

VWR[®] SPECTROPHOTOMETRY

Spectrophotometers

Cuvettes

Spectroscopy solvents

UV/VIS standards

Colour standards

**Your first choice for
spectrophotometry**



2 YEAR WARRANTY

VWR® UV/VIS SPECTROPHOTOMETERS

2 YEAR WARRANTY
represents the reliability and robustness
that we expect from all our units.

Single beam units

VWR offers a choice of 5 models of single beam VIS and UV/VIS spectrophotometers, each with a ready to use package including glass or quartz cells. These robust units feature easy handling plus all the functions required for daily measurements in your lab. A large sample compartment coupled with an extensive range of optional accessories allow you to customise your unit to your requirements.

Double beam option

The newest member of the spectrophotometer family is the UV- 6300PC. This powerful unit is an all round top performer in a host of different applications, from research to pharmaceutical labs, QC to new material development with our large range of accessories.

Software

Two different software packages - M.Wave Professional or UV-Analyst (depending on the model) transform these stand-alone units to allow greater results storage and more demanding analysis of results.



M.Wave Professional

Full functionality of stand-alone unit plus more powerful data processing, expanded data collecting and storage capability. Optional for V-1200, included with UV-1600PC.

Basic functionalities

- Basic photometric mode
- Quantitative test (standard curve)
- Wavelength scanning
- Kinetics
- DNA/protein
- Multiwavelength test
- System utility

PC system requirements:

Pentium or above PC, CD-ROM, USB ports; 32 MB memory (>256 MB is strongly recommended); >50 MB hard disc space; Microsoft Windows 2000/XP/Vista/7

More advanced software functionalities

- Printable spectrums, results and reports
- No memory limits by spectrophotometer
- Standard curve
- Up to 20 standards, curve fitting: Linear/linear through zero/square
- Wavelength scan
- Automatic record of peaks and valleys (unlimited number of channels)
- Off-line calculation and processing including:
 - 1st to 4th derivation
 - Rescaling axes, smoothing, combination, zooming, overlap
- Multiwavelength scan
- Up to 20 wavelengths
- DNA/protein concentration

PC software UV-Analyst

Full functionality of stand-alone unit plus more powerful data processing, expanded data collecting and storage capability. Included with V-3000PC, UV-3100PC and UV-6300PC.

Basic functionalities

- Basic photometric mode
- Quantitative test (standard curve)
- Wavelength scanning
- Kinetics
- DNA/protein
- Multiwavelength test
- System utility

PC system requirements:

Pentium or above PC, CD-ROM, USB ports; 32 MB memory (>256 MB is strongly recommended); >50 MB hard disc space; Microsoft Windows 2000/XP/Vista/7

More advanced software functionalities

- Printable spectrums, results and reports
- No memory limits by spectrophotometer
- Standard curve - up to 20 standards
- Wavelength scan
- Automatic record of peaks and valleys (unlimited number of channels)
- Off-line calculation and processing including:
 - 1st to 4th derivation
 - Smoothing, combination, zooming, overlap
- Multiwavelength scan
- Up to 20 wavelengths
- Multiple sample measurement (with optional automatic cell changer Cat. No. 634-6010)

VWR V-1200 SPECTROPHOTOMETER

- Photometrics (absorption, transmission)
- Standard curves (with standards or coefficient mode)
- Optional software M.Wave Professional (see overleaf)

2 YEAR WARRANTY

Ideal for QC or education

- Basic VIS
- 325 - 1100 nm
- 4 nm bandwidth

Functionalities

Photometry:

- Quantitative (standards or coefficient)
- System utilities

Standard curve:

- Up to 9 standard solutions for calibration equation curve
- Concentration measurement, standard curve $c = K * A + B$



Technical specifications

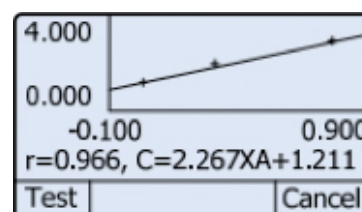
Optical system	Single beam
Lamp	Tungsten
Wavelength range (nm)	325 - 1100
Bandwidth (nm)	4
Wavelength accuracy (nm)	2
Stray light	≤0,3%
Photometric range	0 - 200% T, -0,3...+3,0 A, 0 - 9999 C
Photometric accuracy	≤0,5% T or 0,005 A @ 1 A
Stability	0,002 A/h @ 500 nm
Internal memory	200 result & 200 standard curves
Language	EN, FR, DE, ES
Display	128 x 64 dot matrix LCD
Interfaces for printer/accessory	Parallel/16 pin
Interface for PC	USB type B

Description

V-1200 spectrophotometer including 4 glass cells, manual cell changer UK/EU/CH power cables manual and dust cover

Cat. No.

