

Cells for spectrophotometer

High precision standard cells for routine analysis. Suitable for most spectral photometers, using rectangular cells. Available with cover or with stopper for a liquid-tight seal. Cover and stopper made of PTFE.

Starna Scientific

Glass types

Type G: Optical glass, 334 to 2500 nm

Type SOG: Special optical glass, 320 to 2500 nm

Type Q: Spectrosil® For UV Quartz glass, 190 to 2700 nm

Specifications

Windows parallel to: < 3 arcmin

Window polish: 60/40 scratch/dig

Window thickness: 1.25 mm

Window flatness to: < 4 Newton fringes

Standard Rectangular Cells

NEW

Starna Scientific

Type	Volume ml	Path length mm	External dimensions (W x D x H) mm	Internal width mm	Description	PK	Cat. No.
1/G/10	3.500	10	12.5 x 12.5 x 45	10	with cover	1	4.678 102
1/G/50	17.500	50	12.5 x 52.5 x 45	9.5	with cover	1	4.678 103
1/SOG/10	3.500	10	12.5 x 12.5 x 45	10	with cover	1	4.678 104
1/SOG/40	14.000	40	12.5 x 42.5 x 45	10	with cover	1	4.678 105
1/Q/1	0.400	1	12.5 x 3.5 x 45	10	with cover	1	4.678 106
1/Q/2	0.700	2	12.5 x 4.5 x 45	10	with cover	1	4.678 107
1/Q/5	1.700	5	12.5 x 7.5 x 45	10	with cover	1	4.678 108
1/Q/10	3.500	10	12.5 x 12.5 x 45	10	with cover	1	4.678 109
1/Q/20	7.000	20	12.5 x 22.5 x 45	10	with cover	1	4.678 110
1/Q/40	14.000	40	12.5 x 42.5 x 45	10	with cover	1	4.678 111
1/Q/50	17.500	50	12.5 x 52.5 x 45	9.5	with cover	1	4.678 112
1/Q/100	35.000	100	12.5 x 102.5 x 45	9.5	with cover	1	4.678 113
9/Q/10	1.400	10	12.5 x 12.5 x 45	4	with cover, semi micro cell	1	4.678 115
21/Q/1	0.400	1	12.5 x 3.5 x 55	10	with stopper	1	4.678 116
21/Q/2	0.700	2	12.5 x 4.5 x 55	10	with stopper	1	4.678 117
21/Q/5	1.700	5	12.5 x 7.5 x 48	10	with stopper	1	4.678 118
21/Q/10	3.500	10	12.5 x 12.5 x 48	10	with stopper	1	4.678 119
21/Q/20	7.000	20	12.5 x 22.5 x 48	10	with stopper	1	4.678 120
21/Q/40	14.000	40	12.5 x 42.5 x 48	10	with stopper	1	4.678 121
21/Q/50	17.500	50	12.5 x 52.5 x 48	9.5	with stopper	1	4.678 122
21/Q/100	35.000	100	12.5 x 102.5 x 48	9.5	with stopper	1	4.678 123
21/MS/Q/10	3.5	10	12.5 x 12.5 x 48	10	with stopper, stirring cell	1	4.678 124

1



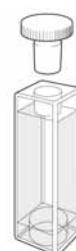
4.678 110

2



4.678 115

3



4.678 124

Standard rectangular fluorometer cells

NEW

Starna Scientific

Type	Volume ml	Path length mm	External dimensions (W x D x H) mm	Internal dimensions (W x D x H) mm	Description	PK	Cat. No.
3/Q/10	3.500	10	12.5 x 12.5 x 45	10	with cover	1	4.678 114
23/Q/10	3.500	10	12.5 x 12.5 x 48	10	with stopper	1	4.678 125

4



4.678 114

5



4.678 125

Calibration - Qualification of spectrophotometers with the certified reference materials from Hellma Analytics

To maintain constant good measurement results, a regular review of the accuracy of the spectrophotometer is required. With the use of certified reference materials from Hellma Analytics, you make sure that your equipment qualifications meet the requirements of the pharmacopoeias and fulfill your internal quality requirements, at the same time you reach the international comparability of your measurement results. The certified reference materials (calibration standards) of the DIN EN ISO 17025 accredited Hellma Analytics calibration laboratory are traceable to the primary standards of NIST (National Institute of Standards and Technology) and meet the requirements of the major pharmacopoeias (e.g. EP, DAB, USP).

Your benefits:

- High quality of the measurement results
- International comparability of measurement results
- Meeting the requirements of the major pharmacopoeias (EP, DAB, USP)
- Results traceable to NIST primary standards
- 30 years warranty on the reference materials

Scope of delivery:

- Certified reference materials (Calibration Standards) in quality storage box
- DAkkS Calibration Certificate (DIN 17025)
- Handling guidelines



9.190 980



Certified reference materials for qualifying spectrophotometer as a complete set

Glass Filters 666-S000: For testing spectrophotometers. Photometric accuracy and wavelength accuracy in the visible spectral region.

