

#### **Essential Instrument Supplies**

Agilent technical experts have compiled a list of recommended supplies that you should consider using with your new instrument in order to keep your lab operational without any disruptions and to achieve optimal performance.

# Top Supplies for Flame AAS



#### Hollow cathode lamps

Select either single or multi-element coded lamps from the range available. See this link and select lamps for the elements required.

#### Sample introduction

- 9910093000: Nebulizer capillary kit (Top Recommendation)
- **1610117390**: Venturi for nebulizer, Mark 7, PEEK 1/pk
- 9910025700: Glass impact beads, 5/pk ♀ (Top Recommendation)
- 9910093400: O-ring kit, for Mark 7 spray chamber used with aqueous samples (Top Recommendation)
- 190034100: Mark 7 Flame Atomization System Operating Supplies Kit

#### Reference standards

Select single or multi-element standards to calibrate your instrument.

**See this link** and select the element from the periodic table to see what standards are available.

### General flame AAS supplies recommendations (55/240/280 AAS)

Part Number	Description	Recommend ed Quantity	Reason to Use	Part Family
9910044000	Capillary tubing, hi-vac nebulizer, 3/pk	1	Precut lengths of narrow bore capillary tubing (0.38 mm ID) with a flared end to ensure best sensitivity with aqueous solutions and samples that have relatively low levels of dissolved solids  (Top Recommendation)	
See this link and select lamps for the elements required	Single or multi-element coded or uncoded lamps	1 for each element	Coded lamps are element coded for automatic recognition by the instrument, simplifying operation and eliminating the risk of time-consuming errors when changing the lamp position.  Uncoded lamps provide economical operation. All Agilent lamps provide superb performance and are compatible with all Agilent AA systems	Larps
See this link and select lamps for the elements required*  * Flame AAS instruments need the UltrAA lamp control module (p/n G8445A) ordered with the system	High Intensity UltrAA Lamps	1 for each element	UltrAA lamps are a comprehensive range of high intensity hollow cathode lamps that can replace conventional lamps for AA determinations. They lower detection limits for the most demanding AAS applications	
210164100	Mark 7 nitrous oxide-acetylene burner, 1/pk	1	Produces a higher temperature flame to ensure atomization of highly refractory elements such as Al, Si, Mo, V, and Ti  (Top Recommendation)	
9910053900	Burner cleaning and alignment card, 100/pk	1	Required for routine maintenance to ensure proper cleaning of the burner ensuring best precision and long, stable operation (Top Recommendation)	margin States (Securing and Salpenters Conditions of Securing and Salpenters Conditions of Securing Se
9910093600	Mixing paddles fluorinated Mark 7, 5/pk	1	Required for routine maintenance to ensure proper mixing of samples ensuring best precision and long, stable operation	SH
110634490	Complete Mark 7 spray chamber assembly, aqueous, for use with aqueous solutions	1	Recommended as a spare to support routine operation with samples prepared in an aqueous matrix	
110866890	Complete Mark 7 spray chamber assembly, organic, for use with organic solvents	1	Required for applications where samples are prepared in a non-aqueous (organic) matrix	li li
9910093500	O-ring kit, for Mark 7 spray chamber used with organic solvents	1	Required for routine maintenance to ensure leak-free connections	
5005-0437	Waste container kit		Recommended for waste collection on all spectroscopy instruments. A 10 L container with S60 Stay Safe cap and charcoal vapor filter to prevent harmful vapors in the lab environment.	
5043-1193	Replacement charcoal filter for vapor trapping		Recommended for waste collection container on all spectroscopy instruments. A replacement charcoal filter to trap acid and solvent vapors with 6 months time strip.	

## Vapor generation AAS supplies recommendations (55/240/280 AAS)

Part Number	Description	Recommended Quantity	Reason to Use	Part Family
9910040000	Hydride absorption cells, quartz, 2/pk	2	Required for atomization of the hydride vapor, ensuring optimum sensitivity and lowest noise	
9910040700	Flowthrough mercury absorpt	ion1	Required for routine analysis of Hg using the cold vapor technique	
9910062100	AA hydride module for VGA 77 Vapor Generation Accessory, 1/pk	1	Recommended to dedicate a module to Hg determinations to reduce cross contamination	00000
3710027200	PVC peristaltic pump tubing for reagent, black/black tabs, 12/pk	1 of each	Required for routine operation as regular replacement of the pump tubing is recommended	
3710027300	PVC peristaltic pump tubing for sample, purple/black tabs, 12/pk	1 of each	Required for routine operation as regular replacement of the pump tubing is recommended	
190025200	VGA 77 Operating Supplies Kit	1	Required to support routine operation of the VGA 77	
9910061900	Tubing and connector kit for VGA-77 1/pk	1	Required to support routine operation of the VGA 77	