634-6000



QUANTITATION

Date & time: mm-dd-yyyy hh:mm:ss
 Model: V-1200
 Serial no.: VECXXXXXX
 Firmware version: 2.5.0
 VWR International bvba
 $C = 1,000 * A + 1,000$
 $r = 1,0000$

No.	WL. (nm)	Abs.	Conc.
1	500,0	0,120	1,120
2	500,0	0,127	1,127
3	500,0	0,121	1,121
End.			

VWR UV-1600PC SPECTROPHOTOMETER

- Photometry
- Quantitative with standard curve or coefficient
- Kinetics
- Including PC software M.Wave professional

2 YEAR WARRANTY

Ideal for QC or research

- Basic UV/VIS
- 190 - 1100 nm
- 4 nm bandwidth
- Includes software

Functionalities

Photometry:

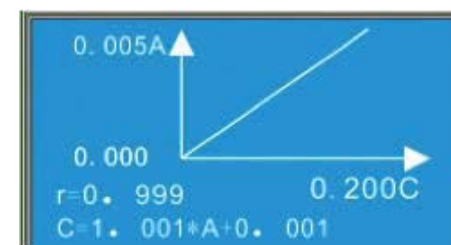
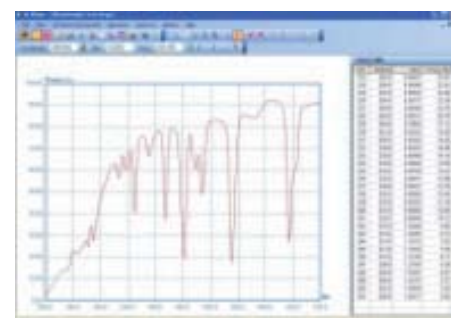
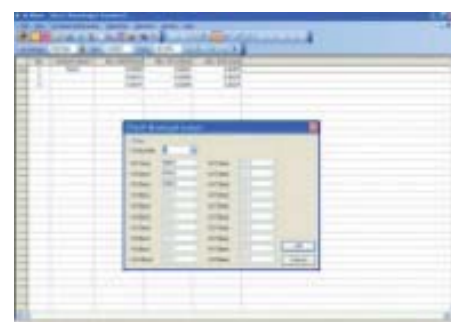
- Absorption, transmission, concentration

Standard curve:

- Standard curve: Up to 9 standards
- Coefficient method: $C = kA + b$ for known k and b

Kinetics

- For scanning time course or reacting rate calculations
- Real time display abs. vs time



546.0nm		0.001A
No.	WL.	Abs.
1	230.0	0.001
2	340.0	0.000
3	450.0	0.002
4	540.0	0.000
5	620.0	0.003

Technical specifications

Optical system	Single beam
Lamp	Deuterium D2, tungsten
Wavelength range (nm)	190 - 1100
Bandwidth (nm)	4
Wavelength accuracy (nm)	0,5
Stray light	≤0,05% T @ 220 nm & 360 nm
Photometric range	0 - 200% T, -0,3....+3,0 A, 0 - 9999 C
Photometric accuracy	≤0,5% T or 0,005 A @ 1 A
Stability	0,002 A/h @ 500 nm
Internal memory	200 results & 200 standard curves
Language	EN, FR, DE, ES
Display	128 x 64 dot matrix LCD
Interfaces for printer/accessory	Parallel/16 pin
USB connection	For PC

Description

Description	Cat. No.
UV-1600PC spectrophotometer including manual 4-cell changer, 4 glass cells, 2 quartz cells, UK/EU/CH power cables, USB cable, software, manual and dust cover	634-6001

