AGILENT 5100/5110 SERIES ICP-OES

Dual View ICP-OES Supplies



Quick Reference Guide

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 5100/5110 SVDV/VDV and RV ICP-0ES systems. Keep this list handy so you can quickly find the supplies you need and minimize instrument downtime.

Nebulizers and supplies	
Description	Part No.
Concentric glass nebulizer, SeaSpray U Series with Ezylok, standard for 5100/5110.	G8010-60255
Concentric glass nebulizer, Conikal U Series with Ezylok Recommended for organics.	G8010-60270
OneNeb Series 2 inert concentric nebulizer. Suitable for most sample types including organic solvents, HF acid digests and high TDS samples.	G8010-60293
Sample inlet fitting for OneNeb Series 2 nebulizer. Includes capillary connector with captive sample capillary tubing 0.5 mm id, 1/16 inch od, 750 mm long.	G8010-60345
Cleaning tool for concentric nebulizer.	G3266-80020
Sample inlet (Unifit) fitting for concentric glass nebulizer 0.75 mm id x 700 mm L, 10/pk.	G8010-80035
Sample inlet (Unifit) fitting for concentric glass nebulizer 0.5 mm id x 700 mm L, 10/pk.	G3266-80012
Gas inlet connector (Ezylok) for concentric nebulizer, 1/pk.	G3266-80015
PFA tubing, nebulizer gas supply, per m.	0890-2603





Pump and Connecting Tubing	
Description	Part No.
Peristaltic pump tubing, PVC, white/white, 12/pk.	3710034400
Peristaltic pump tubing, PVC, blue/blue, 12/pk.	3710034600
Peristaltic pump tubing, PVC, black/black, 12/pk.	3710027200
Peristaltic pump tubing, PVC, orange/white, 12/pk.	3710046900
Y piece connector for online addition of internal standard or ionization buffer.	1610132400
Barb connector, 1/16" to 1/8", connects peristaltic pump tube for waste to drain tubing.	1610088600
Tubing, waste line from peri pump tube, per m.	3710024600
Tubing, waste line from spill tray, per m.	3710033400
Nebulizer capillary tubing, per m.	2410020500

Spray Chambers	
Description	Part No.
Spray chamber, double pass glass cyclonic, standard for 5100/5110.	G8010-60256
Spray chamber, single pass glass cyclonic.	G8010-60271
Inert double pass spray chamber, white, rec. for HF samples.	G8010-80034
Inert single pass spray chamber, white, rec. for HF samples.	G8000-70008
Drain connector for spray chamber waste (Unifit) 0.86 mm id x 2.0 mm od x 480 mm L, 3/pk.	G8010-80036
Seal for spray chamber nebulizer fitting (Helix), 4/pk.	G8010-80042
Locking screw for s/chamber neb. fitting (Helix).	G8010-80043



Description	Part No.
Miscellaneous AVS supplies	
Rinse (20 L) and waste (10 L) containers for AVS 6/7 (1 each).	G8494-60005
Internal standard container (5 L) kit for AVS 7, 1/pk.	G8495-60005
Reagent uptake capillary tube 1.6 mm od x 1.0 mm id x 1400 mm long with heavy PTFE sinker, $1/pk$.	G8494-60007
Check valve outlet for AVS switching valve, non-metallic, 1/pk.	G8010-60300
Mounting clamp for AVS 4/6/7 switching valve, 1/pk.	G8494-60004
Tubing kits for AVS	
Sample inlet connection kit for AVS switching valve, 1/pk.	G8010-60303
Nebulizer connection kit for AVS switching valve, 1/pk.	G8010-60304
Autosampler connection kit for AVS switching valve, 1/pk.	G8010-60306
Internal standard connection kit for AVS 7 switching valve, 1/pk.	G8010-60307
Pump outlet connection kit for AVS switching valve, 1/pk.	G8010-60308
Nebulizer adaptor kit for AVS switching valve, 1/pk.	G8010-60333
Waste tube kit for 4 port AVS switching valve, 1/pk.	G8010-60334
Sample/rinse connection kit for AVS switching valve, 2/pk.	G8010-6033
Allows bypass of the switching valve when required e.g. for wavelength calibration.	
AVS sample loops	00040 0000
AVS sample loop, 1.0 mL volume, 1/pk. (Standard loop supplied with the AVS).	G8010-6030
AVS sample loop, 0.25 mL volume, 1/pk.	G8010-60338
AVS sample loop, 0.5 mL volume, 1/pk.	G8010-60339
AVS sample loop, 1.5 mL volume, 1/pk.	G8010-60340
AVS sample loop, 2.0 mL volume, 1/pk.	G8010-60341
AVS sample loop, 2.5 mL volume, 1/pk.	G8010-60342
AVS sample loop, 3.0 mL volume, 1/pk.	G8010-60343
AVS sample loop, 3.5 mL volume, 1/pk.	G8010-60344
AVS 7/6/4 valve supplies	
Spare valve, 7 port, 2 position for AVS 7 switching valve, 1/pk.	G8495-60000
Stator and rotor for 7 port AVS 7 switching valve, 1/pk.	G8495-60003
Rotor seal for 6-7 port valve used with AVS 6/7 switching valve, 1/pk.	G8494-60002
Spare valve, 6 port, 2 position for AVS 6 switching valve, 1/pk.	G8494-60000
Stator and rotor for 6 port AVS 6 switching valve, 1/pk.	G8494-60003
Spare valve, 4 port, 2 position for AVS 4 switching valve, 1/pk.	G8493-60000
Stator and rotor for 4 port AVS 4 switching valve, 1/pk.	G8493-60003
Rotor seal for 4 port AVS 4 switching valve, 1/pk.	G8493-60002