Hellma Analytics

Liquid Filters 667.033-UV: For testing spectrophotometers according to European Pharmacopoeia, wavelength accuracy, photometric accuracy, stray light behaviour, resolution.

Type	Capacity	Material	Wave-length nm	PK	Cat. No.
666-S000	666-F1	Holmium Oxide Glass Filter	279, 361, 453, 536, 638	1	9.190 973
	666-F2	Neutral Density Glass Filter NG 11	440; 465; 546,1; 590; 635		
	666-F3	Neutral Density Glass Filter NG 5	440; 465; 546,1; 590; 635		
	666-F4	Neutral Density Glass Filter NG 4	440; 465; 546,1; 590; 635		
	666-F0	Empty Filter Mount			
667.003-UV	667.100-UV	Potassium Chloride + blank	198, 200 (certified)	1	9.190 980
	667.200-UV	Toluene in Hexane + blank	266, 269		
	667.305-UV	Potassium Dichromate in HClO ₄ + blank	235, 257, 313, 350, 430		
	667-UV5	Holmium Perchlorate in Perchloric Acid	241,15; 287,15; 361,5; 536,3		

Filters also available individually.

Check for spectral resolution

Hellma Analytics

Type	Description	Wave-length nm	PK	Cat. No.
667.200-UV	Calibration set according to European Pharmacopoeia, contains filter UV6, UV9		1	6.240 535
667-UV6	Liquid filter UV6, Toluene in n-hexane	266, 269	1	9.190 983
667-UV9	Reference filter UV9, n-hexane	-	1	6.231 555

Check the wavelength accuracy

Hellma Analytics

Type	Description	Wave-length nm	PK	Cat. No.
667-UV5	Liquid filter UV5, Holmium oxide in Perchloric acid	240 - 650	1	6.227 666
667-UV25EPUSP	Liquid filter UV25, Didymium in Perchloric acid	329 - 864	1	4.670 729
667-UV35	Liquid filter UV35, Rare Earth in Perchloric acid	201 - 252	1	4.670 730
667-UV45	Liquid filter UV45, Holmium oxide and Didymium in Perchloric Acid	240 - 870	1	6.286 793
666-F1	Glass filter F1, Holmium oxide	279 - 638	1	6.201 067
666-F7A	Glass filter F7, Didymium	270 - 340	1	7.612 486
666-F7W	Glass filter F7, Didymium	329 - 875	1	6.286 794



6.227 666

4.670 729

4.670 730

6.286 793

6.201 067

7.612 486

Check for photometric accuracy

Hellma Analytics

Type	Description	Wave-length nm	PK	Cat. No.
667-UV305	Calibration set acc. to European Pharmacopoeia (UV60, UV600, UV14)		1	7.626 372
667-UV350	Liquid filter calibration-Set, Niacin (UV506, UV512, UV518, UV524, UV599)	213 - 261	1	4.670 731
667-UV60	Liquid filter UV60, Potassium dichromate 60 mg/l	235 - 350	1	6.240 039
667-UV600	Liquid filter UV600, Potassium dichromate 600 mg/l	430	1	9.190 984
667-UV14	Reference filter UV14, Perchloric acid	-	1	6.240 040
666-F2	Neutral density glass filter F2, 0.25 absorbance	440 - 635	1	6.801 867
666-F3	Neutral density glass filter F3, 0.5 absorbance	440 - 635	1	6.801 332
666-F4	Neutral density glass filter F4, 1.0 absorbance	440 - 635	1	6.801 868
666-F7W	Glass filter F7, Didymium	329 - 875	1	6.286 795


Cells for Absorption Measurement, Vis-range

Hellma Analytics

Wavelength Range:

 260nm - 2500 nm
 320 nm - 2500 nm
 360 nm - 2500 nm

Optical material:

 HOQ 310H (UV)
 Special optical glass (OS)
 Optical glass (OG)