VWR V-3000PC SPECTROPHOTOMETER

2 YEAR WARRANTY

- Easy to use
- USB port for result export
- Photometrics (absorption, transmission)
- Quantitative, kinetics
- Wavelength scan, multiwavelength measurement
- Including PC software UV-Analyst

Ideal for routine measurement and education

- Advanced VIS
- 320 - 1100 nm
- 4 nm bandwidth
- 2 USB ports
- Includes software

Functionalities

Photometry:

- Absorption, transmission, concentration

Quantitative:

- Up to 10 standards
- Four methods for fitting calibration curve:
 - Linear
 - Linear through zero
 - Square
 - Cubic

Wavelength scan:

- Wavelength scan intervals with 0,1/0,2/0,5/1/2/5 nm
- Scan speeds from 100 to 1000 nm/min
- Off-line calculation: Re-scaling, curve tracking and peak search

Multiwavelength:

- Up to 10 wavelengths

Kinetics:

- For scanning time course or reacting rate calculations
- Real time display abs. vs time
- Parameters for wait time and measurement time up to 12 h in time intervals of 0,5/1/2,5/10/30/60 s
- Off-line calculation: re-scaling, curve tracking and selection
- Rate calculated with linear regression



Technical specifications

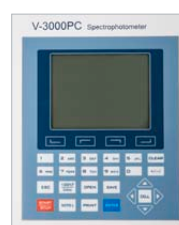
Optical system	Single beam
Lamp	Tungsten
Wavelength range (nm)	320 - 1100
Bandwidth (nm)	4
Wavelength accuracy (nm)	0,5
Stray light	≤0,05% T @ 360 nm
Photometric range	0 - 200% T, -0,3....+3,0 A, 0 - 9999 C
Photometric accuracy	≤0,5% T or 0,005 A @ 1 A
Stability	0,002 A/h @ 500 nm
Internal memory	200 results & 200 standard curves
Language	EN, FR, DE, ES
Display	320 x 240 dot matrix LCD
Interfaces for printer/accessory	Parallel/16 pin
USB connection	USB type B to PC/USB type A for memory stick

Description

V-3000PC spectrophotometer including manual 4-cell changer (10 mm cells), 4 glass cells, UK/EU/CH power cords, USB cable, software, manual and dust cover

Cat. No.

634-6040



VWR UV-3100PC SPECTROPHOTOMETER

- Photometry
- Quantitative with standard curve or coefficient
- Kinetics
- Solvent resistant alphanumeric keypad
- Including PC software UV-Analyst

2 YEAR WARRANTY

Ideal for QC, research, biochemical and pharmaceutical applications

- Advanced scientific UV/VIS
- 190 - 1100 nm
- 2 nm bandwidth
- 2 USB ports
- Includes software

Functionalities

Photometry:

- Absorption, transmission, concentration

Quantitative:

- Up to 10 standards
- Four methods for fitting calibration curve:
 - Linear
 - Linear through zero
 - Square
 - Cubic

Wavelength scan:

- Wavelength scan intervals with 0,1/0,2/0,5/1/2/5 nm
- Scan speeds from 100 to 1000 nm/min
- Off-line calculation: Re-scaling, curve tracking and peak search

Multiwavelength:

- Up to 10 wavelengths

Kinetics:

- For scanning time course or reacting rate calculations
- Real time display abs. vs time
- Parameters for wait time and measurement time up to 12 h in time intervals of 0,5/1/2,5/10/30/60 s
- Off-line calculation: Re-scaling, curve tracking and selection
- Rate calculated with linear regression

DNA/protein:

- Concentration and DNA purity
- Absorbance ratio 260 nm/280 nm or 260 nm/230 nm with optional subtracted absorbance at 320 nm
- DNA/RNA concentration (A260)
- Protein concentration (A280)
- Concentration/sample purity (A260/A280, A260/A230)
- Other wavelengths and factors may be entered



Technical specifications

Optical system	Single beam
Lamp	Deuterium D2, tungsten
Wavelength range (nm)	190 - 1100
Bandwidth (nm)	2
Wavelength accuracy (nm)	0,5
Stray light	≤0,05% T @ 220 nm & 360 nm
Photometric range	0 - 200% T, -0,3....+3,0 A, 0 - 9999 C
Photometric accuracy	≤0,5% T or 0,005 A @ 1 A
Stability	0,002 A/h @ 500 nm
Internal memory	200 results & 200 standard curves
Language	EN, FR, DE, ES
Display	320 x 240 dot matrix LCD
Interfaces for printer/accessory	Parallel/16 pin
USB connection	USB type B to PC/USB type A for memory stick