Description	Part No.
5100/5110 SVDV/VDV torches for use in both axial & radia	l views
Easy-fit torch, one piece with 1.8 mm id injector and an extended outer tube with slot, standard for SVDV/VDV models.	G8010-6022
Easy-fit torch, demountable with 1.8 mm id injector, an extended outer tube with slot & replaceable inner/outer tube set.	G8010-6023
Easy-fit torch, demountable, high solids with 2.4 mm id injector, an ext. outer tube with slot & replaceable inner/outer tube set.	G8010-6023
Easy-fit torch, demountable, semi-volatile organics, with 1.4 mm id inj., ext. outer tube with slot & replaceable inner/outer tube set.	G8010-6023
Easy-fit torch, inert, demountable for HF digests, with 1.8 mm id ceramic injector, an ext. outer tube with slot & replaceable inner/outer tube set.	G8010-6023
Quartz outer tube set for demountable torch, comprises ext. length outer tube with slot, intermediate tube (integrated) and top seal.	G8010-6026
5100/5110 RV torches for dedicated radial viewing	
Easy-fit torch, one piece with 1.4 mm id injector. Has a shorter length outer tube (no slot), standard for RV models.	G8012-6000
Easy-fit torch, demountable with 1.4 mm id injector, shorter outer tube (no slot) and replaceable inner/outer tube set.	G8010-6023
Easy-fit torch, demountable, volatile organics, with 0.8 mm id injector, shorter outer tube (no slot) and replaceable inner/outer tube set.	G8010-6023
Easy-fit torch, inert, demountable for HF digests, with 1.8 mm id ceramic injector, shorter outer tube (no slot) and replaceable inner/outer tube set.	G8010-6023
Quartz outer tube set for demountable torch, comprises shorter length outer tube (no slot), intermediate tube (integrated) and top seal.	G8010-6026
Miscellaneous 5100/5110 torch supplies	
Torch clamp, to clamp the spray chamber to the ball joint on the torch (not suitable for inert torch).	G8000-6414
Torch clamp for inert, demountable torch. Clamps the inert spray chamber to the base of the inert torch (not suitable for standard torch).	G8010-6022
Torch cleaning stand for 5100/5110 Series torches. Designed to make the torch cleaning process easier and safer, also preventing damage to the torch.	G8010-6802
Storage rack for 5100/5110 Series torches. Holds up to 5 torches, multiple racks can be stacked on top of each other if required.	G8010-6700

Operating Supplies Kits

Description Part No.

Includes supplies required to support up to 12 months routine operation. Extra supplies may be required for labs. that have high workload or high matrix samples.