Type	Description	Capacity μ l	External dimensions (W x D x H) mm	Internal width mm	Path length mm	optical material	PK	Cat. No.
macro		3500	12,5 x 12,5 x 45	9,5	10 (\pm 0,05)	UV	1	9.144 301
macro	PTFE lid	3500	12,5 x 12,5 x 45	9,5	10	OG	1	9.144 300
macro		7000	12,5 x 22,5 x 45	9,5	20	OG	1	9.144 302
macro		14000	12,5 x 42,5 x 45	9,5	40	OG	1	9.144 340
macro		17500	12,5 x 52,5 x 45	9,5	50	OG	1	9.144 350
semi-micro		1400	12,5 x 12,5 x 45	4	10 (\pm 0,05)	UV	1	9.144 361
semi-micro	PTFE lid	1400	12,5 x 12,5 x 45	4	10	OS	1	9.144 410
semi-micro	PTFE lid	7000	12,5 x 52,5 x 45	4	50	OS	1	9.144 450
semi-micro		1400	12,5 x 12,5 x 45	4	10	OG	1	9.144 360
micro	PTFE lid	700	12,5 x 12,5 x 45	2	10	OS	1	9.144 750

6

6 Micro Volume Analysis TrayCell

Fibre-Optic Micro Measuring Cell. Accessory for standard spectrophotometer for droplet analysis.

Hellma Analytics

Sample volume 0.7 μ l to 10 μ l.

Typical applications are:

- nucleic acid analysis.
- determination of the incorporation frequency of fluorescent dye labels (FOI).
- protein analysis (A280, BCA, Lowry etc.).
- all UV/Vis analysis utilising wavelength range 190 nm to 1100 nm.
- material: Quartz glass High Performance.

Please state the required cell centre height (8.5 mm, 15 mm or 20 mm) when placing your order!

TrayCell is supplied as standard with caps for both 0.2 mm and 1 mm light path.

Additional light path of 0.1 mm and 2 mm are available.

Capacity μ l	Height mm	Path length mm	Centre height mm	PK	Cat. No.
0.7 to 10	68.5 / 75 / 80	0.2 / 1	8.5 / 15 / 20	1	6.224 913
0.7 to 10	53 / 59.5 / 64.5	0.2 / 1	8.5 / 15 / 20	1	6.230 433

10. Optical instruments and Microscopes

Photometers/Glass cuvettes

Cells for Absorption Measurement, UV-range

Wavelength Range: 200 nm - 2500 nm.
Optical material: Quartz glass High Performance

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Type	Description	Capacity µl	External dimensions (W x D x H) mm	internal width (mm) / aperture (mm x mm/Ø)	Centre height mm	Path length mm	PK	Cat. No.
macro	Screw cap **	3500	12.5 x 12.5 x 56	9.5		10	1	6.801 219
semi-micro	PTFE lid	1400	12.5 x 12.5 x 45	4		10	1	9.144 460
semi-micro	PTFE lid	7000	12.5 x 52.5 x 45	4		50	1	9.144 465
semi-micro	PTFE lid *	1400	12.5 x 12.5 x 45	4		10	1	9.144 490
semi-micro	PTFE lid	1000	12.5 x 12.5 x 45	4	15.2	10	1	6.250 017
semi-micro	PTFE stopper	1400	12.5 x 12.5 x 46	4		10	1	9.144 730
semi-micro	PTFE stopper *	1400	12.5 x 12.5 x 46	4		10	1	9.144 372
micro	PTFE lid	700	12.5 x 12.5 x 45	2		10	1	9.144 751
micro	PTFE lid *	700	12.5 x 12.5 x 45	2		10	1	9.144 756
micro	PTFE lid	500	12.5 x 12.5 x 45	2	15.2	10	1	6.084 722
micro	PTFE lid *	500	12.5 x 12.5 x 45	2	15.2	10	1	6.076 641
micro	PTFE lid	400	12.5 x 12.5 x 40	2		10	1	9.144 758
micro	PTFE lid *	400	12.5 x 12.5 x 40	2		10	1	9.144 385

* = Measuring volume
*black side walls and base
**with silicone rubber seal and with ISO thread GL 14

Ultra micro cells for absorption measurement, UV-range, quartz glass High Performance

Quartz glass High Performance 200 - 2500 nm.
Type A: with PE stopper
Type B: open pipette tips

Hellma Analytics



Type	Path length mm	Centre height mm	External dimensions (W x D x H) mm	Aperture mm	Capacity µl	PK	Cat. No.
A	10	15	12,5 x 12,5 x 45	8x2	160	1	9.190 969
A	10	8,5	12,5 x 12,5 x 45	8x2	160	1	9.190 966
A	10	15	12,5 x 12,5 x 45	5x2	100	1	9.190 968
A	10	8,5	12,5 x 12,5 x 45	5x2	100	1	9.190 965
A	10	15	12,5 x 12,5 x 45	2,5x2	50	1	9.190 967
A	10	8,5	12,5 x 12,5 x 45	2,5x2	50	1	9.190 964
B	10	15	12,5 x 12,5 x 40	Ø 0,8	5	1	9.144 156
B	10	8,5	12,5 x 12,5 x 40	Ø 0,8	5	1	9.144 157

We can supply this
manufacturer's
whole
product range !