Description

Description	Cat. No.
UV-3100PC spectrophotometer including manual 4-cell changer (10 mm cells) 4 glass cells, 2 quartz cells, UK/EU/CH power cords, USB cable, software, manual and dust cover	634-6042

VWR UV-6300PC SPECTROPHOTOMETER

- Photometrics
- Concentration, kinetics, quantitation
- Multiwavelength scan, spectrum scan
- DNA/RNA and protein analysis
- Includes UV-Analyst software

2 YEAR WARRANTY

Ideal for QC, research, biochemical, clinical and pharmaceutical applications

- 190 - 1100 nm
- 1 nm bandwidth
- Includes software

Functionalities

Photometry:

- Absorption, transmission, concentration

Quantitative:

- Up to 10 standards
- Four methods for fitting calibration curve:
 - Linear
 - Linear through zero
 - Square
 - Cubic

Wavelength scan:

- Wavelength scan intervals with 0,1/0,2/0,5/1/2/5 nm
- Scan speeds from 100 to 3000 nm/min
- Off-line calculation: Re-scaling, curve tracking and peak search

Multiwavelength:

- Up to 10 wavelengths

Kinetics:

- For scanning time course or reacting rate calculations
- Real time display abs. vs time
- Parameters for wait time and measurement time up to 12 h in time intervals of 0,5/1/2,5/10/30/ 60 s
- Off-line calculation: Re-scaling, curve tracking and selection
- Rate calculated with linear regression

DNA/protein

- Concentration and DNA purity
- Absorbance ratio 260 nm/280 nm or 260 nm/230 nm with optional subtracted absorbance at 320nm
- DNA/RNA concentration (A260)
- Protein concentration (A280)
- Concentration/sample purity (A260/A280, A260/A230)
- Other wavelengths and factors may be entered



Technical specifications	
Optical system	Double beam
External memory interface	USB
Lamp	Deuterium D2, tungsten
Wavelength range (nm)	190 - 1100
Bandwidth (nm)	1
Wavelength accuracy (nm)	0,3
Stray light	≤0,05% T @ 220 nm & 360 nm
Photometric range	0 - 200% T, -0,3...+3,0 A, 0 - 9999 C
Photometric accuracy	≤0,3% T or 0,002 A @ 1 A
Baseline	0,001 A (200 to 1000 nm)
Stability	0,001 A/h @ 500 nm
Internal memory	200 result & 200 standard curves
Language	EN, FR, DE, ES
Display	320 x 240 dot matrix LCD
Interfaces for printer/accessory	Parallel/16 pin
USB connection	USB type B to PC/USB type A for memory stick

Description	Cat. No.
UV-6300PC spectrophotometer including single cell holder (10 mm cells) 4 glass cells, 2 quartz cells, UK/EU/CH power cords, USB cable, USB stick (8 GB) software, manual and dust cover	634-6041

