

Standard spectrophotometer cells

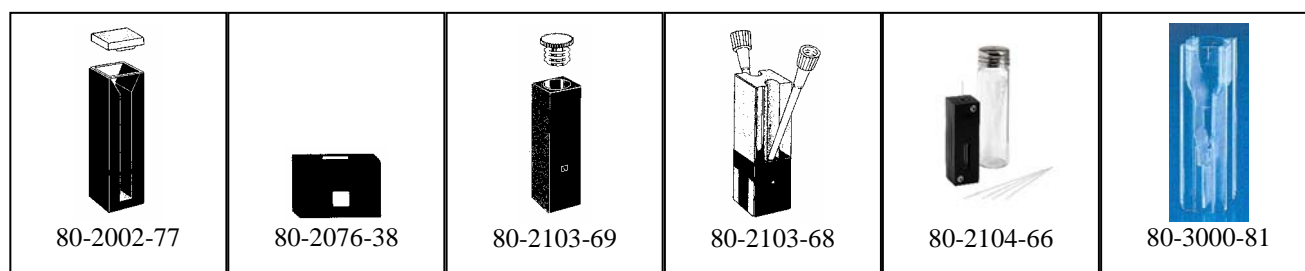
Ordering information (optical centre or "Z" height is 15mm)		
Product	UV grade silica	Optical glass
Standard rectangular with lid		
1mm pathlength, 10mm internal width, 200µl working volume, 12.5 x 45mm external dimensions	80-2002-54*	80-2003-83*
5mm pathlength, 10mm internal width, 1ml working volume, 12.5 x 45mm external dimensions	80-2002-57*	80-2003-85*
10mm pathlength, 10mm internal width, 2ml working volume, 12.5 x 45mm external dimensions	80-2002-58	80-2003-87
50mm pathlength, 10mm internal width, 10ml working volume, 52.5 x 45mm external dimensions	80-2002-63	80-2003-93
Semi-micro cell with lid and black walls		
10mm pathlength, 4mm internal width, 800 µl working volume, 12.5 x 45mm external dimensions	80-2002-77	80-2004-15
Micro cell with lid and black walls		
10mm pathlength, 2mm internal width, 400 µl working volume, 12.5 x 45mm external dimensions	80-2002-95	
Standard rectangular with stopper		
10mm pathlength, 10mm internal width, 2000 µl working volume, 12.5 x 48mm external dimensions	80-2002-70	80-2003-98
Semi-micro cell with stopper and black walls		
10mm pathlength, 4mm internal width, 800 µl working volume, 12.5 x 48mm external dimensions	80-2002-81	
Micro cell with stopper and black walls		
10mm pathlength, 2mm internal width, 400 µl working volume, 12.5 x 48 mm external dimensions	80-2002-99	

* these cells are supplied with packing pieces to facilitate use in a standard 10 mm pathlength cell holder

Microvolume spectrophotometer cells

Ordering information (optical centre or "Z" height is 15mm)	
Product	UV grade silica
Microvolume cell with black walls	
10mm pathlength, 50 µl working volume	80-2076-38
Note: Requires 80-2106-09 microvolume cell holder.	
Microvolume cell with black walls	
10mm pathlength, 70 µl working volume, 12.5 x 48 mm external dimensions	80-2103-69
Note: May require 80-2106-05 cell holder	
Ultra microvolume cell with black walls (includes micro sample viewer)	
5mm pathlength, 5-7µl working volume, 12.5 x 48 mm external dimensions	80-2103-68
Note: Requires 80-2106-06 cell holder. Cannot be used with Ultrospec 1100 <i>pro</i> / Libra S12	
Capillary cell	
0.5mm pathlength, working volume 3µl (includes 100 quartz capillaries and Cristaseal)	80-2104-66
Spare quartz capillaries (100)	
0.5mm pathlength, working volume 3µl (Cristaseal not included)	80-2104-67
Spare cristaseal (10)	
80-2109-79	
Spare micro sample viewer	
80-2109-87	

UV grade silica cells should not be used visible only instruments. Capillaries are intended for go-no go tests and not absolute absorbance measurements



Matched spectrophotometer cells

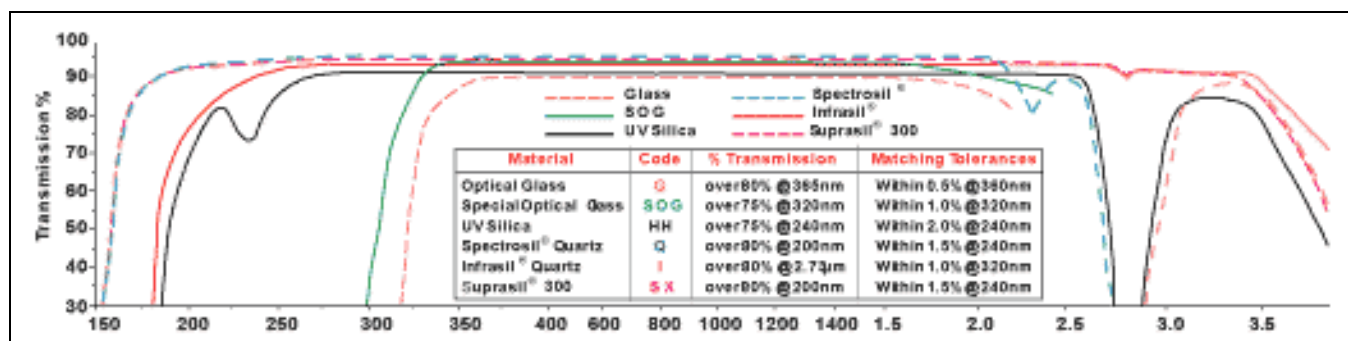
Ordering information (optical centre or "Z" height is 15mm)			
Product	Set of 2 UV grade silica	Set of 8 UV grade silica	Set of 8 optical glass
Standard rectangular with lid			
2000µl working volume, 10mm internal width, 12.5 x 45mm external dimensions	80-2099-89	80-2109-80	80-2109-81
Semi-micro with lid and black walls			
800µl working volume, 4mm internal width, 12.5 x 45mm external dimensions	80-2100-13	80-2109-82	-
Semi-micro with stopper and black walls			
800µl working volume, 4mm internal width, 12.5 x 48mm external dimensions	80-2100-22	-	-
Micro cell with lid and black walls			
400µl working volume, 2mm internal width, 12.5 x 45mm external dimensions	80-2100-25	80-2109-83	-

