



PCR sealing film that minimizes evaporation

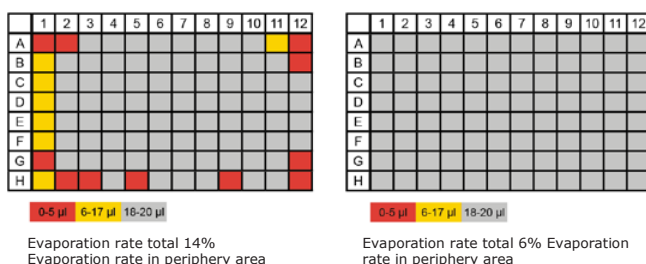
Perfect teamwork in the laboratory: PCR plates from VWR paired with matching sealing films from BRAND

Even when using adhesive sealing films for PCR plates, evaporation of samples can be a problem – especially in peripheral wells. Validation testing shows BRAND sealing films are the solution.

Evaporation test 1: EXTREME conditions!

Low profile 96-well plates were filled with 20 µl of sample in each well and covered with a sealing film. A PCR program was run in a UNO96 thermocycler without the optional high pressure lid (i.e. with the lower contact pressure of the spring-mounted universal cover), for an above-average duration of 4h – conditions intended to test the limits of sealing films.

Fig. 1: Comparison of evaporation with sealing films
(Residual volumes at end of PCR run)



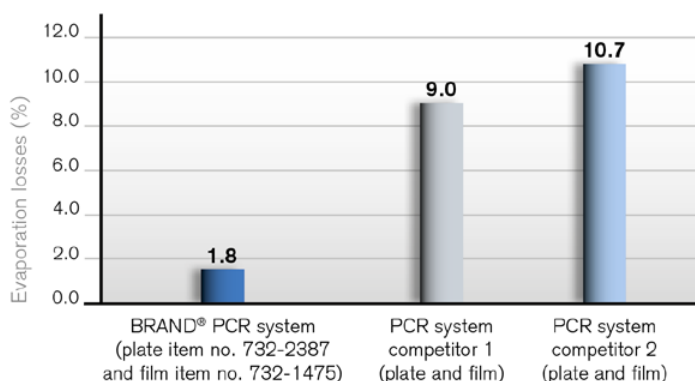
Summary: If you have had problems with evaporation effects, BRAND 'Real Time' film (item no. 732-1475) should be the product of your choice!

Evaporation test 2: Comparison of plate + film systems

In order to compare plates/film combinations from different manufacturers, the wells of 96-well plates were each filled with 50 µl methylene blue solution, sealed and the plates were then weighed before and after 25 cycles in the thermocycler.

When comparing different systems made with PCR plates and sealing films, the following evaporation results were obtained:

Fig. 2 Comparison between systems



Summary: It makes sense not to use just any system of plates and films, but those which have proven to be well matched to each other!



96-well PCR plates from VWR and PCR sealing films from BRAND: A perfectly matched solution for your laboratory!

While the shape and structure of the well edges play an important role in the effectiveness of a plate/sealing film system, the quality of the sealing film used is of central importance. The self-adhesive sealing film from Brand (732-1475) contains the adhesive in micro vesicles and does not initially adhere. The adhesive vesicles burst when pressure is applied, resulting in a tight seal, optimized to the well rims of the PCR plates from VWR.

Since they only attach around the well edge, the samples are not contaminated by adhesive and the optical properties of the film remain unchanged.