

LABORTOPS

valid until 30th of June 2017



Extra

New Products

Package BRAND® Premium PCR Plates + BRAND® PCR Sealing film



Every package includes 50 PCR plates 96-well and 50 qPCR sealing films.

BRAND® has significantly expanded its product range of extra-thin-wall disposable products, which were specially developed to satisfy the demands of PCR applications. Single tubes, strips of 8 and 12, and, for high sample throughput, PCR plates in 24-well, 48-well, 96-well, and 384-well formats are available. We have an optimal product for every application.



Measurement of evaporation losses of different PCR systems

A mixture of water with the cationic dye methylene blue was prepared. In each PCR plate every well was filled with 50 µl of the water dye mixture and sealed with adhesive sealing film. The weighed portion of the plates and the sealing films was determined before and after the filling of the wells. The roller was used to ensure a film seal. The PCR plates were then put into the thermal cycler Biometra T1 and a PCR run was performed (table 1).

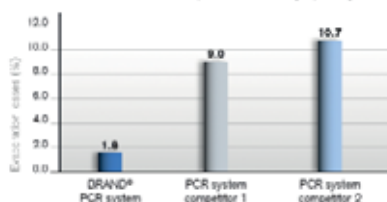
Temperatures and times during the thermal cycler process (table 1)

Temperature	Time
114 °C	3 min
94 °C	30 sec
50 °C	30 sec
72 °C	30 sec
72 °C	10 min

Finally the weighing portion of the PCR plates was examined again.

Analysis and Results

The percentaged evaporation losses of the different PCR systems were determined and represented in a graph (figure 1).



Significantly reduced evaporation losses due to a system consisting of PCR plate and closure film

BRAND® Premium PCR plates

- Ultra-thin walled
- Even and rapid heating of all samples
- Reinforced plate deck
- No warping, no wiggling, for use with robots
- Free of DNase, DNA, RNase and endotoxins
- Suitable for qPCR

