

Quick Reference Guide

## Agilent 7800/7900/8900 ICP-MS Supplies

## **Agilent supplies for Agilent instruments**

Agilent is committed to optimizing your laboratory's productivity. This reference guide shows the most commonly ordered supplies and parts for the Agilent 7800/7900 ICP-MS and 8900 Triple Quadrupole ICP-MS. Keep this list so you can quickly find the supplies you need and minimize instrument downtime.



Sampler Cones and Supplies (suits all Agilent 7800/7900 and 8900 ICP-MS)	Part Number
Nickel sampler cone care package Includes 2pcs Ni sampler, 1pc Magnifier tool, 1pk Graphite gaskets, 1pk Cotton swabs	5067-0294
Platinum sampler cone care package Includes 2pcs Pt sampler, 1pc Magnifier tool, 1pk Graphite gaskets, 1pk Cotton swabs	5067-0296
Nickel-plated sampler cone care package Includes 2pcs Ni-plated sampler, 1pc Magnifier tool, 1pk Graphite gaskets, 1pk Cotton swabs	5067-0295

Sampler Cones and Supplies (continued)	Part number
Gasket, graphite, for sampling cone, 3/pk	G3280-67009
Sampler cone, nickel with copper base (std for x-lens)	G3280-67040
Sampler cone, platinum with copper base (standard for s-lens / semiconductor configuration)	G3280-67036
Sampler cone, nickel with nickel-plated copper base (for samples containing >0.5% HCl and when using maximum HMl aerosol dilution)	G3280-67061
Magnifier tool	5190-9614
Cotton swabs, 1pk of 100pcs	9300-2574

Skimmer Cones Selection by ion lens configura	ation and ICP-MS series			
Description	x-lens	x-lens	s-lens (semicon)	s-lens (semicon)
	7800	7900/8900	7900	8900
Nickel	G3280-67041	G8400-67200	G3280-67066	G3666-67421
Platinum, with copper base	G3280-67060	G8400-67201	G3280-67064	G3666-67401
Platinum, with nickel base	G3280-67063	G8400-67202	G3280-67065	G3666-67411
Note: Shaded cells denote stand	lard configuration			

Skimmer Bases Selection first by ion lens configuration and ICP-MS series, then by the Interface cone material (Nickel, Ni or Platinum, Pt)					
Description	x-lens	x-lens	x-lens	s-lens (semicon)	s-lens (semicon)
	7800	7900	8900	7900	8900
Stainless steel (use with Ni cones)	G3280-60608	G8400-60624	G3666-60301	G8400-60627	-
Brass (use with Pt cones)	G3280-60621	G8400-60625	G3666-60311	G8400-60626	G3666-60401

Note: Shaded cells denote standard configuration

Nebulizers and Supplies	Part Number
MicroMist nebulizer, borosilicate glass, U-series, standard for Agilent 7800/7900 ICP-MS	G3266-80004
UniFit sample connector, for U-series MicroMist nebulizer, 0.5 mm id, 10/pk	G3266-80012
UniFit sample connector, for U-series MicroMist nebulizer, 0.25 mm id, 10/pk	G3266-80013
UniFit sample connector, for U-series MicroMist nebulizer, 0.75 mm id, 10/pk	G8010-80035
MicroMist nebulizer, with PEEK gas connector. Suits Agilent 8900 ICP-MS	G3266-80005
Nebulizer gas fitting, with PEEK ratchet connector, 1/ pk. Suits MicroMist nebulizer with PEEK gas fitting used with the Agilent 8900 ICP-MS	G3266-80017
MicroFlow nebulizer, PFA, 200 μL/min, self-aspirating	G3139-65100
MicroFlow nebulizer, with I-AS probe, PFA, 200 $\mu L/\text{min}$ , self-aspirating	G3139-65102

Tubing	Part Number
Peristaltic pump tubing, Tygon, 3-stop white/white, for sample introduction with 1.02 mm id, 40 cm, 12/pk	G1833-65569
Peristaltic pump tubing, for pumping internal standard with, 0.25 mm id, 2-stop blue/orange, 12/pk	G3280-67047
Peristaltic pump tubing, for spray chamber drain, Ismaprene 3-stop yellow/blue, 1.52 mm id, 40 cm, 12/pk	G1833-65570
Sample tubing, PFA, for sample introduction, 0.5 mm id, 1.6 mm od, 5 m	G1820-65105
Online internal standard addition kit for ICP-MS	G3280-60590
Drain tubing, for use between peri-pump tubing and drain tank), 4.0 mm id, 2.5 m	G1820-65515
Tubing, Tygon, for drain to drain tank, 3 m	G3280-60077