Photometers/Glass cuvettes



Macro cells for absorption measurement, UV-range, quartz glass High Performance

Quartz glass High Performance 200 - 2500 nm. Inside width 9.5 mm.
Base thickness 1.5 mm.

Hellma Analytics

Type A: with PTFE lid
Type B: with small glass lid
Type D: with PTFE stopper/from 40 mm with 2 PTFE stoppers

Type	Path length	External dimensions (W x D x H) mm	Capacity μl	PK	Cat. No.
	mm				
A	5	12,5 x 7,5 x 45	1750	1	9.144 205
A	10	12,5 x 12,5 x 45	3500	1	9.144 210
A	20	12,5 x 22,5 x 45	7000	1	9.144 220
A	40	12,5 x 42,5 x 45	14000	1	9.144 240
A	50	12,5 x 52,5 x 45	17500	1	9.144 250
B	1	12,5 x 3,5 x 45	350	1	9.144 201
B	2	12,5 x 4,5 x 45	700	1	9.144 202
C	100	12,5 x 102,5 x 45	35000	1	6.088 125
D	1	12,5 x 3,5 x 52	350	1	9.144 601
D	2	12,5 x 4,5 x 52	700	1	9.144 602
D	5	12,5 x 7,5 x 46	1750	1	9.144 605
D	10	12,5 x 12,5 x 46	3500	1	9.144 610
D	20	12,5 x 22,5 x 45	7000	1	9.144 620
D	40	12,5 x 42,5 x 46	14000	1	9.144 640



Macro cells for absorption measurement, VIS-range, special optical glass

Special optical glass 360 - 2500 nm. Inside width 9.5 mm. Base thickness 1.5 mm.

Hellma Analytics

Type A: with PTFE-Falzdeckel
Type B: with small glass lid
Type C: with regular glass lid
Type D: with PTFE stopper/from 40 mm with 2 PTFE stoppers

Type	Path length	External dimensions (W x D x H) mm	Capacity μl	PK	Cat. No.
	mm				
A	5	45 x 12,5 x 7,5	1750	1	9.144 105
A	10	45 x 12,5 x 12,5	3500	1	9.144 110
A	20	45 x 12,5 x 22,5	7000	1	9.144 120
A	40	45 x 12,5 x 42,5	14000	1	9.144 140
A	50	45 x 12,5 x 52,5	17500	1	9.144 150
B	1	45 x 12,5 x 3,5	350	1	9.144 101
B	2	45 x 12,5 x 4,5	700	1	9.144 102
D	10	46 x 12,5 x 12,5	3500	1	9.144 510



Macro cells for absorption measurement, NIR-range, quartz glass Extended Range

Quartz glass Extended Range, Wavelength range: 200 - 3500 nm.
Inside width 9.5 mm. Base thickness 1.5 mm.

Hellma Analytics

Type A: with PTFE lid
Type B: with small glass lid
Type D: with PTFE stopper/from 40 mm with 2 PTFE stoppers

Type	Path length	External dimensions (W x D x H) mm	Capacity μl	PK	Cat. No.
	mm				
A	5	45 x 12,5 x 7,5	1750	1	6.053 055
A	10	45 x 12,5 x 12,5	3500	1	6.086 375
A	50	45 x 12,5 x 52,5	17500	1	6.078 779
B	1	45 x 12,5 x 3,5	350	1	6.302 993
B	2	45 x 12,5 x 4,5	700	1	6.901 645
D	1	52 x 12,5 x 3,5	350	1	6.800 848
D	5	46 x 12,5 x 7,5	1750	1	6.072 791
D	10	46 x 12,5 x 12,5	3500	1	6.052 763

Cells for Fluorescence Measurement, Vis-range

Wavelength Range: 320 nm - 2500 nm
Optical material: Special optical glass

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Type	Description	Capacity µl	External dimensions (W x D x H) mm	Internal width mm	Path length mm	PK	Cat. No.
macro	PTFE-lid	3500	12.5 x 12.5 x 45	10	10 x 10	1	9.144 760 1
macro	PTFE-stopper	3500	12.5 x 12.5 x 46	10	10 x 10	1	9.144 770 2

Cells for Fluorescence Measurement, UV-range

Wavelength Range: 200 nm - 2500 nm
Optical material: Quartz glass High Performance