All matched cells have a 10mm pathlength

Other spectrophotometer cells and cell accessories

Ordering information (optical centre or "Z" height is 15mm)	
Product	Part number
Continuous flow-through cells	
10mm pathlength, UV grade Silica, 3mm internal diameter; 75µl volume, 12.5 x 45mm external dimensions	80-2003-05
10mm pathlength, Optical glass, 4mm internal diameter, 450µl volume: 12.5 x 45mm external dimensions	80-2004-45
Sipper flowcell	
10mm pathlength, 80µl internal volume, UV grade silica (includes tubing kit)	80-2080-60
Test tubes	
Glass test tubes (pack of 10), marked for optical alignment, 12 x 100mm	80-2004-50
Glass test tubes (pack of 10), marked for optical alignment, 24 x 150mm	80-2004-51
<i>Align the indicator line on the tube with the arrow on the cell compartment area (if present) to ensure accurate re-positioning as tube curvature can lead to poor reproducibility of results. Note that test tubes do not last forever, and that the surface gets scratched and/or blemished with repetitive use; if this happens they should be replaced.</i>	
Cylindrical cell	
100mm pathlength, 22mm diameter, UV grade silica (requires 80-2106-10 cylindrical cell holder)	80-2003-12
Disposable cells	
10mm pathlength, volume 4.5ml, methacrylate, pack of 100	80-2004-53
10mm pathlength, volume 2.5ml, polystyrene, pack of 100	80-2084-11
10mm pathlength, minimum volume 800µl, UV plastic, semi-micro, pack of 100	80-3000-77
10mm pathlength, minimum volume 70µl, UV plastic, ultra-micro, pack of 100	80-3000-81
[NOTE: not recommended with Ultrospec 2100 pro / 3100 pro or Libra S21 / 22]	
<i>Note that disposable cells are not intended to be washed out and re-used. Although they may be fine - if you are careful - for a couple of washes, the faces scratch quite easily and you'll get poor results if the scratch, however small, happens to be in the place where the light goes through. We recommend single use only.</i>	
Cell spacers	
For use with cells that have an 8.5mm optical centre, 6 spacers	80-2106-85
Packing pieces	
For use with 1mm and 5mm pathlength cells	
1mm pathlength cell pieces, pack of 8	80-2107-70
5mm pathlength cell packing pieces, pack of 8	80-2107-71

Cell transmission properties and cleaning cells *



Registered Trade Marks: INFRASIL® & Suprasil® 300 Heraeus Quarzglas GmbH, Hanau / Main, Germany. SPECTROSIL®, Thermal Syndicate, England. PYREX® Corning Glass Works, U.S.A. The above information illustrates the approximate transmission ranges of the guaranteed materials used in the production of Starna cells. The traces are for a thickness of 5 mm, which is approximately double the total thickness of the windows that are used in the construction of most cells.

General Cleaning Considerations

Keeping cell clean while in use is the most important element of a long, useful cell life. During the day, never let your cells dry out. If you keep them in a water or solvent bath between usage, the material that you are using will not have a chance to dry out and stick. Use only fine cloth to wipe the optical surfaces, most paper products contain wood fibres which may scratch or damage the cell face or surface. At the end of the day, ensure all cells are well cleaned and store in a suitable container after drying.

Ultrasonic Cleaners

We do not recommend the use of ultrasonic cleaning baths with cells. Each bath generates a different frequency and if your bath operates at the resonant frequency of a cell, the cell will break. We do not warranty that our cells for cleaning in an ultrasonic cleaner.

Solvent	Material	Suggested cleaning methods
Aqueous	Protein, DNA, biologics	Warm water with detergent, dilute acid rinse, copious water rinse
Aqueous	Salt solution, warm water	Acid rinse, copious water rinse
Aqueous	Basic solutions	Warm water with detergent, dilute acid rinse, copious water rinse
Organic	Oil based	Rinse with solvent, warm water with detergent, dilute acid rinse, copious water rinse
Organic	Alcohol solutions	Rinse with solvent, copious water rinse
Organic	Acidic solutions	Rinse with solvent, copious water rinse
Organic	Basic solutions	Rinse with solvent, dilute acid rinse, copious water rinse

* Information kindly provided by Starna (www.starna.com)