## **AGILENT ATOMIC ABSORPTION SUPPLIES**

## Quick reference guide



### **Agilent supplies for Agilent instruments**

Agilent Technologies is committed to optimizing your laboratory's productivity, so we have produced this list of the most commonly ordered supplies and parts for the Agilent 240/280 and 50/55 series AA systems. Keep this list handy so you can quickly find the supplies you need and minimize instrument downtime.

Mark 7 Flame Atomization System	Part No.
Burner cleaner strips, 100/pk	9910053900
Glass impact beads, 5/pk	9910025700
High solids capillary tubing, 3 m	9910024800
High vacuum capillary tubing, 3/pk	9910044000
Nebulizer Venturi (PEEK)	1610117390
Nebulizer capillary kit, includes capillary and guide, spring, capillary tubing and cleaning wire	9910093000
Nebulizer cleaning wire, 3 x 0.9 m lengths	9910024700
Atomization system 0-ring kit, aqueous samples	9910093400
Atomization system 0-ring kit, organic samples	9910093500
Nebulizer O-ring kit	9910035200
Mixing paddles, fluorinated, 5/pk	9910093600
Kit, fluorinated liquid trap, float and magnet	9910105800
Drain tubing for aqueous solutions per m, 2 m length required	3710009200
Operating supplies kit for Mark 7 atomization system, includes PEEK Venturi, capillary and guide, spring, nebulizer block, glass impact beads, capillary tubing, O-ring kit, mixer paddles and burner cleaning strips	190034100
Venturi extraction tool	7210027700
Nebulizer capillary extraction tool	7210027600
Spray chamber body	6210092090
Nebulizer block, excludes integrated nebulizer	9910093100
Spray chamber bung	1610118800
Complete Mark 7 spray chamber assembly for aqueous/acidic solutions (fitted with standard 0-rings)	110634490
Complete Mark 7 spray chamber assembly for organic solvents (fitted with organic resistant 0-rings)	110866890
Mark 7 air/acetylene burner	210164000
Mark 7 nitrous oxide/acetylene burner	210164100





Deuterium Background Corrector	Part No.
Deuterium background correction lamp	G8431-80000

SIPS	Part No.
Pump bands, 10/pk	9910077600
SIPS 10/20 pump tubing, 6/pk	9910075900
Tubing kit, to connect Mariotte bottle to tee piece	9910076100
SIPS 10 2-way tee piece assembly	110651090
SIPS 20 3-way tee piece assembly	110585790
Constant-pressure-head bottle, rectangular, 500 mL	110533590
Constant-pressure-head bottle, rectangular, 1 L	110766690
SIPS flame dilution system operating supplies kit, Includes:	190025400
500 mL constant pressure bottle (2 ea) 1 L diluent bottle	
SIPS 3-way Tee piece assembly	
SIPS pump tubing kit	
SIPS tubing kit	
SIPS pump bands kit	



