assembly			03030997



Multi-Element Lumina HCLs*		
Element Name	Symbol	Part No.
Calcium, Magnesium	Ca, Mg	N3050202
Potassium, Sodium	K, Na	N3050204
Copper, Iron, Manganese, Zinc	Cu, Fe, Mn, Zn	N3050212
Cobalt, Chromium, Copper, Iron, Manganese, Nickel	Co, Cr, Cu, Fe, Mn, Ni	N3050217
Aluminum, Calcium, Copper, Iron, Magnesium, Silicon, Zinc	Al, Ca, Cu, Fe, Mg, Si, Zn	N3050218

<sup>\*</sup>Note multi-element lamps are not designed to be used with furnace systems.

## **Graphite Components**

PerkinElmer tubes are manufactured to the highest quality specifications. Our exclusive design ensures even heating over the entire length of the tube. Performance must be reproducible from day to day with respect to sensitivity, accuracy and precision. When you purchase graphite supplies from PerkinElmer, you get the results of our many years of experience with quality graphite parts.

Advanced Platform Tubes — Our exclusive and patented Advanced Platform design offers an alternative to our standard integrated platform design. With the current Integrated Platform design, the platform attaches to the tube wall along a single side that runs the length of the platform. The new Advanced Platform design suspends the platform in the tube using three small pins in a triangular layout. This has the advantage of minimizing wall contact and reducing thermal conduction from the tube walls resulting in even and rapid heating almost exclusively from thermal radiation, an ideal way to heat the sample.

Please visit our website at www.perkinelmer.com/AAgraphite for a complete listing of our graphite components.

#### THGA Graphite for PinAAcle 900T and 900Z

Advanced Platform™ THGA Graphite Tubes				
Description	Description Advanced Platform Advanced Platform w/End Part No. Part No.			
5-Pack	N9307830	N9307832		
20-Pack	N9307831	N9307833		



Integrated Platform THGA Graphite Tubes			
Description	Integrated Platform Part No.	Integrated Platform w/End Caps Part No.	Ultraclean Part No.
5-Pack	B3000641	B3000653	B3140361
20-Pack	B0504033	B3000655	B3140362
100-Pack	N3110147		



THGA Contact Cylinders			
Description	Standard Part No.	Modified* Part No.	
1 Pair	B0504035	B3002103	
5 Pairs	B0504036	B3002102	



<sup>\*</sup>Modified contact cylinders have a slightly modified injection port area for improved performance with samples that have a high concentration of dissolved salts or matrices with a high boiling point.

#### HGA Graphite for PinAAcle 900H

Advanced Platform™ HGA Graphite Tubes		
Description	Pyrocoated Graphite Tubes with Advanced Platform Part No.	
5-Pack	N9307834	
20-Pack	N9307835	



#### HGA Graphite for PinAAcle 900H - Continued

HGA Graphite Tubes			
Description	Pyrocoated Graphite Tubes with Integrated Platform Tubes Part No.	Pyrocoated Graphite Tubes* Part No.	
5-Pack	B3001262	B0105197	
10-Pack		B0135653	
20-Pack	B3001264	B3000342	
40-Pack	N9300651		
50-Pack		B0091504	



<sup>\*</sup>Wall-type tubes that do not accept any platforms.

HGA Graphite Tubes with L'vov Platforms			
Description	Grooved Pyrocoated Graphite Tubes* Part No.	L'vov Platform Part No.	
5-Pack	B0137111		
20-Pack	B3001254	B3001256	
50-Pack	B0109322	B0109324	



<sup>\*</sup>Grooved to accept L'vov platforms.

HGA Contact Cylinders	
Description	Part No.
1 Set	B0128495
5 Sets	B3130086



# Flame Components

To keep your flame instrument operating as it was designed, we offer a wide variety of replacement parts that are manufactured to our exacting specifications. By purchasing PerkinElmer replacement parts, you are assured to receive a high-quality product that is optimized to deliver the performance that is required. Below is a selection of some of our most popular flame-related components. **Please visit our website at www.perkinelmer.com/supplies for a complete listing.** 

### Flame Components for PinAAcle 500, 900F, and 900T

Burner Heads			
Description	Length	Flame Type	Part No.
Single-slot*	10 cm	Air-Acetylene	N0400102
Single-slot	5 cm	Air-Acetylene	N0400101
Single-slot	5 cm	Nitrous-Oxide Acetylene	N0400100
Three-slot	10 cm	Air-Acetylene	N0400103
Burner Head Handle			



<sup>\*</sup>Standard burner head shipped with PinAAcle instrument.

#### Flame Components for PinAAcle 500, 900F, and 900T - Continued

Nebulizer Assemblies and Spares						
Description	Туре	Needle	O-ring Type	Complete Assembly Part No.	End Cap Assembly Part No.	Replacement Needle Assembly Part No.
Stainless Steel (standard)	Aqueous	Stainless	Viton	N3160143	N3160505	03030354
Plastic High Sensitivity (standard)	Aqueous	Pt/Ir	Viton	N3160144	N3160511	B3150525
Plastic High Sensitivity	Aqueous or Organics	Pt/Ir	Kalrez	N3160159	N3160189	N3160154
Plastic High Sensitivity*	Aqueous or Organics	Tantalum	Kalrez	N3160152	N3160189	
Stainless Steel	Aqueous or Organics	Stainless	Kalrez	N3160158	N3160188	
Stainless Steel	Aqueous	Plastic	Viton	N/A	N3160505	03030402
Stainless Steel	Aqueous	Platinum Alloy	Viton	N/A	N3160505	03030433





<sup>\*</sup>Suitable for aqua regia in addition to organics.