Hellma Analytics

Type	Description	External dimensions (W x D x H) mm	internal width (mm) / aperture (mm x mm/Ø)	Path length mm	Centre height mm	PK	Cat. No.
macro	PTFE lid, 4 window	12.5 x 12.5 x 45	10	10 x 10		1	9.144 761
macro	PTFE stopper, 4 window	12.5 x 12.5 x 46	10	10 x 10		1	9.144 771
semi-micro	PTFE stopper **	12.5 x 12.5 x 49.5	4	10 x 4		1	6.080 511 3
micro	PTFE lid	12.5 x 12.5 x 45	2	10 x 2	20.0	1	6.081 483 4
micro	PTFE lid	12.5 x 12.5 x 45	2	10 x 2		1	9.144 801
ultramicro	PE stopper, 3 window	12.5 x 12.5 x 45	5 x 3	3 x 3	15.0	1	9.144 391 5
ultramicro	PE stopper, 3 window	12.5 x 12.5 x 45	5 x 3	3 x 3	8.5	1	9.144 390
ultramicro	PE stopper, 3 window	12.5 x 12.5 x 45	5 x 2	10 x 2	15.0	1	6.051 579
ultramicro	PE stopper, 3 window	12.5 x 12.5 x 45	5 x 2	10 x 2	8.5	1	6.510 380

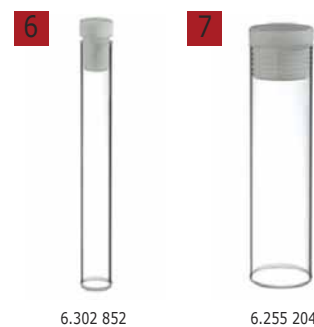
**for magnetic stirrers



Cells for light scattering measurements, UV-range

Wavelength: 200 nm - 2500 nm
Optical material: Quartz glass High Performance

Hellma Analytics



Description	Capacity µl	External dimensions (H x Ø) mm	Internal dimensions (H x Ø) mm	PK	Cat. No.
PTFE-stopper	2800	75 x 10	74 x 8	1	6.302 852 6
PTFE-stopper, outer cylinder fire-polished	2800	75 x 10	74 x 8	1	6.073 106
PTFE-stopper	14000	75 x 20	74 x 18	1	6.255 204 7

10. Optical instruments and Microscopes

Photometers/Glass cuvettes

Cells for Absorption Measurement, Flow-Through Measurement, UV-range

Wavelength Range: 200 - 2500 nm.
Optical material: Quartz glass High Performance

Hellma Analytics

Type	Path length	Capacity	Description	External dimensions (W x D x H)	Internal width	Centre height	PK	Cat. No.
	mm	µl		mm	mm	mm		
semi-micro	10	450	Supply and outlet tubes	12,5 x 12,5 x 45	11 x 4	15.0	1	6.051 845
semi-micro	50	2250	Supply and outlet tubes	12,5 x 52,5 x 45	11 x 4	15.0	1	6.080 156 ■
semi-micro	50	2250	Supply and outlet tubes	12,5 x 52,5 x 38,5	11 x 4	8.5	1	6.242 811
semi-micro	5	195	2 screw terminals *	12,5 x 12,5 x 35	11 x 3,5	15.0	1	6.059 697
semi-micro	5	195	2 screw terminals *	12,5 x 12,5 x 35	11 x 3,5	8.5	1	6.300 696
semi-micro	10	390	2 screw terminals *	12,5 x 12,5 x 35	11 x 3,5	15.0	1	9.144 667 ■
semi-micro	10	390	2 screw terminals *	12,5 x 12,5 x 35	11 x 3,5	8.5	1	9.144 666
micro	0,1	6	2 screw terminals *	12,5 x 12,5 x 35	17,5 x 3,5		1	9.144 660
micro	0,2	12	2 screw terminals *	12,5 x 12,5 x 35	17,5 x 3,5		1	6.206 587
micro	0,5	31	2 screw terminals *	12,5 x 12,5 x 35	17,5 x 3,5		1	9.144 662
micro	1	62	2 screw terminals *	12,5 x 12,5 x 35	17,5 x 3,5		1	9.144 664 ■
micro	2	124	2 screw terminals *	12,5 x 12,5 x 35	17,5 x 3,5		1	9.144 663

* M 6 x 1 and FEP tubes (outside diameter 1.9mm, inner diameter 1.1mm, length 500mm)

■ 1



6.080 156

■ 2



9.144 667

■ 3



9.144 664

■ 4



6.266 794

Flow-through cells with two optical paths lengths, Absorption and Fluorescence Measurement

Wavelength Range: 200 nm - 2500 nm
Optical material: Quartz glass High Performance