ACCESSORIES FOR VWR SPECTROPHOTOMETERS

Description	V-1200	UV-1600PC	V-3000	UV-3100PC	UV-6300PC	Cat. No.
Cell holder, 4 position, for 10 mm standard cells	•	•	•	•		634-6003
Cell holder (sample), 1 position, for 10 mm standard cells					•	634-0777
Cell holder (reference), 1 position, for 10 mm standard cells					•	634-0778
M.Wave Professional	○	•				634-0774
10 mm standard square glass cells, Pk4, 10 mm optical path length, outer dimensions: 12.5 x 12.5 x 45 mm	•	•	•	•	•	634-6013
10 mm standard square quartz cells, Pk2, 10 mm optical path length, outer dimensions: 12.5 x 12.5 x 45 mm		•		•	•	634-6018
Cell holder, 4 position, for 20 to 50 mm rectangular cells					○	634-6045
Cell holder, 4 position, for 100 mm rectangular cells					○	634-6046
Cell holder, 1 position, for 100 mm rectangular cells					○	634-6047
Cell holder, 1 position, for cylindrical cells					○	634-6048
Cell holder, 1 position, thermostatable, for 10 mm standard cells (external water bath required)					○	634-6049
Cell holder, 4 position, thermostatable, for 10 mm standard cells (external water bath required)					○	634-6050
Cell holder, 1 position, for test tubes, max. height 100 mm					○	634-6051
Cell holder, for solid samples, max. thickness 3.5 mm					○	634-6052
Cell holder, 4 position, for 20 to 50 mm rectangular cells	○	○	○	○		634-6004
Cell holder, 4 position, for 100 mm rectangular cells	○	○	○	○		634-6005
Cell holder, 1 position, for cylindrical cells	○	○	○	○		634-6006
Cell holder, 1 position, thermostatable, for 10 mm standard cells (external water bath required)		○	○	○		634-6007
Cell holder, 1 position, for micro cells, 15 mm centre beam height	○	○	○	○	○	634-0687
Cell holder, 1 position, for test tubes, max. height 100 mm	○	○	○	○		634-6009
Cell holder, 8 position, automatic, for 10 mm standard cells		○	○	○	○	634-6010
Cell holder, for solid samples, max. thickness 3.5 mm	○	○	○	○		634-6011
Cell holder, 4 position, thermostatable, for 10 mm standard cells (external water bath required)		○	○	○		634-6012
Cell holder A-102, 1 position, Peltier thermostatted incl. 10 mm standard cells; 15 mm centre beam height		○	○	○	○	634-0698
Sipper unit A-101, no temperature control, 15 mm centre beam height. Flow through cell 10 mm path length included in delivery		○	○	○	○	634-0699
Sipper unit A-100, with temperature control, 15 mm centre beam height. Flow through cell 10 mm path length included in delivery		○	○	○	○	634-0763
Thermal printer	○	○	○	○	○	634-6039
Paper for thermal printer 57 mm * 50 m, Core: 1/2"	○	○	○	○	○	634-6043

Lamps

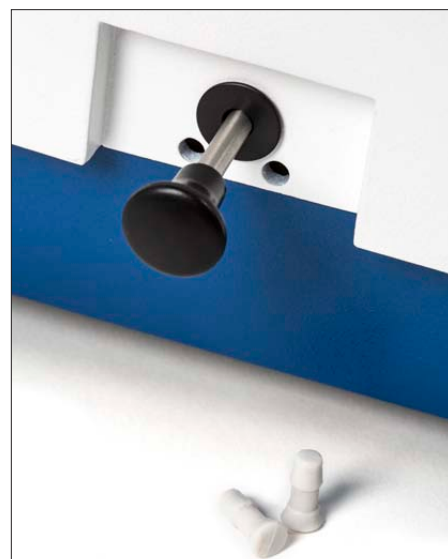
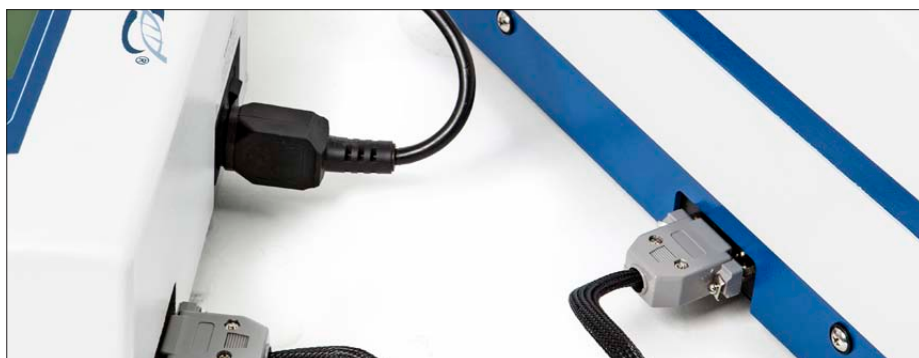
Halogen Lamp, 12V20W, Philips	x	x	x	x		634-6037
Halogen Lamp, 12V20W, Osram					x	634-0776
Deuterium Lamp		x		x	x	634-6038

• delivered with the main unit

○ optional accessory

x = accessory applicable to corresponding main unit

All cell holders have a centre beam height of 15 mm



VWR DISPOSABLE CUVETTES

Disposable cuvettes made from optical polystyrene (PS) with optimal transmittance from 340 to 900 nm or PMMA with a range of 300 to 900 nm. 10 mm optical path.