### SPS 4 autosampler supplies recommendations (Flame AAS)

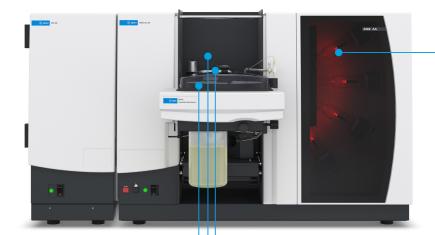
Part Number	Description	Recommended Quantity	Reason to Use	Part Family
G8410-80103	SPS 4 probe 1.0 mm id with blue markers. Inert, FEP sleeved for SPS 4 autosampler, 1/pk	1	Required to support routine operation of the SPS 4 autosampler when used with flame AAS	<b>%</b> /
3710049000	Peristaltic pump tubing for supply of rinse solution to the autosampler, PVC Solvaflex, 3-bridged, gray/gray black/black tabs, 12/pk	1	Required for routine operation as regular replacement of the pump tubing is recommended	The late of
6610025400	Sample rack for 16 mm od tubes, 60 positions	1	Additional sample racks are recommended to provide additional holding and storage capacity	
6610026100	Rack overlay for 60-position sample rack Allows 13 mm od tubes to be used in 60-position rack	2 for each rack	Additional sample racks are recommended to provide additional holding and storage capacity	
6610026600	Sample rack for 30 mm od tubes, 21 positions	1	Additional sample racks are recommended to provide additional holding and storage capacity	
G8410-40000	Standards rack, 34 positions, for SPS 4 autosampler	1	Additional standard rack for AA/MP-AES and ICP-OES autosampler configuration	
190049700	Polypropylene sample tubes, 16 mm od, 125 mm height, 1000/pk	1	Sample tube recommended for the 60-position sample rack	
190065200	Centrifuge tubes, screw-capped, 29 mm od, 50 mL polypropylene, 500/pk	1	Sample tube recommended for the 21-position sample rack	
5005-0437	Waste container kit		Recommended for waste collection on all spectroscopy instruments. A 10 L container with S60 Stay Safe cap and charcoa vapor filter to prevent harmful vapors in the lab environment.	
5043-1193	Replacement charcoal filter for vapor trapping		Recommended for waste collection container on all spectroscopy instruments. A replacement charcoal filter to trap acid and solvent vapors with 6 months time strip.	

Learn more about the comprehensive range of single-element and multi-element inorganic standards for testing elemental impurities in all markets that includes instrument calibration and tuning mixes for ICP-MS, ICP-OES, MP-AES, AA, and IC instrumentation.



#### **Essential Instrument Supplies**

# Top Supplies for Graphite Furnace AAS



#### Hollow cathode lamps

Select either single or multi-element coded lamps from the range available.

**See this link** and select lamps for the elements required.

#### Sample introduction

- 9910028200: Autosampler cups, 2.0 mL conical, polyethylene, 1,000/pk
  - (Top Recommendation)
- 9910115100: Sample capillary assembly for PSD 120, 5/pk
  - (Top Recommendation)

#### Graphite furnace workhead

- 6310001200: Partitioned tubes, pyrolytically coated, 10/pk
   (Top Recommendation)
- 6310003700: Omega platform tubes, pyrolytically coated, 10/pk
- 190067900: GTA 120 Deuterium furnace System Operating Supplies Kit
- 190068000: GTA 120 Zeeman furnace System Operating Supplies Kit

#### Reference standards

Select single or multi-element standards to calibrate your instrument.

**See this link** and select the element from the periodic table to see what standards are available.

Part Number	Description	Recommended Quantity	Reason to Use	Part Family
See this link and select lamps for the elements required	Single or multi-element coded or uncoded lamps	1 for each element	Coded lamps are element coded for automatic recognition by the instrument, simplifying operation and eliminating the risk of time-consuming errors when changing the lamp position. Uncoded lamps provide economical operation. All Agilent lamps provide superb performance and are compatible with all Agilent AA systems	Du un
See this link and select lamps for the elements required*	High Intensity UltrAA Lamps	1 for each element	UltrAA lamps are a comprehensive range of high intensity hollow cathode lamps that can replace conventional lamps for AA determinations. They lower detection limits for the most demanding AAS applications	
*G8435AA requires option#200 ordered with the system				
9910113100	High capacity carousel kit for PSD 120	1	Increases sample capacity of the PSD 120 from 50 to 130 samples	<b>3</b> 5
6610025900	Sample vials, polyethylene, 1.1 mL, 2,000/pk	1	1.1 mL sample vials required for use with the high capacity sample carousel kit	
9910115600	Plastic beakers, low density polyethylene, 10 mL	1	Required for holding bulk standards and modifiers in the 5 central positions of the PSD 120	
4710003200	Syringe 100 μL for PSD 120, 1/pk	1	Spare syringe for PSD 120 to support routine operation	1
4710003100	Plunger for 100 μL syringe for PSD, 1/pk	1	The plunger in the syringe will wear with use. Regular replacement of the plunger ensures good sealing for accurate sample dispensing, reducing bubble formation and preventing cross contamination (Top Recommendation)	ē
5005-0437	Waste container kit		Recommended for waste collection on all spectroscopy instruments. A 10 L container with S60 Stay Safe cap and charcoal vapor filter to prevent harmful vapors in the lab environment.	
5043-1193	Replacement charcoal filter for vapor trapping		Recommended for waste collection container on all spectroscopy instruments. A replacement charcoal filter to trap acid and solvent vapors with 6 months time strip.	•

**Learn more** about the comprehensive range of single-element and multi-element inorganic standards for testing elemental impurities in all markets that includes instrument calibration and tuning mixes for ICP-MS, ICP-OES, MP-AES, AA, and IC instrumentation.

#### Learn more:

www.agilent.com/en/product/atomic-spectroscopy

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This information is subject to change without notice.

