

SELECT YOUR AA HOLLOW CATHODE LAMP BY ELEMENT

1 H hydrogen 1.008																	2 He helium 4.003														
3 Li lithium 6.941	4 Be beryllium 9.012																	5 B boron 10.81	6 C carbon 12.01	7 N nitrogen 14.01	8 O oxygen 16.00	9 F fluorine 19.00	10 Ne neon 20.18								
11 Na sodium 22.99	12 Mg magnesium 24.31																	13 Al aluminum 26.98	14 Si silicon 28.09	15 P phosphorus 30.97			17 S sulfur 32.07	18 Cl chlorine 35.45	19 Ar argon 39.95						
19 K potassium 39.10	20 Ca calcium 40.08	21 Sc scandium 44.96	22 Ti titanium 47.88	23 V vanadium 50.94	24 Cr chromium 52.00	25 Mn manganese 54.94	26 Fe iron 55.85	27 Co cobalt 58.93	28 Ni nickel 58.69	29 Cu copper 63.55	30 Zn zinc 65.39	31 Ga gallium 69.72	32 Ge germanium 72.64	33 As arsenic 74.92	34 Se selenium 78.96	35 Br bromine 79.90	36 Kr krypton 83.80														
37 Rb rubidium 85.47	38 Sr strontium 87.62	39 Y yttrium 88.91	40 Zr zirconium 91.22	41 Nb niobium 92.91	42 Mo molybdenum 95.94	43 Tc technetium 98.91	44 Ru ruthenium 101.1	45 Rh rhodium 102.9	46 Pd palladium 106.4	47 Ag silver 107.9	48 Cd cadmium 112.4	49 In indium 114.8	50 Sn tin 118.7	51 Sb antimony 121.8	52 Te tellurium 127.6	53 I iodine 126.9	54 Xe xenon 131.3														
55 Cs cesium 132.9	56 Ba barium 137.3	57 La lanthanum 138.9	58 Ce cerium 140.1	59 Pr praseodymium 140.9	60 Nd neodymium 144.2	61 Pm promethium 144.9	62 Sm samarium 150.4	63 Eu europium 152.0	64 Gd gadolinium 157.3	65 Tb terbium 158.9	66 Dy dysprosium 162.5	67 Ho holmium 164.9	68 Er erbium 167.3	69 Tm thulium 168.9	70 Yb ytterbium 173.0	71 Lu lutetium 175.0	72 Hf hafnium 178.5	73 Ta tantalum 180.9	74 W tungsten 183.8	75 Re rhenium 186.2	76 Os osmium 190.2	77 Ir iridium 192.2	78 Pt platinum 195.1	79 Au gold 197.0	80 Hg mercury 200.6	81 Tl thallium 204.4	82 Pb lead 207.2	83 Bi bismuth 209.0	84 Po polonium (209)	85 At astatine (210)	86 Rn radon (222)
87 Fr francium [MS]	88 Ra radium [MS]	89 Lr lawrencium [MS]	90 Rf rutherfordium [MS]	91 Db dubnium [MS]	92 Sg seaborgium [MS]	93 Bh bohrium [MS]	94 Hs hassium [MS]	95 Mt meitnerium [MS]	96 Ds darmstadtium [MS]	97 Rg roentgenium [MS]	98 Cn copernicium [MS]	99 Uut ununtrium [MS]	100 Uuq ununquadium [MS]	101 Uup ununpentium [MS]	102 Uuh ununhexium [MS]	103 Uus ununseptium [MS]	104 Uuo ununoctium [MS]														

COLOR CODE LEGEND

FLAME TYPE	SPECTROSCOPY TECHNIQUE	
Air/Acetylene	FAAS	Flame Atomic Absorption Spectroscopy
N ₂ O/Acetylene	GFAA	Graphite Furnace Atomic Absorption Spectroscopy
Not detectable by AA	VGA	Vapor Generation Atomic Absorption Spectroscopy
	MP	MP-AES
	ES	ICP-DES
	MS	ICP-MS

◆ Multi-Element Lamp (See ordering table on right)

ORDERING INFORMATION

OPTIMAL SIGNAL-TO-NOISE PERFORMANCE WITH AGILENT AA HOLLOW CATHODE LAMPS
Agilent lamps provide high spectral purity due to purified materials, an extended processing cycle, and factory lamp conditioning procedures. These ensure minimal lamp warm-up time and good stability during operation.