Operating supplies kit for 5100/5110 DV ICP-0ES.	G8010-67001
Operating supplies kit for 5100/5110 RV ICP-0ES.	G8012-67001

Each kit includes:

- · Demountable torch
- 2 quartz outer tube sets
- 4 pks sample + waste peristaltic pump tubing
- · Internal standard pump tubing and connectors
- SeaSpray nebulizer (U series)
- Unifit connectors (0.75 mm id) for nebulizer
- EzvLok gas connector
- Double pass glass cyclonic spray chamber
- Unifit connectors for spray chamber drain
- Spare clamp for the ball joint
- Replacement pre-optic window (DV kit includes supplies for both radial and axial windows)
- Barb connectors for waste line
- · Nebulizer capillary tubing
- PFA tubing for nebulizer gas supply
- Drain tubing for waste liquid from spray chamber
- Drain tubing for sample tray and seal for spray chamber nebulizer fitting (Helix)

Application Kits

Description Part No.

Inert sample introduction kit for HF digests.

Kit includes:

- · Inert double pass spray chamber with ball joint socket
- OneNeb Series 2 nebulizer
- Demountable, inert Easy-fit torch with ceramic injector (1.8 mm id)
- Torch clamp for inert torch
- SolvaFlex peristaltic pump tubes for sample (black/black tabs) and waste (gray/gray tabs)

Inert sample introduction kit for SVDV/VDV.

G8010-68007

Inert sample introduction kit for RV.

G8010-68006

Ketone-based organics sample introduction kit.

Kit includes:

- · Double pass glass cyclonic spray chamber with ball joint socket
- Conikal nebulizer
- Demountable Easy-fit torch with 1.4 mm id injector
- Solvent resistant drain tubing
- Marprene peristaltic pump tubes for sample (white/white tabs) and waste (blue/blue tabs)

Ketone-based organics sample introduction kit for SVDV/VDV.

G8010-68009

Ketone-based organics sample introduction kit for RV.

G8010-68008

Volatile organics sample introduction kit.

Kit includes:

- Conikal nebulizer
- Demountable Easy-fit torch with 0.8 mm id injector
- · Solvent resistant drain tubing
- Viton peristaltic pump tubes for sample (white/white tabs) and waste (blue/ blue tabs)

Requires but does NOT include the IsoMist peltier cooled spray chamber.

Volatile organics sample introduction kit for SVDV/VDV.

G8010-68005 G8010-68004

Volatile organics sample introduction kit for RV.

Semi-volatile organics sample introduction kit.

Kit includes:

- Double pass glass cyclonic spray chamber with ball joint socket
- Conikal nebulizer
- Demountable Easy-fit torch with 1.4 mm id injector
- · Solvent resistant drain tubing
- PVC SolvaFlex peristaltic pump tubes for sample (black/black tabs) and waste (gray/gray tabs)

Semi-volatile organics sample introduction kit for SVDV/VDV.

G8010-68029

Semi-volatile organics sample introduction kit for RV.

G8010-68030

Miscellaneous Supplies	
Description	Part No.
Tubing clamp for sample tray. Secures the drain tubing to the sample tray.	G8010-40026
Argon gas inlet filter. Requires annual replacement. Customer replaceable.	G8010-60136
Replacement filter element for cooling air inlet. Suits the dusty environment air inlet filter option.	G8010-60189
Quartz window for the axial view pre-optic window.	G8010-68014
O-ring for the axial view pre-optic window.	G8010-68018
Pre-optics cone for the axial view pre-optic window.	G8010-68109
Esteele powder for cleaning pre-optics cone.	8110002800
Quartz window for the radial view pre-optic window.	G8010-68015
Argon humidifier accessory. Used to humidify the nebulizer gas for samples >3% TDS. Includes:	G8010-60346
• 2 x 0.6 m 4 mm od gas lines	
Fitting plate and bracketInstallation instructions	

SPS 4 Autosampler Supplies	
Description	Part No.
SPS 4 Autosampler options	
High uptake volume rinse kit for SPS 4. Recommended for use when connected to switching valves. Allows rinse uptake rate to be increased to 25 mL/min.	G8410-68260
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 ICP-0ES).	G8410-80102
SPS 4 probe 1.0 mm id, blue marker, inert, FEP sleeved, 1/pk.	G8410-80103
SPS 4 probe 1.2 mm id, black marker, inert, FEP sleeved, 1/pk (required for viscous, high matrix and high TDS samples).	G8410-80104
Peristaltic pump tubing for the rinse pump	
Peristaltic pump tubing, PVC SolvaFlex, 3 bridged, gray/gray tabs (12 tubes/pk). Standard tubing for the rinse pump, for use with aqueous or low volatile organic solvents.	3710049000
Peristaltic pump tubing, Santoprene, 3 bridged, gray/gray tabs (12 tubes/pk). For use with ketone-based solvents.	3710057500
Peristaltic pump tubing, Viton, 3 bridged, black/black tabs with flared ends (12 tubes/pk). 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 ICP-OES).	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