Kalrez O-Ring Kits				
Description	Туре	For Stainless Nebulizers Part No.	For Plastic Nebulizers Part No.	
Nebulizer O-Ring Kit	Organics	N3160192	N3160193	
End Cap O-Ring Kit	Organics	N3160194	N3160194	
Nebulizer, End Cap, and Burner Head O-Ring Kit	Organics	N3160156	N3160157	

# **Autosampler Supplies**

We offer a wide variety of high-quality graphite furnace cups and autosampler tubes and supplies. Sample cups are of heavy-duty construction to prevent cracking or tipping. Their conical design allows the autosampler to utilize nearly the entire sample. Autosampler tubes range in size from 8 mL to 50 mL and are available as conical or round bottom, capped and uncapped. **Please visit our website at www.perkinelmer.com/AutosamplerSupplies for a complete listing.** 

Graphite Furnace Autosampler Cups				
Volume	Composition	Qty.	Part No.	
1.2 mL	Polypropylene	2000	B0510397	
2.5 mL	Polypropylene	1000	B3001566	
7.0 mL	Polypropylene	100	B3001567	
2.0 mL	Polyethylene	1000	B0087056	
2.0 mL	Polystyrene	1000	B0119079	
3.5 mL	Polystyrene	100	B0129303	
2.0 mL	PTFE	30	B0087600	



Graduated Autosampler Tubes with Caps				
Capacity	Size	Туре	Qty.	Part No.
15 mL	17 mm x 120 mm	Conical Bottom	500	B0193233
50 mL	28 mm x 115 mm	Conical Bottom/Freestanding	500	B0193234



## **Standards**

Whatever your application, you can depend on PerkinElmer Pure standards to yield reliable, accurate results. Our wide selection of standards is supplied with a comprehensive Certificate of Analysis that documents the quality and reliability. **Please visit our website at www.perkinelmer.com/Standards for a complete listing.** 



Single-Element Standards 1000 mg/L in Aqueous Solution				
Element Name	Symbol	125 mL Part No.	500 mL Part No.	
Aluminum	Al	N9300184	N9300100	
Arsenic	As	N9300180	N9300102	
Cadmium	Cd	N9300176	N9300107	
Calcium	Ca	N9303763	N9300108	
Chromium	Cr	N9300173	N9300112	
Copper	Cu	N9300183	N9300114	
Gold	Au	N9303759	N9300121	
Iron	Fe	N9303771	N9300126	
Lead	Pb	N9300175	N9300128	
Magnesium	Mg	N9300179	N9300131	
Manganese	Mn	N9303783	N9300132	
Mercury	Hg	N9300174	N9300133	
Nickel	Ni	N9300177	N9300136	
Phosphorus	Р	N9303788	N9300139	
Potassium	K	N9303779	N9300141	
Silver	Ag	N9300171	N9300151	
Sodium	Na	N9303785	N9300152	
Zinc	Zn	N9300178	N9300168	

Quality Control Standards				
Matrix	Contents	Vol.	Part No.	
Quality Control Standard, 21 Elements 5% HNO <sub>3</sub> /tr Tartaric Acid/tr HF	100 mg/L: As, Be, Ca, Cd, Co, Cr, Cu, Fe, Li, Mg, Mn, Mo, Ni, Pb, Sb, Se, Sr, Ti, Tl, V, Zn	125 mL	N9300281	
Quality Control Standard, 7A Elements 5% HNO <sub>3</sub> /tr HF	1000 mg/L: K 500 mg/L: Si 100 mg/L: Al, B, Ba, Na 50 mg/L: Ag	125 mL	N9300280	
Alternate Metals I Standard				
Matrix	Concentration	Vol.	Part No.	
2% HNO <sub>3</sub>	5 mg/L: Be, Sb, Tl 10 mg/L: Co, Cu, Mn, Ni, Zn 20 mg/L: Al, Fe, V	125 mL	N9300214	
Alternate Metals II Standard				
Matrix	Concentration	Vol.	Part No.	
2% HNO <sub>3</sub>	100 mg/L: K, Mg 500 mg/L: Ca, Na	125 mL	N9300215	

## Standards - Continued

GFAAS Mixed Standard					
Matrix	Concentration	Vol.	Part No.		
5% HNO <sub>3</sub> w/trace of HF	5 mg/L: Be, Cd 10 mg/L: Ag 20 mg/L: Cr, Fe, Mg 50 mg/L: Ba, Co, Cu, Ni 100 mg/L: Al, As, Pb, Sb, Se, Tl	125 mL	N9300244		
AA Test Mix Standard					
Matrix	Concentration	Vol.	Part No.		
2% HCl	10 mg/L: Na, Zn 20 mg/L: K 50 mg/L: Ca, Cr, Cu, Fe, Ni	125 mL	N9300260		
Triton X-100 Standard					
			Part No.		
			02900540		

Matrix Modifiers				
Modifiers	Concentration	Vol.	Part No.	
Mg(NO <sub>3</sub> ) <sub>2</sub>	1% Mg (as nitrate)	100 mL	B0190634	
Pd	1% Pd (as nitrate)	50 mL	B0190635	
NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub>	10% NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub>	100 mL	N9303445	



Every day you count on PerkinElmer to provide you with solutions that deliver reliable performance, control operating costs and maximize operational time. Our complete portfolio of consumables, parts, supplies, training and service helps you meet both routine and demanding measurement challenges. We invest heavily in testing and validating our products to ensure you receive guaranteed compatibility and performance — on-time, for every instrument in your laboratory.

For a complete listing of PinAAcle Consumables, please visit www.perkinelmer.com/supplies

PerkinElmer, Inc. 940 Winter Street Waltham, MA 02451 USA P: (800) 762-4000 or (+1) 203-925-4602 www.perkinelmer.com