Hellma Analytics

Type	Path length	Capacity	External dimensions (W x D x H)	internal width (mm) / aperture (mm x mm/Ø)	Centre height	PK	Cat. No.
	mm	µl		mm	mm		
semi-micro*	5 x 10	550	35 x 12.5 x 12.5	11 x 6/11 x 5	15.0	1	6.267 923
semi-micro*	5 x 10	550	35 x 12.5 x 12.5	11 x 6/11 x 5	8.5	1	6.266 794 ■
semi-micro	2.5 x 5	140	35 x 12.5 x 12.5	11 x 4/11 x 2.5	15.0	1	4.658 278
semi-micro	2.5 x 5	140	35 x 12.5 x 12.5	11 x 4/11 x 2.5	8.5	1	6.286 789
semi-micro	1.5 x 3	50	35 x 12.5 x 12.5	11 x 2.5 /11 x 1.5	15.0	1	6.280 788
semi-micro	1.5 x 3	50	35 x 12.5 x 12.5	11 x 2.5 /11 x 1.5	8.5	1	6.286 790
semi-micro	1 x 10	110	35 x 12.5 x 12.5	11 x 6/11 x 1	15.0	1	6.280 645
semi-micro	1 x 10	110	35 x 12.5 x 12.5	11 x 6/11 x 1	8.5	1	6.286 791
semi-micro*	2 x 10	220	35 x 12.5 x 12.5	11 x 6/11 x 2	15.0	1	4.658 277
semi-micro	2 x 10	220	35 x 12.5 x 12.5	11 x 6/11 x 2	8.5	1	6.286 792

* For fluorescence measurement

10. Optical instruments and Microscopes

Photometers/Plastic cuvettes

1 LLG-Disposable plastic cells, PS

The shape and narrow wall thickness of the cuvettes enable an excellent heat transfer resulting in constant sample temperatures during photometric measurements.

- Cavity sorted
- Glass clear polystyrene (PS)
- Applicable wavelength range 340 nm to 900 nm
- Very low variation of extinction values
- Excellent optical transmission range
- Path length 10mm
- Overall dimensions 12.5 mm x 12.5 mm x 45 mm
- Styrofoam racks: 100 cuvettes in a styrofoam box with cover

1



Description	Capacity ml	Path length mm	Operating range nm	Material	PK	Cat. No.
Macro	4.0	10	340 to 900	PS	100	9.406 011
Semi-micro	1.6	10	340 to 900	PS	100	9.406 012

2 Disposable cuvettes

Disposable cuvettes for spectroscopy, in optical-quality PS and UV grade PMMA with optical windows for optimum transmittance when using wavelengths from 340nm to 800 nm (PS) and from 280 nm to 800 nm (PMMA). Moulding and quality control determine the reproducibility of cuvettes. Kartell cuvettes are strictly controlled and variations should be within the range ±1% absorption. This is the vital when batch analysis is being undertaken. Dust proof packaging: 100 pcs in expanded polystyrene box with lid, 5 boxes in inner carton and 12 inner cartons (60 boxes) per case.

Kartell

2



Description	Capacity ml	Path length mm	Material	PK	Cat. No.
Standard cuvettes	4.5	10	PS	100	9.406 431
Semi-micro cuvettes, low form	1.5	10	PS	100	9.406 432
Semi-micro cuvettes, high form	2.5	10	PS	100	9.406 433
Standard cuvettes, 4 clear faces	4.5	10	PS	100	9.406 434
Standard cuvettes	4.5	10	PMMA	100	9.406 435
Semi-micro cuvettes, high form	2.5	10	PMMA	100	9.406 436
Semi-micro cuvettes, low form	1.5	10	PMMA	100	9.406 437
Standard cuvettes, 4 clear faces	4.5	10	PMMA	100	9.406 438

3 Accessories for standard and semi-micro cuvettes

Kartell

3



Description	Material	Length mm	Diam.	PK	Cat. No.
Disposable stirrer	PS	90	3	100	9.406 439
Caps for cuvettes	PE-LD			1000	9.406 440
Cuvette holder for 12 cuvettes	PE			1	9.406 441

VIS cuvettes Eppendorf®, PMMA

The Eppendorf® Vis Cuvettes are disposable cuvettes made of clear plastic with a light transmission of 300 nm to 900 nm. They are the perfect tool for applications outside of the UV range, for example, colorimetric protein assays (Bradford, Lowry, etc.), determining of the optical density of bacterial cultures (OD600 methods), kinetic and fluorescence measurements. Based on the volume you would like to measure, you can select semi-micro or macro cuvette.

Eppendorf AG

4



6.265 212

5



6.265 213

Description	Capacity µl	Path length mm	Operating range nm	Material	PK	Cat. No.
Macro	4500	10	300 -900	PMMA	1000	6.265 212
Semi-micro	3000	10	300 -900	PMMA	1000	6.265 213

Photometers/Plastic cuvettes



1 Macro and semi micro cuvettes

Sorted by mould cavity number. PMMA or PS.

BRAND

Quality characteristics:

- Minimal extinction value variation.
- Optically perfect transmission range
- Recessed window, to protect against scratches
- Arrow head marking shows the direction of transmission.