VGA 77 Supplies	
Description	Part No.
Sodium tetrahydroborate reagent, 500 g.	8210029100
Reagent pump tubing, black/black, 12/pk.	3710027200
Sample pump tubing, purple/black, 12/pk.	3710027300
Tubing and connector kit.	9910061900
ICP-OES hydride module (recommended to dedicate a module to Hg determinations).	9910062200
Gas-liquid separator.	9910062000
Pump tube beds kit.	9910050700

MSIS Supplies	
Description	Part No.
Reagent pump tubing, PVC, black/black, 12/pk.	3710027200
Waste pump tubing, PVC, black/white 12/pk.	3710068900
MSIS nebulizer bushing (with 0-rings).	G8479-20020
O-rings for MSIS nebulizer bushing, 1 pair. Includes 1 pair of replacement O-rings for the nebulizer bushing (1 internal and 1 external O-ring).	G8479-67000
MSIS drain tube assembly, 1/pk. Includes:	G8479-60100
MSIS reaction cone assembly, 1/pk. Includes: Reaction cone Bushing Threaded barb adapter Tubing connector for sample inlet	G8479-60300
MSIS reagent tubing kit. Includes: O-rings for nebulizer bushing (1 pair) Tubing connectors for reagent/sample inlets Capillary tubing 0.01 inch id x 0.03 inch od to join to peristaltic pump tubing for reductant inlet	G8479-68100