- Minimal variation of extinction values
- Recessed windows
- Resealable packs of 100



Type	Window material	Volume (ml)	Range (nm)	Cat. No.
Macro	PS	2,5 - 4	340 - 900	634-0675
Macro	PMMA	2,5 - 4	300 - 900	634-0677
Semi-micro	PS	1,5 - 3	340 - 900	634-0676
Semi-micro	PMMA	1,5 - 3	300 - 900	634-0678

VWR CHEMICALS SPECTRONORM SOLVENTS

Purified from selected raw materials under ISO 9001 conditions to eliminate impurities through chemical and physical treatment

- Guaranteed with extremely low water content
- Evaporation residue less than 5 ppm
- Filtered at 0,2 µm and bottled under nitrogen
- Packed in glass bottles with GL 45 closures
- PTFE caps lined to prevent contamination
- High optical purity plus high and wide UV specification range
- Very high transmittance, even in low wavelength areas



SPECTRONORM® solvents for spectroscopy - material	Pk (l)	Cat. No.
Acetone	1	84700.290
	2,5	84700.320
Acetonitrile	1	84701.290
	2,5	84701.320
1-Butanol	1	84709.290
Chloroform	1	22715.293
Chloroform stab ETOH	1	83951.290
Cyclohexane	1	23225.296
	2,5	23225.320
Dichloromethane	1	84702.290
	2,5	84702.320
Diethyl ether	1	84703.290
	2,5	84703.320
Dimethyl sulphoxide	1	84711.290
	2,5	84711.320
1,4-Dioxane	1	84715.290
Ethyl acetate	1	84704.290
	2,5	84704.320
Isooctane	1	28776.293
	2,5	28776.320
Methanol	1	84705.290
	2,5	84705.320
2-Methylbutane	1	84716.290
N,N-Dimethylformamide	1	84710.290
	2,5	84710.320
Chloroform stab ETOH	1	83951.290
Chloroform	1	22715.293
N Hexane	2,5	140096E
n-Heptane	1	84712.290
	2,5	84712.320
n-Pentane	1	84714.290
	2,5	84714.320
2-Propanol	1	84706.290
	2,5	84706.320
tert-Butyl methyl ether	1	84713.290
Tetrachloroethylene	1	83950.290
Tetrahydrofuran	1	84707.290
	2,5	84707.320
Toluene	1	84708.290
	2,5	84708.320

UV/VIS STANDARDS

- Ready to use, so no waste, no liquid handling
- Permanently sealed cuvettes available
- Compatible with all spectrophotometers
- NIST traceable and produced with salts directly from NIST where applicable
- Certified measurement uncertainties
- Consistency of product - independent, traceable, certified
- Certificates of Analysis and SDS available online
- Prepared gravimetrically on a weight/weight basis
- Concentration of each standard verified by high performance calibrated spectrophotometers by high purity standards traceable to NIST, ISO Guide 34 certified standards