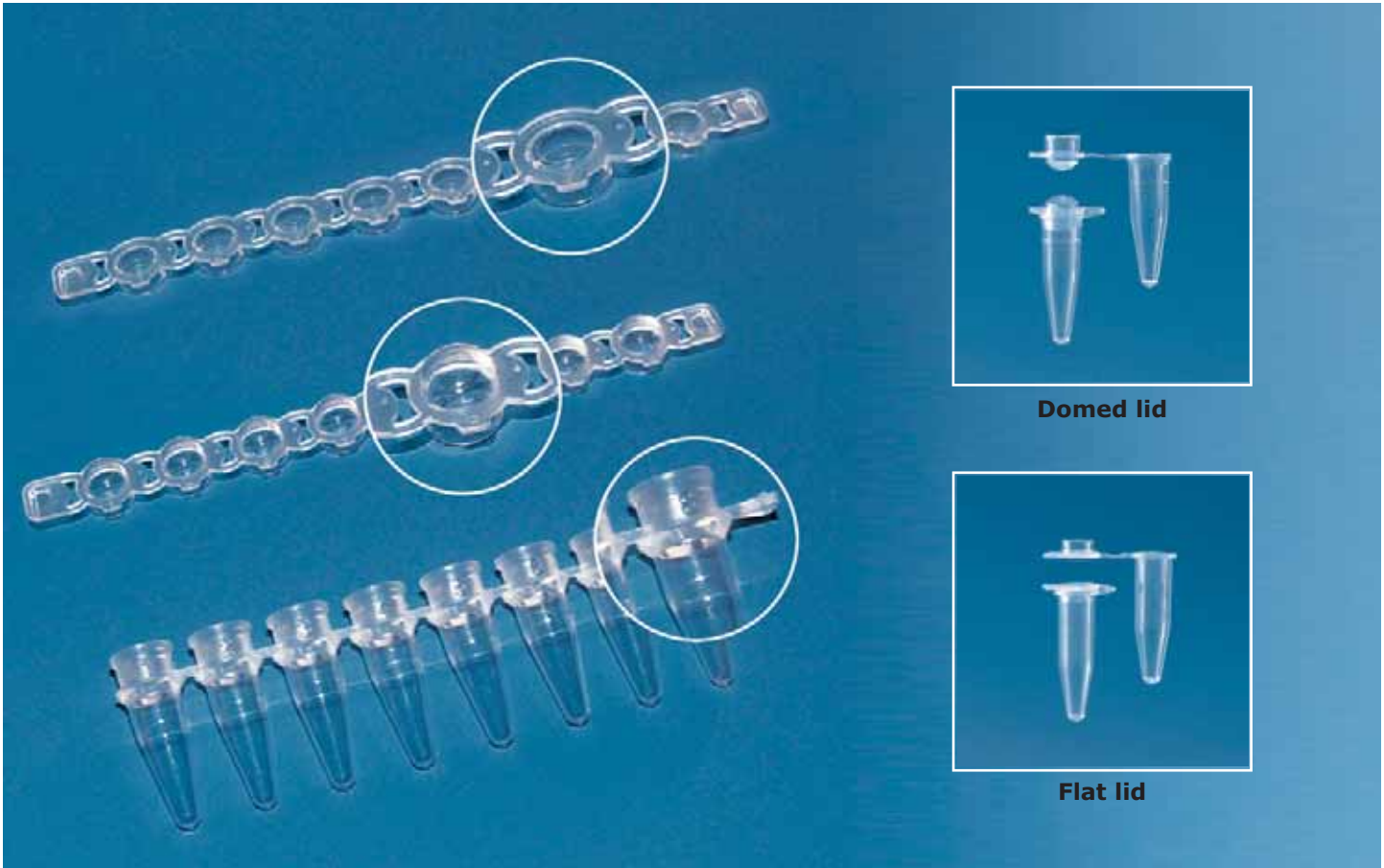
BRAND® PCR Sealing film

- Highly transparent for qPCR
- Non-tacky surface
- Press to seal
- Convenient end tabs
- No annoying adhesive residues

-13%

Description	PK	Cat. No.	Price	Now
			GBP	GBP
PCR plate Cat. No. 9.409 247, non-skirted, low profile + qPCR sealing film	50	6.269 626	108.42	94.33
PCR plate Cat. No. 9.409 254, non-skirted, standard profile + qPCR sealing film	50	6.269 627	108.42	94.33
PCR plate Cat. No. 9.409 256, semi-skirted, low profile + qPCR sealing film	50	6.269 628	108.42	94.33
PCR plate Cat. No. 9.409 258, semi-skirted, elevated, low profile + qPCR sealing film	50	6.269 629	108.42	94.33
PCR plate Cat. No. 9.409 264, semi-skirted, standard profile + qPCR sealing film	50	6.269 630	108.42	94.33

Strips of 8 PCR Tubes plus detached Cap Strips, PP



Domed lid

Flat lid

PP. Strips of 8 connected PCR tubes (0.2 ml). The caps of the 8-tubes strips can be closed and opened easily without any tool. The tubes have a holding strap at one end, and the cover strips on each lid have a small lip on the side for careful, contamination-free opening. The lids provide tight seal during all PCR cycles, thus protecting samples from cross-contamination. Consistent tube wall thickness allows rapid

heat transfer along the entire exterior tube surface.

Made of pure, virgin polypropylene, free from RNase-, DNase- and DNA. Autoclavable at 121 °C (2 bar), according to DIN EN 285.

-29%

Capacity	Description	Colour	PK	Cat. No.	Price	Now
ml					GBP	GBP
0.2	Strips of 8 PCR tubes, with separate flat caps	clear	250	4.007 894	134.00	95.14
0.2	Strips of 8 PCR tubes, with separate domed caps	clear	250	4.007 895	125.86	89.36

BRAND® Cuvettes

For over 25 years, BRAND® has been one of the leading manufacturers of plastic disposable cuvettes. Macro and semi-micro cuvettes of PS and PMMA are now standard in every laboratory. This product line was extended with the plastic UV-Cuvettes. The new UV-transparent cuvettes are available in various types and replace sensitive and expensive glass or quartz cuvettes in many areas.

Quality features

- Optically perfect transmission range
- Manufactured under controlled room conditions and packaged fully automatically, without human contact
- Grouped by mold cavity number to ensure lowest variation of extinction coefficient
- UV-Cuvettes available as micro, semi-micro and macro cuvettes

Sorted by mould cavity number. PMMA or PS. What does "sorted by mould cavity number" mean? Injection moulds which produce 8 cells in one cycle have 8 cavities. For serial analysis only cells with the same cavity number should be used, to minimise cell-to-cell variation.