Description Part No. Supplied in 100 mL bottles, concentration 10,000 ppm (1%) in 5% nitric acid (unless indicated otherwise), 1 mL of solution contains 10 mg of metal. Aluminum ICP Standard. 5190-8352 Antimony ICP Standard in 1% HNO3, 1% tartaric acid. 5190-8354 Arsenic ICP Standard. 5190-8356 Barium ICP Standard. 5190-8358 Beryllium ICP Standard. 5190-8360 Bismuth ICP Standard. 5190-8362 Boron ICP Standard. 5190-8362 Boron ICP Standard. 5190-8364 Cadmium ICP Standard. 5190-8364 Calcium ICP Standard. 5190-8368 Cerium ICP Standard. 5190-8368 Cerium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadlinium ICP Standard in 5% HNO3, 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO3, trace HF. 5190-8394	Single Element ICP Standards	
indicated otherwise), 1 mL of solution contains 10 mg of metal. Aluminum ICP Standard. 5190-8352 Antimony ICP Standard in 1% HNO ₃ , 1% tartaric acid. 5190-8354 Arsenic ICP Standard. 5190-8356 Barium ICP Standard. 5190-8368 Beryllium ICP Standard. 5190-8360 Bismuth ICP Standard. 5190-8362 Boron ICP Standard in 1% NH ₄ OH. 5190-8364 Cadmium ICP Standard. 5190-8366 Calcium ICP Standard. 5190-8368 Cerium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8380 Gadolinium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO ₃ , 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO ₃ , trace HF. 5190-8390 Gold ICP Standard in 5% HCI. 5190-8394 Holmium ICP Standard. 5190-8398 Irridium ICP Standard. 5190-8398 Irridium ICP Standard. 5190-8398 Irridium ICP Standard. 5190-8398 Irridium ICP Standard in 20% HCI. 5190-8398 Irridium ICP Standard in 20% HCI. 5190-8398 Irridium ICP Standard in 20% HCI. 5190-8398	Description	Part No.
Antimony ICP Standard in 1% HNO ₃ , 1% tartaric acid. 5190-8354 Arsenic ICP Standard. 5190-8356 Barium ICP Standard. 5190-8368 Beryllium ICP Standard. 5190-8360 Bismuth ICP Standard. 5190-8362 Boron ICP Standard in 1% NH ₄ OH. 5190-8364 Cadmium ICP Standard. 5190-8368 Calcium ICP Standard. 5190-8368 Cerium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8388 Gallium ICP Standard in 5% HNO ₃ , 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO ₃ , trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8394 Holmium ICP Standard. 5190-8398 Indium ICP Standard. 5190-8398 Indium ICP Standard. 5190-8398 Iridium ICP Standard. 5190-8398 Iridium ICP Standard. 5190-8398 Iridium ICP Standard. 5190-8398		5% nitric acid (unless
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Barium ICP Standard. 5190-8358 Beryllium ICP Standard. 5190-8360 Bismuth ICP Standard. 5190-8362 Boron ICP Standard in 1% NH₄OH. 5190-8364 Cadmium ICP Standard. 5190-8366 Calcium ICP Standard. 5190-8368 Cerium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO₃, trace HF. 5190-8398 Gold ICP Standard in 20% HCI. 5190-8394 Holmium ICP Standard. 5190-8398 Indium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Antimony ICP Standard in 1% HNO ₃ , 1% tartaric acid.	5190-8354
Beryllium ICP Standard. 5190-8360 Bismuth ICP Standard. 5190-8362 Boron ICP Standard in 1% NH₄OH. 5190-8364 Cadmium ICP Standard. 5190-8366 Calcium ICP Standard. 5190-8370 Cerium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8382 Gadolinium ICP Standard. 5190-8384 Gadolinium ICP Standard in 5% HNO₃, 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO₃, trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8394 Holmium ICP Standard. 5190-8398 Indium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Arsenic ICP Standard.	5190-8356
Bismuth ICP Standard. 5190-8362 Boron ICP Standard in 1% NH4OH. 5190-8364 Cadmium ICP Standard. 5190-8366 Calcium ICP Standard. 5190-8368 Cerium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8384 Gallium ICP Standard in 5% HNO3, 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO3, trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Barium ICP Standard.	5190-8358
Boron ICP Standard in 1% NH₄ 0H. 5190-8364 Cadmium ICP Standard. 5190-8366 Calcium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO₃, 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO₃, trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Beryllium ICP Standard.	5190-8360
Cadmium ICP Standard. 5190-8366 Calcium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8382 Gadolinium ICP Standard. 5190-8384 Gadlium ICP Standard in 5% HNO3, 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO3, trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398	Bismuth ICP Standard.	5190-8362
Calcium ICP Standard. 5190-8368 Cerium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8384 Gallium ICP Standard in 5% HNO3, 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO3, trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Boron ICP Standard in 1% NH ₄ OH.	5190-8364
Cerium ICP Standard. 5190-8370 Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO ₃ , 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO ₃ , trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398	Cadmium ICP Standard.	5190-8366
Cesium ICP Standard. 5190-8372 Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO ₃ , 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO ₃ , trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Calcium ICP Standard.	5190-8368
Chromium ICP Standard. 5190-8374 Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8380 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO3, 0.5% HCl. 5190-8388 Germanium ICP Standard in 5% HNO3, trace HF. 5190-8390 Gold ICP Standard in 20% HCl. 5190-8392 Hafnium ICP Standard. 5190-8394 Holmium ICP Standard. 5190-8398 Indium ICP Standard in 20% HCl. 5190-8398 Iridium ICP Standard in 20% HCl. 5190-8400	Cerium ICP Standard.	5190-8370
Cobalt ICP Standard. 5190-8376 Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO ₃ , 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO ₃ , trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8392 Hafnium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Cesium ICP Standard.	5190-8372
Copper ICP Standard. 5190-8378 Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO ₃ , 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO ₃ , trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8392 Hafnium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Chromium ICP Standard.	5190-8374
Dysprosium ICP Standard. 5190-8380 Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO ₃ , 0.5% HCl. 5190-8388 Germanium ICP Standard in 5% HNO ₃ , trace HF. 5190-8390 Gold ICP Standard in 20% HCl. 5190-8392 Hafnium ICP Standard in 5% HCl. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard in 20% HCl. 5190-8398 Iridium ICP Standard in 20% HCl. 5190-8400	Cobalt ICP Standard.	5190-8376
Erbium ICP Standard. 5190-8382 Europium ICP Standard. 5190-8384 Gadolinium ICP Standard. 5190-8386 Gallium ICP Standard in 5% HNO ₃ , 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO ₃ , trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8392 Hafnium ICP Standard in 5% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Copper ICP Standard.	5190-8378
Europium ICP Standard. $5190-8384$ Gadolinium ICP Standard. $5190-8386$ Gallium ICP Standard in 5% HNO $_3$, 0.5% HCI. $5190-8388$ Germanium ICP Standard in 5% HNO $_3$, trace HF. $5190-8390$ Gold ICP Standard in 20% HCI. $5190-8392$ Hafnium ICP Standard in 5% HCI. $5190-8394$ Holmium ICP Standard. $5190-8396$ Indium ICP Standard. $5190-8398$ Iridium ICP Standard in 20% HCI. $5190-8400$	Dysprosium ICP Standard.	5190-8380
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	Erbium ICP Standard.	5190-8382
Gallium ICP Standard in 5% HNO3, 0.5% HCI. 5190-8388 Germanium ICP Standard in 5% HNO3, trace HF. 5190-8390 Gold ICP Standard in 20% HCI. 5190-8392 Hafnium ICP Standard in 5% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Europium ICP Standard.	5190-8384
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	Gadolinium ICP Standard.	5190-8386
Gold ICP Standard in 20% HCI. 5190-8392 Hafnium ICP Standard in 5% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Gallium ICP Standard in 5% HNO ₃ , 0.5% HCl.	5190-8388
Hafnium ICP Standard in 5% HCI. 5190-8394 Holmium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Germanium ICP Standard in 5% HNO ₃ , trace HF.	5190-8390
Holmium ICP Standard. 5190-8396 Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Gold ICP Standard in 20% HCI.	5190-8392
Indium ICP Standard. 5190-8398 Iridium ICP Standard in 20% HCI. 5190-8400	Hafnium ICP Standard in 5% HCI.	5190-8394
Iridium ICP Standard in 20% HCI. 5190-8400	Holmium ICP Standard.	5190-8396
	Indium ICP Standard.	5190-8398
Iron ICP Standard. 5190-8402	Iridium ICP Standard in 20% HCI.	5190-8400
	Iron ICP Standard.	5190-8402
Lanthanum ICP Standard. 5190-8404	Lanthanum ICP Standard.	5190-8404
Lead ICP Standard. 5190-8406	Lead ICP Standard.	5190-8406
Lithium ICP Standard. 5190-8408	Lithium ICP Standard.	5190-8408
Lutetium ICP Standard. 5190-8410	Lutetium ICP Standard.	5190-8410
Magnesium ICP Standard. 5190-8412	Magnesium ICP Standard.	5190-8412
Manganese ICP Standard. 5190-8414	Manganese ICP Standard.	5190-8414
Mercury ICP Standard. 5190-8416	Mercury ICP Standard.	5190-8416