SPS 4 Autosampler	Part No.
SPS 4 autosampler options	
SPS 4 rinse tube kit, for low volatile organics. Allows use of low volatile organic solvents in rinse station.	G8410-68261
Pump drain kit for SPS 4 autosampler, 1/pk. Provides the components required to allow the liquid overflow to be pumped from the rinse station.	G8410-68262
Spare probes	
SPS 4 probe 0.8 mm id, green marker, inert, FEP sleeved, 1/pk (standard probe for flame AA)	G8410-80102
SPS 4 probe 1.0 mm id, blue marker, inert, FEP sleeved, $1/\mathrm{pk}$	G8410-80103
SPS 4 probe 1.2 mm id, black marker, inert, FEP sleeved, 1/pk (required for viscous, high matrix & high TDS samples)	G8410-80104
Peristaltic pump tubing for the rinse pump	
Peristaltic pump tubing, PVC SolvaFlex, 3 bridged, grey/grey tabs (pk/12 tubes) Standard tubing for the rinse pump, for use with aqueous or low volatile organic solvents	3710049000
Peristaltic pump tubing, Santoprene, 3 bridged, grey/ grey tabs (pk/12 tubes) For use with ketone-based solvents	3710057500
Peristaltic pump tubing, Viton, 3 bridged, black/black tabs with flared ends (pk/12 tubes), for use with aromatic organic solvents	3710069100
Racks and tubes	
Standards rack 34 position (1/pk). Provides 12 places for 50 mL 30 mm od centrifuge tubes and 22 places for 18 mm od test tubes. (Standard configuration for flame AA)	G8410-40000
Sample rack for 13 mm od tubes, 90 positions (1/pk)	6610026400
Sample rack for 16 mm od tubes, 60 positions (1/pk)	6610025400
Sample rack for 20 mm od tubes, 40 positions (1/pk)	6610025500
Sample rack for 25 mm od tubes, 24 positions (1/pk)	6610026500
Sample rack for 30 mm od tubes (50 mL centrifuge tubes), 21 positions (1/pk)	6610026600
Rack overlay for 60-position sample rack (1/pk, recommend 2 per rack). Allows 13 mm and some 16 mm od tubes to be used in 60-position rack.	6610026100
Rack overlay for 40-position sample rack (1/pk, recommend 2 per rack). Allows 18 mm od tubes to be used in 40-position rack.	6610026000
Centrifuge tubes polypropylene 50 mL (500/pk) screw capped, 29 mm od	190065200
Polypropylene tubes, 17 mm x 130 mm, 1000/pk	00000001600L

PSD 120 GFAA Autosampler	Part No.
Sample vials, 2 mL, conical polyethylene, 1000/pk	9910028200
Sample vials, 1.1 mL, polyethylene, for high capacity carousel, 2000/pk	6610025900
Plastic beakers, 10 mL, 5/pk	9910115600
Capillary assembly, 5/pk	9910115100
Syringe, 100 μL	4710003200
Plunger for 100 μL syringe, PTFE tipped	4710003100
0-ring, 2 in id x 2 1/4 in od x 1/8 in nitrile, rinse bottle	6910025900
VGA 77	Part No.
Sodium tetrahydroborate reagent, 500 g	8210029100
Reagent pump tubing, black/black, 12/pk	3710027200
Sample pump tubing, purple/black, 12/pk	3710027300
Hydride absorption cells, quartz, 2/pk	9910040000
Tubing and connector kit	9910061900
AA hydride module (recommended to dedicate a module to Hg determinations)	9910062100
Flow-through mercury absorption cell, single cell	9910040700
Gas-liquid separator	9910071100
Pump tube beds kit	9910050700
VGA 77 vapor generation operating supplies kit Includes: VGA 77 tubing and connector kit (2 ea) Reagent pump tubing (2 pks of 12) Sample pump tubing (2 pks of 12) Gas-liquid separator Mercury flow-through cell Hydride absorption cells (2 pks of 2) Spare AA hydride module VGA 77 pump bed kit	190025200

GTA 120 and GTA 120 Zeeman GFAA	Part No.
Partitioned tubes, pyrolytically coated, 10/pk	6310001200
Omega platform tubes, pyrolytically coated, 10/pk	6310003700
Plateau tubes, pyrolytically coated, for pyrolytic platforms, 10/pk	6310001300
Solid pyrolytic graphite platforms, for plateau tubes, 10/pk	6310001100
Graphite electrodes for GTA 120, 1 pair	6310003400
Graphite electrodes for GTA 120, Zeeman, 1 pair	6310003500
GTA 120 Deuterium GFAA operating supplies kit*	190067900
GTA 120 Zeeman GFAA operating supplies kit*	190068000

<sup>\*</sup> Includes:

Replacement electrodes (2 pairs)

Spare shroud

Omega platform tubes (5 pks of 10 tubes)

 $100~\mu L$  syringe

Kit of capillary assemblies (5/pk)

Plastic beakers (5/pk)

2 mL polyethylene sample vials ( 2 pks of 1000 vials)