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.

NEW

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.

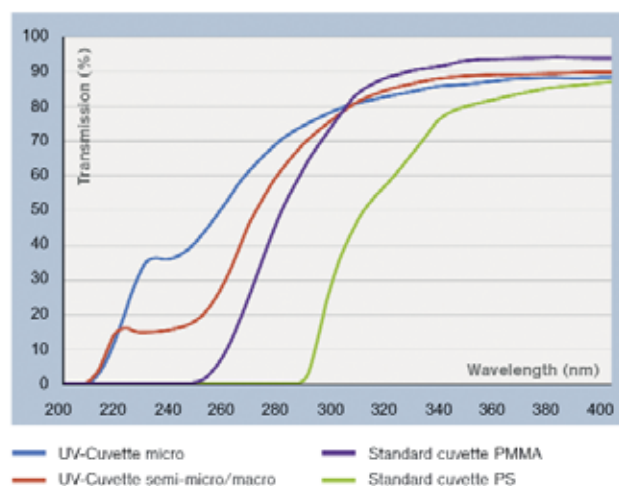


Chemical resistance* of plastic cuvettes

Substance	PS	PMMA	UV-Cuvette
Acetic acid, 100%	-	-	+
Acetone	-	-	+
Ammonia	+	+	+
Benzaldehyde	-	-	+
Butanone	-	-	+
Chloroform	-	-	-
Dioxane	-	-	+
DMF	-	-	+
Ethyl acetate	-	-	+
Hexane	-	+	-
Hydrochloric acid, 36%	+	-	+
Hydrofluoric acid, 10%	+	+	+
Isopropanol	+	+	+
Nitric acid, 65%	-	-	+
Sodium hydroxide	+	+	+

* Short time resistance, 30 min. Longer-term storage of these chemicals should be confirmed by the user. Request a free sample.

Transmission curves of different cuvettes



LABORTOPS

BRAND® Plastic disposable UV-Cuvettes for the UV/VIS range



UV-transparent plastic Brand cuvettes replace fragile and expensive glass or quartz cuvettes in many applications. 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.

- Ideally suited for measurements at 260 nm, 280 nm and in the visible range
- Grouped by mould cavity number to minimize extinction value variation

- Made of plastic for the UV/VIS range
- For applications from 230 to 900 nm
- Suitable for most polar solvents, acids and alkalis (e.g. acetone, butanone, DMF, conc. HCL)
- Specially designed for determination of proteins, DNA, RNA
- Recessed windows protect against scratching

-30%

Description	Capacity	Path length	Operating range	PK	Cat. No.	Price	Now
	µl	mm	nm			GBP	GBP
① UV macro cuvette	2.5 ml - 4.5 ml	10.0	230 - 900	100	9.406 119	30.26	21.18
② UV semi-micro cuvette	1.5 - 3.0 ml	10.0	230 - 900	100	9.406 118	28.70	20.09

BRAND® Macro and Semi Macro cuvettes



NEW

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

-25%

Description	Volume	Path length	Operating range	Material	PK	Cat. No.	Price	Now
	ml	mm	nm				GBP	GBP
③ Macro	2.5 to 4.5	10.0	300 to 900	PMMA	100	9.406 111	10.60	8.02
③ Semi-micro	1.5 to 3.0	10.0	300 to 900	PMMA	100	9.406 115	11.10	8.39
③ Macro	2.5 to 4.5	10.0	340 to 900	PS	100	9.406 110	7.93	5.95
③ Semi-micro	1.5 to 3.0	10.0	340 to 900	PS	100	9.406 114	8.35	6.26
④ Macro, 4 optical windows	2.5 to 4.5	10.0	340 to 900	PS	100	6.280 982	9.53	7.15
④ Macro, 4 optical windows	2.5 to 4.5	10.0	340 to 900	PS	500	6.280 981	25.75	26.81
④ Macro, 4 optical windows	2.5 to 4.5	10.0	230 to 900	UV-transparent	100	6.280 680	30.36	22.77
④ Macro, 4 optical windows	2.5 to 4.5	10.0	230 to 900	UV-transparent	500	6.280 980	125.01	93.76