Molybdenum ICP Standard in 1% NH₄0H.

Single Element ICP Standards (continued)	
Description	Part No.
Neodymium ICP Standard.	5190-8420
Nickel ICP Standard.	5190-8422
Niobium ICP Standard in 2% HF.	5190-8424
Palladium ICP Standard in 10% HNO ₃ .	5190-8426
Phosphorus ICP Standard.	5190-8428
Platinum ICP Standard in 20% HCI.	5190-8430
Potassium ICP Standard.	5190-8432
Praseodymium ICP Standard.	5190-8434
Rhenium ICP Standard.	5190-8436
Rhodium ICP Standard in 20% HCI.	5190-8438
Rubidium ICP Standard.	5190-8440
Ruthenium ICP Standard in 20% HCI.	5190-8442
Samarium ICP Standard.	5190-8444
Scandium ICP Standard.	5190-8446
Selenium ICP Standard.	5190-8448
Silicon ICP Standard in H ₂ 0.	5190-8450
Silver ICP Standard.	5190-8452
Sodium ICP Standard.	5190-8454
Strontium ICP Standard.	5190-8207
Sulfur ICP Standard in H ₂ O.	5190-8209
Tantalum ICP Standard in 2% HF.	5190-8211
Tellurium ICP Standard in 30% HCI.	5190-8213
Terbium ICP Standard.	5190-8215
Thallium ICP Standard.	5190-8217
Thulium ICP Standard.	5190-8219
Tin ICP Standard in 20% HCI.	5190-8221
Titanium ICP Standard in H ₂ 0.	5190-8224
Tungsten ICP Standard in 5% HNO ₃ , trace HF.	5190-8226
Vanadium ICP Standard.	5190-8228
Ytterbium ICP Standard.	5190-8230
Yttrium ICP Standard.	5190-8232
Zinc ICP Standard.	5190-8234
Zirconium ICP Standard.	5190-8236