Coded Multi-Element Lamps for automatic lamp recognition, preventing errors

Element	Part No.
Aluminum/Calcium/Magnesium - Al/Ca/Mg	5610108900
Calcium/Magnesium - Ca/Mg	5610107100
Cobalt/Chromium/Copper/Iron/Manganese/Nickel - Co/Cr/Cu/Fe/Mn/Ni	5610107600
Cobalt/Molybdenum/Lead/Zinc - Co/Mo/Pb/Zn	5610109800
Copper/Iron/Manganese/Zinc - Cu/Fe/Mn/Zn	5610109600
Copper/Iron/Silicon/Zinc - Cu/Fe/Si/Zn	5610109700
Copper/Zinc - Cu/Zn	5610119200
Silver/Cadmium/Lead/Zinc - Ag/Cd/Pb/Zn	5610108700
Silver/Chromium/Copper/Iron/Nickel - Ag/Cr/Cu/Fe/Ni	5610109500
Sodium/Potassium - Na/K	5610107000

Uncoded Multi-Element Lamps for economical operation and universal compatibility

Element	Part No.
Barium/Chromium - Ba/Cr	5610133500
Calcium/Magnesium - Ca/Mg	5610129100
Cobalt/Chromium/Copper/Iron/Manganese/Nickel - Co/Cr/Cu/Fe/Mn/Ni	5610129200
Copper/Zinc - Cu/Zn	5610129300
Sodium/Potassium - Na/K	5610129000

High Intensity UltraAA Coded Multi-Element Lamps

Element	Part No.
Aluminum/Calcium/Magnesium - Al/Ca/Mg	5610133600
Cobalt/Chromium/Copper/Iron/Manganese/Nickel - Co/Cr/Cu/Fe/Mn/Ni	5610134500
Cobalt/Molybdenum/Lead/Zinc - Co/Mo/Pb/Zn	5610135200
Copper/Iron/Manganese/Zinc - Cu/Fe/Mn/Zn	5610135000
Copper/Iron/Silicon/Zinc - Cu/Fe/Si/Zn	5610135100
Copper/Zinc - Cu/Zn	5610134600
Silver/Cadmium/Lead/Zinc - Ag/Cd/Pb/Zn	5610108900
Silver/Chromium/Copper/Iron/Nickel - Ag/Cr/Cu/Fe/Ni	5610134900

High Intensity UltraAA Uncoded Multi-Element Lamps

Element	Part No.
Arsenic/Copper/Iron - As/Cu/Fe	5610135300
Nickel/Selenium - Ni/Se	5610135400

UltraAA lamps are high-intensity, boosted discharge hollow cathode lamps. They provide increased emission intensity, enhanced sensitivity by up to 40% and improved detection limits, allowing determinations at even lower levels. Visit www.agilent.com/chem/AA/Lamps

SAMPLE INTRODUCTION PUMP SYSTEM (SIPS) SUPPLIES
This innovative sample introduction and dilution system for flame AA eliminates the task of manual preparation of multiple calibration standards, providing fast, accurate on-line dilution of over range samples.

Description	Part No.
Pump tubing	9910075900
Pump bands	9910077600

VGA 77 SUPPLIES
The Vapor Generation Accessory (VGA 77) is ideal for µg/L determination of Hg and the hydride-forming elements.

Description	Part No.
Atomization cells	9910040000
AA hydride module	9910062100
Sample pump tubes	3710027200
Reagent pump tubes	3710027300
Hg flow through cell	9910040700

BACKGROUND CORRECTION LAMPS

Description	Part No.
Deuterium background correction lamp for AA systems	5610021800

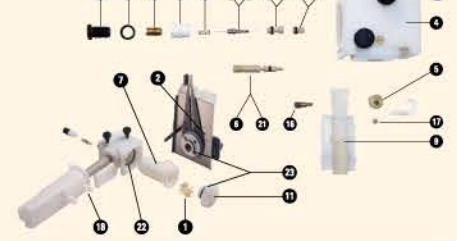
GRAPHITE TUBES AND PLATFORMS (Pictured to the right)

Every tube is hand-checked to ensure reproducible and reliable results.