Spray Chamber Supplies	Part Number
Spray chamber, quartz, double-pass, for Agilent 7800 ICP-MS (non-HMI/UHMI). Can be used with the Agilent 7900/8900 ICP-MS when Ultra HMI capability is not required.	G3280-80008
Endcap, for non-HMI/UHMI spray chamber	G3280-60008
Connector tubing, quartz straight, between spray chamber and torch	G3270-80025
Connector tubing, quartz, with dilution port for HMI/UHMI kit	G3270-80024
Spray chamber, quartz, for UHMI, Agilent 7900/8900 ICP-MS. Required when using Ultra HMI capability. For operation without Ultra HMI capability, use the standard spray chamber (p/n G3280-80008).	G8400-67150
Clamp, torch ball joint connector, secures ball joint connector between torch and spray chamber	G8400-60327
Endcap retainer ring for spray chamber, for Agilent 7900 ICP-MS	G8400-40200
Dilution nozzle for UHMI, for Agilent 7900 ICP-MS	G8400-67026
Drain tubing assembly (tubing between spray chamber and peristaltic pump, includes two connectors, bushing and tubing)	G3280-60555

Torch	Part Number
Torch, quartz, 2.5 mm id, standard torch for Agilent 7800/7900/8900 ICP-MS	G3280-80053
Torch, quartz, tapered, 1.5 mm id, for use with organic solvents	G3280-80080
Torch, quartz, tapered, 1.0 mm id, for use with organic solvents	G3280-80081
ShieldTorch bonnet, quartz	G1833-65421
Shield plate, long life, platinum, for ShieldTorch	G1833-65419

Vacuum System Supplies	Part Number
AVF Platinum oil for Agilent MS40+ foreline pump used with Agilent 7800/7900/8900 ICP-MS, 1 L	X3760-64004
AVF Gold oil for Edwards E2M18 foreline pump, used with earlier model Agilent 7900 ICP-MS, 1.06 qt	6040-0834

PS 4 Autosampler Consumables	Part Number
acks and tubes	
tandards rack, 5-position, 1/pk, for Agilent SPS 4 utosampler. Provides 5 locations for 250 mL 60 mm od arrow neck sample containers.	G8410-40001
ample rack for 13 mm od tubes, 90 positions, 1/pk	6610026400
ample rack for 16 mm od tubes, 60 positions, 1/pk	6610025400
ample rack for 20 mm od tubes, 40 positions, 1/pk	6610025500
ample rack for 25 mm od tubes, 24 positions, 1/pk	6610026500
ample rack for 30 mm od tubes (50 mL centrifuge ubes), 21 positions, 1/pk	6610026600
ack overlay for 60-position sample rack (2 per rack ecommended), for Agilent SPS 3 autosampler. Allows 3 mm and some 16 mm od tubes to be used in 0-position rack.	6610026100
ack overlay for 40-position sample rack (2 per rack ecommended), for Agilent SPS 3 autosampler. Allows 8 mm od tubes to be used in 40-position rack	6610026000
ottle 250 mL for 5-position standards rack, 1/pk	5043-0064
entrifuge tubes, polypropylene, 5 to 50 mL at 2.5 mL atervals, 500/pk, screw cap, 29 mm od	190065200
olypropylene tubes, 17 mm od, 16.5 mL, 1,000/pk	000000016001
eristaltic pump tubing for the rinse pump	
eristaltic pump tubing, PVC SolvaFlex, 3-bridged, gray/ ray tabs, for Agilent SPS 3 when pumping acidic or queous rinses, 12/pk	3710049000
eristaltic pump tubing, Santoprene, 3-bridged, gray/gray abs, for ketone-based solvents on AA, MP-AES, and CP-OES instruments, 6/pk	3710057500
eristaltic pump tubing, FPM, 3-bridged, black/black tabs rith flared ends, for use with Agilent SPS 3 autosampler rhen pumping aromatic organic samples, 12/pk	3710069100
pare probes	
PS 4 probe, 0.25 mm id, red marker, inert, FEP sleeved, /pk	G8410-80100
PS 4 probe, 0.5 mm id, yellow marker, inert, FEP sleeved, /pk (standard probe for ICP-MS)	G8410-80101
PS 4 probe, 0.8 mm id, green marker, inert, FEP sleeved, /pk	G8410-80102
PS 4 sample probe with red marker, 1/pk. Required when sing the Agilent SPS 4 autosampler with microtiter tray or sampling from a 96 position well plate. Requires, but oes not include, the well plate tray adaptor kit or any	G8410-80105

compatible well plates.