5190-8418

Multi-Element Calibration Standards		
Description	Part No.	
Calibration mix 1, 125 mL. Contains 100 mg/L Sb, Mo, Sn and Tl in 2% $\rm HNO_3 + 0.5\%~HF.$	6610030500	
Calibration mix 2, 125 mL. Contains 100 mg/L Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Se, Tl, Th, U, V and Zn in 5% HNO ₃ .	6610030600	
Calibration mix majors, 125 mL. Contains 500 mg/L Ca, Fe, K, Mg and Na in 5% HNO ₃ .	6610030700	
IntelliQuant Calibration Solutions		
IntelliQuant calibration kit. Used to update the pre supplied IntelliQuant calibration to achieve a greater level of accuracy for semi quantitative analysis. Includes multi-element standards No. 1, 2 and 3 plus a 5% $\rm HNO_3$ blank. NOTE: Hg standard is not part of this kit - if required, order part number 5190-8575.	5190-9425	
IntelliQuant multi-element standard No.1. (Ready to use) 100 mg/L of 68 elements in 5% $\rm HNO_3$ (500 mL).	5190-9422	
IntelliQuant multi-element standard No. 2. (Ready to use) 100 mg/L of Sb, Ge, Hf, Mo, Nb, Si, Ag, Ta, Sn, Ti, W, Zr; in 5% HNO $_3$ with trace HF (500 mL).	5190-9423	
IntelliQuant multi-element standard No. 3. (Ready to use) 100 mg/L Au, Ir, Os, Pb, Pt, Rh, Ru, Te; in 10% HCl (500 mL).	5190-9424	
IntelliQuant single element standard for Hg. (Ready to use) 100 mg/L Hg, in 5% HNO $_3$ (100 mL).	5190-8575	
Calibration blank solution for ICP-OES. (Ready to use) Pure ASTM Type 1A water in 5% HNO ₃ (500 mL).	5190-7001	

Wavelength Calibration Solutions	
Description	Part No.
ICP-0ES wavelength calibration solution, 500 mL Contains 50 mg/L Al, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sr, Zn and 500 mg/L K in 5% $\rm HNO_3 + tr$ HF. Dilute x10 before use.	6610030000
ICP-0ES wavelength calibration solution, 500 mL Contains 5 mg/L Al, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sr, Zn and 50 mg/L K in 5% $\rm HNO_3$ + tr HF. Ready to use.	6610030100
ICP-OES calibration blank solution, 500 mL Pure ASTM Type 1A water with 5% $\rm HNO_3$ For use as cal. blank or diluent for the wavelength cal. solution.	5190-7001

Internal Standard/Ionization Suppressant	
Description	Part No.
Cesium Nitrate Buffer Solution, 1%. 10,000 ppm Cs in 5% nitric acid, 100 mL bottle.	5190-8343
Cesium Buffer Solution, 10%. 100,000 ppm Cs in 5% nitric acid, 500 mL bottle.	5190-9421
Yttrium Solution, 1%. 10,000 ppm Y in 5% nitric acid, 500 mL bottle. Also used for instrument optimization.	5190-8233
ICP Internal Standard, 125 mL bottle. 100 mg/L ⁶ Li, Sc, Y, In, Tb, Bi in 5% nitric acid.	6610030400

Environmental Standards	
Description	Part No.
INTF-A Quality Control Standard. Interference check standard for preparation of US EPA CLP standards ICSA and ICSAB. Contains AI, Ca, Mg at 5000 ppm, Fe at 2000 ppm in 20% HCI, 500 mL.	5190-8599
ICV Quality Control Standard in 5% HNO ₃ with trace tartaric acid, 500 mL. Initial/continuing calibration verification standard for US EPA CLP analyses. Contains Ca, Mg, K, Na at 500 ppm, Al, Ba at 200 ppm, Fe at 100 ppm, Sb at 60 ppm, Co, V at 50 ppm, Ni at 40 ppm, Cu at 25 ppm, Zn at 20 ppm, Mn at 15 ppm, As, Cr, Ag, Tl at 10 ppm, Be, Cd, Se at 5 ppm, and Pb at 3 ppm.	5190-9408
QCSTD-27 Quality Control Standard, 100 mL. Quality control standard for environmental analyses. Contains Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Si, Ag, Sr, Na, Tl, Ti, V, Zn at 100 ppm.	5190-9418

[#] Agilent also offers other ICP-OES standards, including standards in 500 mL bottles, plus a range of multi-element, AAS, ICP-MS and metallo-organic and bio-diesel standards and solvents. For more information on these alternatives, see Agilent publication "5991-5678EN Chemical Standards Catalogue"

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