Single element AA standards	Part No.
Supplied in 100 mL bottles, concentration 1000 ppm (0.1%), 1 mL of solution contains 1 mg of metal	
Aluminum standard solution	5190-8256
Antimony standard solution	5190-8258
Arsenic standard solution	5190-8260
Barium standard solution	5190-8262
Beryllium standard solution	5190-8264
Bismuth standard solution	5190-8266
Boron standard solution	5190-8268
Cadmium standard solution	5190-8270
Calcium standard solution	5190-8272
Cesium standard solution	5190-8274
Chromium standard solution	5190-8275
Cobalt standard solution	5190-8277
Copper standard solution	5190-8279
Europium standard solution	5190-8239
Gadolinium standard solution	5190-8241
Gallium standard solution	5190-8457
Germanium standard solution	5190-8459
Gold standard solution	5190-8282
Holmium standard solution	5190-8465
Indium standard solution	5190-8284
Iridium standard solution	5190-8469
Iron standard solution	5190-8285
Lanthanum standard solution	5190-8473
Lead standard solution	5190-8287
Lithium standard solution	5190-8289
Magnesium standard solution	5190-8291
Manganese standard solution	5190-8293
Mercury standard solution	5190-8295
Molybdenum standard solution	5190-8297
Nickel standard solution	5190-8298
Osmium standard solution	5190-8495
Palladium standard solution	5190-8300
Phosphorus standard solution	5190-8499
Platinum standard solution	5190-8302
Potassium standard solution	5190-8304
Rhodium standard solution	5190-8509
Rubidium standard solution	5190-8511
Scandium standard solution	5190-8517
Selenium standard solution	5190-8306
Silicon standard solution	5190-8308
Silver standard solution	5190-8309

Single element AA standards (continued)	Part No.
Sodium standard solution	5190-8311
Strontium standard solution	5190-8313
Tantalum standard solution	5190-8531
Tellurium standard solution	5190-8315
Thallium standard solution	5190-8316
Tin standard solution	5190-8318
Titanium standard solution	5190-8320
Tungsten standard solution	5190-8547
Vanadium standard solution	5190-8323
Ytterbium standard solution	5190-8553
Yttrium standard solution	5190-8555
Zinc standard solution	5190-8325
Zirconium standard solution	5190-8327

Matrix modifiers for GFAA Supplied in 100 mL bottles (unless indicated otherwise)	Part No.
Ammonium phosphate matrix modifier solution, 10% ammonium dihydrogen phosphate in water	5190-8337
Nickel nitrate matrix modifier solution, 10000 ppm nickel in 5% nitric acid	5190-8339
Palladium nitrate matrix modifier solution, 10000 ppm palladium in 5% nitric acid	5190-8336
Mixed modifier of palladium nitrate and magnesium nitrate, 1000 $\mu g/mL$ Pd, 600 $\mu g/mL$ Mg(NO $_3$ ) $_2$ , 250 mL bottle	5190-8341
Triton X-100 surfactant (50 mL bottle)	CP3418

Ionization suppressants for flame AA Supplied in 500 mL bottles (unless indicated otherwise)	Part No.
Cesium nitrate buffer solution, 1% (from carbonate) in $5\%~\mathrm{HNO_3}$ (100 mL bottle)	5190-8343
Lanthanum buffer solution, 10% in 5% nitric acid	5190-8801
Potassium buffer solution, 10% in 5% nitric acid	5190-9420
Strontium buffer solution, 10% in 5% nitric acid	5190-9419

Agilent also offers AA standards in 500 mL bottles, multi-element standards, and a range of ICP standards and metallo-organic standards and solvents. For more information on these alternatives, see the Agilent publication 5991-5678EN "Chemical Standards Catalog".

#### **Hollow Cathode Lamps**

Agilent lamps are manufactured in ISO 9001 certified environment and use proven processing steps to guarantee quality and reliability, and ensure they are optimized to deliver the best performance from your AA.

We offer a full range of Coded or Uncoded lamps with either single- or multi-element combinations, including High Intensity UltrAA lamps, which increase sensitivity by up to 40%, providing lower detection limits for the most demanding flame, furnace and vapor AA applications.

For ordering details and more information, see the listing of hollow cathode lamps available from the <u>Agilent website</u>, or see the Agilent Spectroscopy Supplies catalog.

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