Advantages to user:

- Ideal for kinetics measurements
- 1000 cells from the same cavity in each pack
- Practical packaging: clear, re-closable.

Polymethylmethacrylate (PMMA) cuvettes

Typical operating range: from 300 nm to 900 nm.

Standard deviation at 320 nm ± 0.004 extinction units.

Polystyrene (PS) cuvettes

Typical operative range: from 340 nm to 900 nm.

Standard deviation at 360 nm $\leq \pm 0.005$ extinction units.

Macro cell with 4 optical windows, PS/UV-transparent

Particularly suitable for fluorescence spectroscopy. The UV version can be used from a wavelength of 230 nm and shows minimal autofluorescence. Standard deviation: Cuvettes of Polystyrene (PS) at 360 nm $\leq \pm 0.005$ extinction units, cuvettes UV-transparent at 240 nm $\leq \pm 0.007$ extinction units and at 300 nm $\leq \pm 0.005$ extinction units.

Dimensions: 12.5 mm x 12.5 mm x 45 mm
 Window: Macro cell 10 mm x 35 mm
 Semi micro cell 4.5 mm x 23 mm

Description	Volume ml	Path length mm	Operating range nm	Material	PK	Cat. No.
Macro	2.5 to 4.5	10	300 to 900	PMMA	100	9.406 111
Semi-micro	1.5 to 3.0	10	300 to 900	PMMA	100	9.406 115
Macro	2.5 to 4.5	10	340 to 900	PS	100	9.406 110
Semi-micro	1.5 to 3.0	10	340 to 900	PS	100	9.406 114
Macro, 4 optical windows	2.5 to 4.5	10	340 to 900	PS	100	6.280 982
Macro, 4 optical windows	2.5 to 4.5	10	340 to 900	PS	500	6.280 981
Macro, 4 optical windows	2.5 to 4.5	10	230 to 900	UV-transparent	100	6.280 680
Macro, 4 optical windows	2.5 to 4.5	10	230 to 900	UV-transparent	500	6.280 980



2 Macro and semi micro cuvettes, plastic

NEW

For photometric measurements even in the UV range.

Ratiolab

- Applicable wavelength range 220 to 900 nm
- Low variation of extinction values
- Good optical transmission range
- Sorted by mould cavity number

Scope of supply: 100 netidentical cuvettes in styrofoam box with a resealable cover

Description	Nominal capacity ml	Operating range nm	Path length mm	Dimensions (W x D x H) mm	PK	Cat. No.
Macro	4.0	220 ... 900	10	12,5 x 12,5 x 45	100	6.225 579
Semi-micro	1.6	220 ... 900	10	12,5 x 12,5 x 45	100	6.243 404



1 Plastic disposable UV-Cuvettes for the UV/VIS range

BRAND

UV-transparent plastic Brand cuvettes replace fragile glass or quartz cuvettes in many applications that were previously beyond the range of plastic cuvettes. Designed for single use, they eliminate time-consuming washing, and the cross-contamination risk associated with washing and re-using cuvettes. Their very high chemical resistance allows use with most polar solvents, acids and alkalis (e.g. Acetone, Butanone, DMF, hydrochloric acid). The UV-cuvette micro has a working range from 230 nm - sample volumes as small as 70 µl are sufficient. The UV-Cuvette is also available in macro and semi-macro sizes for applications from 230 nm to 900 nm.

- Specially designed for photometric determination of proteins, ssDNA, dsDNA, TNA and oligonucleotides in the UV range.
- Ideally suited for measurements at 260 nm, 280 nm and in the visible range.
- Two different centre heights (8.5 mm and 15 mm) allow use in most commercial spectrophotometers without adapters (for more information please visit the Brand website, www.brand.de).
- Round caps provide a tight seal and allow storage of samples at -20 °C.
- Coloured caps are available for easy sample identification.
- Grouped by mould cavity number to minimize extinction value variation.

The UV cuvette is also available as a macro and semi-microscope cuvette for analyzes from 230 to 900 nm.

Made of plastic for the UV/VIS range. For analyzes from 230 to 900 nm

- Compatible with most polar solvents, as well as acids and alkalis (eg acetone, butanone, DMF, concentrated HCL, etc.)
- Ideal for the determination of proteins, DNA, RNA
- number-sorted to reduce extinction deviations
- Verified windows to protect against scratches