SPS 4 Autosampler Options	Part Number
High uptake volume rinse kit for Agilent SPS 4 autosample to connect to SVS 2+ or ISIS 3. Allows rinse uptake rate to be increased to 25 mL/min.	
SPS4 rinse tube kit, for low volatile organic solvents in rinse station. Includes 1 m capillary, 3-bridged gray/gray PVC Solvaflex (4 pump tubes), barb connector, 2.5-1.5 mm, solvent-resistant tubing for inlet + outlet	G8410-68261
Pump drain kit for Agilent SPS4 autosampler. Allows the liquid overflow to be pumped from the rinse station. Includes wide-bore tubing, purple/white tabs (4 pump tubes), barb connectors, 2.5 m PVC Solvaflex to connect to a remote pump (not supplied).	G8410-68262
Well plate startup kit for Agilent SPS 4 autosampler. Allows the SPS 4 to be adapted to sample from 96-well plates. Includes well plates (10/pk), well plate adapter, and sample probe. Only supported with the ICP-MS MassHunter software	G8410-68270

Tuning Solutions	Part Number
ICP-MS stock tuning solution: Li, Y, Ce, TI, and Co; 100 mL, 10 mg/L; matrix 2% HNO <sub>3</sub>	5188-6564
ICP-MS stock tuning solution: Li, Mg, Y, Ce, Tl, Co; 100 mL, 10 mg/L; matrix 2% HNO <sub>3</sub>	5190-0465
Tuning solution: Li, Y, Ce, TI, and Co; 2 x 500 mL, 10 µg/L; matrix 2% HNO <sub>3</sub>	5184-3566
PA tuning solution kit: 2 x 100 mL bottles Tuning 1: 20 ppm each of Zn, Be, Cd, As; 10 ppm each of Ni, Pb, Mg; 5 ppm each of Tl, Na Al, U, Cu, Th, Ba, Co, Sr, V, Cr, Mn, 6Li, Sc, In, Lu, Bi; 2.5 ppm each of Y, Yb; matrix 2 to 5% HNO <sub>3</sub>	5188-6524
Tuning 2: 10 ppm each of Mo, Sb, Sn, Ge, Ru, Pd; 5 ppm of Ti, Ir; matrix 10% HCI/1% HNO <sub>2</sub> /trace HF	

Ordering Supplies Kits*	Part Number
Basic supplies kit, for Agilent 7900 ICP-MS, fitted with x-lensand Edwards E2M18 roughing pump using AVF Gold oil*	G3280-67003
Basic supplies kit for Agilent 7700/7800/7900 and 8900 ICP-MS, fitted with x-lens and roughing pump using AVF Platinum oil*	G3280-67221

<sup>\*</sup> For kit contents, extra options, and more information see Agilent publication: Spare Parts and Operating Supplies Kits for Agilent ICP-MS (p/n 5991-5006EN)

10 μg/mL Single Element ICP-MS Standards Supplied in 100 mL bottles	Part Number
Aluminum (Al) in 5% HNO <sub>3</sub>	5190-8561
Antimony (Sb) in 1% HNO <sub>3</sub> , trace tartaric acid	5190-8562
Arsenic (As) in 2% HNO <sub>3</sub>	5190-8563
Barium (Ba) in 2% HNO <sub>3</sub>	5190-8564
Beryllium (Be) in 2% HNO <sub>3</sub>	5190-8565
Boron (B) in H <sub>2</sub> O	5190-8566
Cadmium (Cd) in 2% HNO <sub>3</sub>	5190-8567
Chromium (Cr) in 2% HNO <sub>3</sub>	5190-8568
Copper (Cu) in 2% HNO <sub>3</sub>	5190-8569
Iridium (Ir) in 2% HCl	5190-8570
Lead (Pb) in 2% HNO <sub>3</sub>	5190-8571
Lithium (Li) in 2% HNO <sub>3</sub>	5190-8572
Lutetium (Lu) in 2% HNO <sub>3</sub>	5190-8573
Manganese (Mn) in 2% HNO <sub>3</sub>	5190-8574
Mercury (Hg) in 5% HNO <sub>3</sub>	5190-8575
Nickel (Ni) in 2% HNO <sub>3</sub>	5190-8576
Platinum (Pt) in 5% HCl	5190-8577
Scandium (Sc) in 2% HNO <sub>3</sub>	5190-8578
Selenium (Se) in 2% HNO <sub>3</sub>	5190-8579
Silver (Ag) in 2% HNO <sub>3</sub>	5190-8580
Strontium (Sr) in 2% HNO <sub>3</sub>	5190-8581
Terbium (Tb) in 2% HNO <sub>3</sub>	5190-8582
Tin (Sn) in 5% HCl	5190-8583
Uranium (U) in 2% HNO <sub>3</sub>	5190-8584
Vanadium (V) in 5% HNO <sub>3</sub>	5190-8585
Yttrium (Y) in 2% HNO <sub>3</sub>	5190-8586
Zinc (Zn) in 2% HNO <sub>3</sub>	5190-8587