Description	Cat. No.
Linearity Standards @ 235, 257, 313 and 350 nm, Potassium Dichromate Linearity Set With Blank - 0/20/40/60/80 and 100 mg/l (packed in six permanently sealed UV Cuvettes)	84750.600
Potassium Dichromate Absorbance/Transmission Standard - 20 mg (packed in single permanently sealed UV Cuvette plus Blank) Linearity Standards @ 235, 257, 313 and 350 nm	84751.600
Potassium Dichromate Absorbance/Transmission Standard - 40 mg (packed in single permanently sealed UV Cuvette plus Blank) Linearity Standards @ 235, 257, 313 and 350 nm	84752.600
Potassium Dichromate Absorbance/Transmission Standard - 60 mg (packed in single permanently sealed UV Cuvette plus Blank) Linearity Standards @ 235, 257, 313 and 350 nm	84753.600
Potassium Dichromate Absorbance/Transmission Standard - 80 mg (packed in single permanently sealed UV Cuvette plus Blank) Linearity Standards @ 235, 257, 313 and 350 nm	84754.600
Potassium Dichromate Absorbance/Transmission Standard - 100 mg (packed in single permanently sealed UV Cuvette plus Blank) Linearity Standards @ 235, 257, 313 and 350 nm	84755.600
Blank - 0,001 M Perchloric Acid - 0 mg/l Linearity Standards @ 235, 257, 313 and 350 nm	84756.180
Potassium Dichromate Absorbance/Transmission Standard - 20 mg Linearity Standards @ 235, 257, 313 and 350 nm	84757.180
Potassium Dichromate Absorbance/Transmission Standard - 40 mg Linearity Standards @ 235, 257, 313 and 350 nm	84758.180
Potassium Dichromate Absorbance/Transmission Standard - 60 mg Linearity Standards @ 235, 257, 313 and 350 nm	84759.180
Potassium Dichromate Absorbance/Transmission Standard - 80 mg Linearity Standards @ 235, 257, 313 and 350 nm	84760.180
Potassium Dichromate Absorbance/Transmission Standard - 100 mg Linearity Standards @ 235, 257, 313 and 350 nm	84761.180
Nicotinic Acid Linearity Set With Blank in Sealed Cuvettes - 0 mg/l, 6 mg/l, 12 mg/l, 18 mg/l, 24 mg/l (set of 5 permanently sealed UV Cuvettes) Linearity Standards @ 213 and 261 nm	84762.600
Nicotinic Acid Absorbance/Transmission Standard 6 mg/l (single permanently sealed UV cuvette plus blank) Linearity Standards @ 213 and 261 nm	84763.600
Nicotinic Acid Absorbance/Transmission Standard 12 mg/l (single permanently sealed UV cuvette plus blank) Linearity Standards @ 213 and 261 nm	84764.600
Nicotinic Acid Absorbance/Transmission Standard 18 mg/l (single permanently sealed UV cuvette plus blank) Linearity Standards @ 213 and 261 nm	84765.600
Nicotinic Acid Absorbance/Transmission Standard 24 mg/l (single permanently sealed UV cuvette plus blank) Linearity Standards @ 213 and 261 nm	84766.600
Blank - 0,1 M Hydrochloric Acid Linearity Standards @ 213 and 261 nm	84767.180
Nicotinic Acid Absorbance/Transmission Standard 6 mg/l Linearity Standards @ 213 and 261 nm	84768.180
Nicotinic Acid Absorbance/Transmission Standard 12 mg/l Linearity Standards @ 213 and 261 nm	84769.180
Nicotinic Acid Absorbance/Transmission Standard 18 mg/l Linearity Standards @ 213 and 261 nm	84770.180
Nicotinic Acid Absorbance/Transmission Standard 24 mg/l Linearity Standards @ 213 and 261 nm	84771.180
Didymium Solution UV and Visible Wavelength Standard 298 to 865 nm (single permanently sealed UV cuvette) Wavelength Standards (certified at 0,1/0,2/0,5/1,0/2,0 and 5 nm slit widths)	84772.600
Samarium Solution UV and Visible Wavelength Standard 235 to 480 nm (single permanently sealed UV cuvette) Wavelength Standards (certified at 0,1/0,2/0,5/1,0/2,0 and 5 nm slit widths)	84773.600
Holmium Oxide Solution UV and Visible Wavelength Standard 240 to 640 nm (single permanently sealed UV cuvette) Wavelength Standards (certified at 0,1/0,2/0,5/1,0/2,0 and 5 nm slit widths)	84774.600
Didymium Solution UV and Visible Wavelength Standard 298 to 865 nm Wavelength Standards (certified at 0,1/0,2/0,5/1,0/2,0 and 5 nm slit widths)	84775.180
Samarium Solution UV and Visible Wavelength Standard 235 to 480 nm Wavelength Standards (certified at 0,1/0,2/0,5/1,0/2,0 and 5 nm slit widths)	84776.180
Holmium Oxide Solution UV and Visible Wavelength Standard 240 to 640 nm Wavelength Standards (certified at 0,1/0,2/0,5/1,0/2,0 and 5 nm slit widths)	84777.180
Stray Light Inorganic Cut-off filter (390 nm) - Sodium Nitrite (single permanently sealed UV cuvette plus blank) Stray Light Standards	84778.600
Stray Light Inorganic Cut-off filter (260 nm) - Potassium Iodide (single permanently sealed UV cuvette plus blank) Stray Light Standards	84779.600
Stray Light Inorganic Cut-off filter (260 nm) - Sodium Iodide (single permanently sealed UV cuvette plus blank) Stray Light Standards	84780.600
Stray Light Inorganic Cut-off filter (227 nm) - Lithium Carbonate (single permanently sealed UV cuvette plus blank) Stray Light Standards	84781.600
Stray Light Inorganic Cut-off filter (205 nm) - Sodium Chloride (single permanently sealed UV cuvette plus blank) Stray Light Standards	84782.600
Stray Light Inorganic Cut-off filter (200 nm) - Potassium chloride (single permanently sealed UV cuvette plus blank) Stray Light Standards	84783.600
Stray Light Inorganic Cut-off filter (390 nm) - Sodium Nitrite Stray Light Standards	84784.180
Stray Light Inorganic Cut-off filter (260 nm) - Potassium Iodide Stray Light Standards	84785.180
Stray Light Inorganic Cut-off filter (260 nm) - Sodium Iodide Stray Light Standards	84786.180
Stray Light Inorganic Cut-off filter (227 nm) - Lithium Carbonate Stray Light Standards	84787.180
Stray Light Inorganic Cut-off filter (205 nm) - Sodium Chloride Stray Light Standards	84788.180
Stray Light Inorganic Cut-off filter (200 nm) - Potassium chloride Stray Light Standards	84789.180
Stray Light Blank - Aqueous Stray Light Standards	84829.180
Toluene in Hexane Bandwidth Standard With Blank in Sealed Cuvettes - Ratio of 268,7 nm peak to 266,8 nm trough (set of 2 permanently sealed UV cuvette) Bandwidth Standard	84830.600
Bandwidth Standard - Blank - Ratio of 268,7 nm peak to 266,8 nm trough (single permanently sealed UV cuvette) Bandwidth Standard	84832.600
Bandwidth Standard - Toluene in Hexane - Ratio of 268,7 nm peak to 266,8 nm trough	84833.180
Bandwidth Standard - Blank - Ratio of 268,7 nm peak to 266,8 nm trough	84795.180