Description	Unit	Part No.
Partitioned tubes, pyrolytically coated	10/pk	6310001200
Omega platform tubes, pyrolytically coated	10/pk	6310003700
Solid pyrolytic graphite platforms: Only for plateau tubes, 6310001100	10/pk	6310001300
Plateau tubes, pyrolytically coated: Only for pyrolytic platforms, 6310001300	10/pk	6310001100

MARK 7 SPRAY CHAMBER

This flame atomization system features simple-to-use twist and lock assembly for easy cleaning and routine maintenance.



Item	Description	Part No.
1	Mark 7 spray chamber assembly, complete	110634490
1	Mixing paddle, fluorinated, 1/pk	110637000
	Mixing paddles, fluorinated, 5/pk	9910093600
2	Mark 7 air/acetylene burner	210164000
3	Mark 7 nitrous oxide/acetylene burner	210164100
7	Spray chamber body, fluorinated	6210092090
11	Pressure relief bung, fluorinated	1610118800
18	Kit, fluorinated liquid trap, drain tube with integrated float and magnet	9910105800
22	O-ring spray chamber, nitrile	6910037000
	O-ring spray chamber, organic solvent compatible	6910036800
23	O-ring spray chamber bung, nitrile	6910010500
	O-ring spray chamber bung, organic solvent compatible	6910013100

Nebulizer components for Mark 7 Spray Chamber

Item	Description	Part No.
3	Spray chamber screw mounting	1510226600
4	Nebulizer block, fluorinated (excludes integrated nebulizer)	9910093100
5	Clamp bead adjuster	810133400
6	Screw bead adjuster	1510225000
8	Nebulizer capillary guide	810134400
9	Kit, fluorinated liquid trap, drain tube with integrated float and magnet	9910105800
10	Venturi nebulizer, PEEK	1610117390
12	Clamp bush guide	810134300
13	Screw capillary adjuster	1510228800
14	Nut lock M12 x 0.5	1510226700
15	Bearing bush nebulizer	310046600
16	Screw lock dog point M8	1510226000
17	Screw M6 x 6 Ertalloy	1510226500
18	Kit, fluorinated liquid trap, drain tube with integrated float and magnet	9910105800
20	Spring nebulizer	4610017400
21	O-ring screw bead adjuster, nitrile	6910000100
	O-ring screw bead adjuster, organic solvent compatible	6910036900
24	O-ring 1/32 in id x 3/32 in od x 1/32 in nitrile	6910009700
25	O-ring 3/16 in id x 5/16 in od x 1/16 in nitrile	6910009800
25	O-ring 3/16 in id x 5/16 in od x 1/16 in organic solvent compatible	6910013600
26	Nebulizer Capillary Kit Includes capillary assembly, capillary guide, nebulizer spring, nebulizer cleaning wire, Hi-Vac capillary tubing and standard capillary tubing	9910093000
	Glass impact beads, 5/pk	9910025700
	PTFE impact beads (for use with HF digests), 5/pk	9910053300
	Mark 7 O-ring kit, for aqueous samples	9910093400
	Mark 7 O-ring kit, for organic solvents	9910093500
	Drain tubing for aqueous solutions, per meter, 2 m length required	3710009200

Description	Part No.
Solid pyrolytic graphite platforms, 6310001300	
Plateau tubes, 6310001100	
Partitioned tubes, 6310001200	
Omega platform tubes, 6310003700	



To order your AA hollow cathode lamps, visit [agilent.com/chem/AAchart](http://www.agilent.com/chem/AAchart) or if you wish to speak to Agilent, you can find an Agilent customer center in your country at [agilent.com/chem/contactus](http://www.agilent.com/chem/contactus)