A 11 .	1.	A 10 10 10		4.00	1.0	
Adilent	supplies -	· to nei	n voli (	ant the	recilite '	voli need

Our supplies are designed, manufactured, and tested to rigorous Agilent specifications, under a quality system registered to ISO 9001. Why risk compromising your analytical results with anything less than genuine Agilent supplies?

For a complete list of Agilent atomic spectroscopy supplies, including AA lamps and supplies for AA, ICP-OES, ICP-MS and MP-AES products, visit: www.agilent.com/chem/atomic

Multi-Element Calibration Standards	Part Number
Multi-element calibration standard 1, 100 mL: 10 mg/L of Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Pr, Sc, Sm, Tb, Th, Tm, Y, Yb; matrix 5% HNO <sub>3</sub>	8500-6944
Multi-element calibration standard 2A, 100 mL: 10 mg/L of Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cs, Cu, Fe, Ga, K, Li, Mg, Mn, Na, Ni, Pb, Rb, Se, Sr, Tl, U, V, Zn; matrix 5% HNO <sub>3</sub>	8500-6940
Multi-element calibration standard 3, 100 mL: 10 mg/L of Sb, Au, Hf, Ir, Pd, Pt, Rh, Ru, Te, Sn; matrix 10% HCI/1% HNC	8500-6948
Multi-element calibration standard 4B, 100 mL: 10 mg/L of B, Ge, Mo, Nb, P, Re, S, Si, Ta, Ti, W, Zr; matrix H2O/trace HF	8500 <u>-</u> 6072

Semiquantitative Standards Supplied in 100 mL bottles	Part Number
ICP-MS semiquantitative calibration standard 1. Contains: 10 µg/mL Ag, Al, As, Ba, Bi, Ca, Cd, Ce, Dy, Er, Eu, Ga, Gd, Ho, La, Lu, Mg, Na, Nd, P, Pb, Pr, Rb, Sc, Se, Sm, Sr, Tb, Th, Tl, Tm, U, Y, Yb; matrix 40% aqua regia	5190-8594
ICP-MS semiquantitative calibration standard 2. Contains: 10 µg/mL Au, B, Be, Co, Cr, Cu, Fe, Ge, Hf, Ir, K, Li, Mn, Mo, Nb, Ni, Os, Pd, Pt, Re, Rh, Ru, Sb, Si, Sn, Ta, Te, Ti, V, W, Zn, Zr; matrix 40% aqua regia, trace HF	5190-8595

Environmental Standards	Part Number
Environmental calibration standard, 100 mL; 1,000 mg/L of Fe, K, Ca, Na, Mg; 10 mg/L of Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn, Th, U; matrix 10% HNO <sub>3</sub>	
Initial calibration verification standard, 100 mL; 1,000 mg/L of Fe, K, Ca, Na, Mg, Sr; 10 mg/L of Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn, Th, U; matrix 5% HNO <sub>3</sub>	5183-4682
Internal standard mix, 100 mL; 100 ppm of 6Li, Sc, Ge, Rh, In, Tb, Lu, Bi; matrix 10% HNO $_3$	5188-6525
Internal standard mix, 100 mL; 10 mg/L of 6Li, Sc, Ge, Y, In, Tb, Bi; matrix 5 to 10% $\rm HNO_3$	5183-4681
Environmental spike mix, 100mL; 1,000 mg/L Fe, K, Ca, Na, Mg, 100 mg/L Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Tl, V, Zn, U; matrix 5% HNO <sub>3</sub>	5183-4687
6020 interference check solution A, 100 mL: 20,000 ppm of Cl; 3,000 ppm of Ca; 2,500 ppm each of Fe, Na; 2,000 ppm of C; 1,000 ppm each of Al, Mg, P, K, S; 20 ppm each of Ti, Mo; matrix 5% HNO <sub>3</sub> /trace HF	5188-6526

6020 interference check solution B, 100 mL:
20 ppm each of Cr, Co, Cu, Mn, Ni, V;
10 ppm each of As, Cd, Se, Zn;
5 ppm of Ag;
matrix 5% HNO<sub>2</sub>