COLOUR STANDARDS

- Ready to use for use as calibration and/or quality control standards
- Designed specifically for use in ASTM analytical methods
- Presented in high quality tamper evident bottles
- Produced in accordance with ASTM methods (D1500, D6045, D1209)
- Consistency of product - independent, traceable, certified
- Certificates of Analysis and SDS available online
- Prepared gravimetrically on a weight/weight basis
- Concentration of each standard verified by high performance calibrated spectrophotometers using high purity ISO Guide 34 accredited spectrophotometric standards



Description	Pk (ml)	Cat. No.
ASTM Colour Standard Sample A1	100	84834.180
	500	84834.260
ASTM Colour Standard Sample A3	100	84796.180
	500	84796.260
ASTM Colour Standard Sample A5	100	84797.180
	500	84797.260
ASTM Colour Standard Sample A7	100	84798.180
	500	84798.260
Gardner Colour 2	500	84815.260
Gardner Colour 4	500	84816.260
Gardner Colour 6	500	84817.260
Gardner Colour 8	500	84818.260
Gardner Colour 10	500	84819.260
Gardner Colour 12	500	84820.260
Gardner Colour 14	500	84821.260
Gardner Colour 16	500	84822.260
Platinum-Cobalt Colour 0	1000	84806.290
Platinum-Cobalt Colour 10	1000	84807.290
Platinum-Cobalt Colour 25	1000	84808.290
Platinum-Cobalt Colour 40	1000	84809.290
Platinum-Cobalt Colour 50	1000	84810.290
Platinum-Cobalt Colour 80	1000	84811.290
Platinum-Cobalt Colour 100	1000	84812.290
Platinum-Cobalt Colour 250	1000	84813.290
Platinum-Cobalt Colour 500	1000	84814.290
Saybolt Colour -15	100	84805.180
	500	84805.260
Saybolt Colour +0	100	84804.180
	500	84804.260
Saybolt Colour +12	100	84803.180
	500	84803.260
Saybolt Colour +15	100	84802.180
	500	84802.260
Saybolt Colour +19	100	84801.180
	500	84801.260
Saybolt Colour +25	100	84800.180
	500	84800.260
Saybolt Colour +30	100	84799.180
	500	84799.260

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