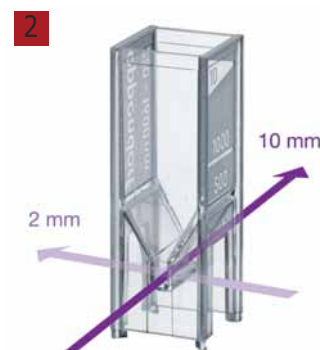
Description	Capacity	Path length	Operating range	PK	Cat. No.
	µl	mm	nm		
UV micro cuvette (centre height 8.5 mm)	70 - 850	10.0	230 - 900	100	9.406 120
UV micro cuvette (centre height 8.5 mm)	70 - 850	10.0	230 - 900	500	9.406 121
UV micro cuvette (centre height 15 mm)	70 - 550	10.0	230 - 900	100	9.406 122
UV micro cuvette (centre height 15 mm)	70 - 550	10.0	230 - 900	500	9.406 123
Cap for UV micro cuvette, blue				100	9.406 124
Cap for UV micro cuvette, yellow				100	9.406 125
Cap for UV micro cuvette, green				100	9.406 126
Cap for UV micro cuvette, orange				100	9.406 127
UV macro cuvette	2.5 ml - 4.5 ml	10.0	230 - 900	100	9.406 119
UV semi-micro cuvette	1.5 - 3.0 ml	10.0	230 - 900	100	9.406 118

2 3 UV cuvette UVette®

Eppendorf AG

The plastic material of the UVettes® provides a transparency range of 220 nm to 1600 nm. It is possible to carry out measurements in the UV range as well as the entire VIS range.

- Suitable for measuring small volumes, min. 50 µl
- Individually blister-packed for sterile work
- DNA-/RNase- and protein-free
- Choice of two optical path lengths: 2 mm and 10 mm
- UV- and VIS-transparent between 220 nm and 1600 nm
- Volume markings at 500 µl and 1000 µl
- Total transparent material with outstanding surface properties
- Optimal filling guaranteed by tapered cuvette base
- Recessed optical window prevents scratches
- Self-standing design
- Marking possible on frosted gripping surface
- Optimal use in BioPhotometer and in most common spectrophotometers, using adapters.



Description	PK	Cat. No.
UVettes®, 80 x individually wrapped, disposable cells for direct use in BioPhotometer, path length 2 and 10 mm	80	9.409 392
UVette® routine pack, Eppendorf Quality, path length 2 and 10 mm	200	9.409 398
Starter kit, 80 x UVettes® + 1 universal adapter for photometers/spectrophotometers with beam centre height of 15 mm, convertible	80	9.409 397

1

1 HELLMANEX® III liquid
Cleaning:

HELLMANEX® III is an alkaline liquid concentrate used for the highly effective cleaning of glass or silica cells and other sensitive optical components. Laboratory equipment made of glass, quartz, sapphire and porcelain can also be cleaned using the solution.

Hellma Analytics
Characteristics:

Hellmanex® III significantly reduces the surface tension of water. The removal of dirt particles is also assured by the good wetting action of a Hellmanex® III aqueous solution, whilst its high emulsifying and dispersing capabilities prevent the re-deposition of the loosened particles. Special surface-active substances facilitate the residue-free rinsing of the optical components once they have been cleaned.

Cleaning and Dilution:

The optimal dilution depends on several factors, such as the hardness of the water, the degree and type of contamination, the temperature, etc. The use of demineralised water improves the cleaning characteristics.

Available in 1.3kg PE-bottle.

The following treatments have been proven at a **concentration (vol%) 0.5 to 2** in practice.


Attention

H phrases: H290|H315|H319|H335

Temperature°C

20-25

30-35

50-60 (quartz only)

70-80 (quartz only)

Time minutes

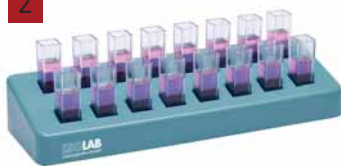
120-180

30-40

10-15

< 5

Type	Capacity Litres	PK	Cat. No.
HELLMANEX® III	1	1	9.190 985

2

2 Cuvette rack, PP

ISOLAB

For safe handling and holding of 16 spectrophotometer cuvettes with 10 mm width.

Alphanumerical index on cuvette rows enables easy identification of tube positions.

2 tier body form offers clear visibility option from horizontal direction. Autoclavable (121 °C).

Length mm	Width mm	Height mm	PK	Cat. No.
210	70	35	1	6.286 844

3

3 Cuvette rack, PP

BRAND

Grey. 16 numbered positions.

Autoclavable (121°C).

Width mm	Length mm	Height mm	PK	Cat. No.
70	210	38	1	9.145 020

4

4 Cuvette rack with attached lid, PP

For safe handling and holding up to 12 cuvettes with a 10 mm light path.

ISOLAB

These racks consist of hinged lids with secure clasps and removable inserts for easy cleaning.

The height of the lid is designed to accommodate all spectrophotometer cells - even those with covers or stoppers.

Description	PK	Cat. No.
Cuvette rack with attached lid	1	6.267 353