Thermowell® Sealing Mats

Instructions for Use



Corning® Thermowell silicone rubber sealing mats are specially designed for optimal sealing of Thermowell and Thermowell GOLD polypropylene 96 and 384 well PCR microplates, as well as Costar® polycarbonate 96 well PCR microplates. Offered in both 96 and 384 well versions, the custom fit provides for minimal evaporation and condensation, and prevents well-to-well cross contamination.

Thermowell Silicone Rubber Sealing Mat Advantages:

- Certified DNase-/RNase-free
- Easy to apply and remove
- No need for oil overlays in thermal cyclers with heated lids
- Precise fit on Corning Thermowell and Thermowell GOLD PCR microplates, and Costar polycarbonate PCR microplates
- Reusable
- Autoclavable

Instructions

Follow the instructions below for use and cleaning of Thermowell® Sealing Mats. Please note that the polycarbonate plates cannot be used in thermal cyclers where the heated lid height is not adjustable. A tight fit is necessary to avoid evaporation and cross contamination.

How to Use the Thermowell Sealing Mat

- 1. Load the required samples and reagents into the PCR plate.
- 2. Orient the Thermowell Sealing Mat so that the notched corners line up with the notched corners on the PCR plate. Place the mat onto the plate with the plugs extending into the wells.
- 3. Place the PCR plate with the sealing mat directly into the heat block, and tighten the lid per manufacturer's instructions.
- 4. Follow manufacturer's instructions for use of the instrument.

Cleaning and Sterilizing the Thermowell Sealing Mat

Thermowell Sealing Mats can be sterilized in an autoclave at 121°C for 15 minutes or cleaned by soaking in a 10% bleach solution for 2 minutes. After soaking in bleach, rinse the sealing mat with distilled water and oven dry. Note that autoclaving does not destroy nucleic acids. To denature any DNA on the mat, use the bleach protocol described above. Thermowell Sealing Mats are designed to withstand at least five autoclave cycles and five cleaning cycles. Frequent autoclaving and/or cleaning can deteriorate the sealing mat. Be sure to inspect the mat prior to each use. Discard if the mat begins to crack.

Evaporation

Each thermal cycler manufacturer has a different heated lid design. Volume loss can vary from cycler to cycler. For a 20 μL reaction, it is normal to experience a 1 μL loss per well. Volume loss, in the best case, should be approximately 5%. For heated lids with insufficient pressure, loss can be several fold greater. Some heated lids are hinged and as a result can cause variations in volume loss from front to back of the PCR plate. If volume loss is unacceptable, contact Corning or your thermal cycler manufacturer for more information.



Thermowell[®] Sealing Mats

Cat. No.	Description	Qty/Pk	Qty/Case
6555	Silicone Rubber Sealing Mat - 96 well	1	25
3699	Silicone Rubber Sealing Mat – 384 well	1	25

Corning[®] Thermowell Polypropylene PCR Microplates

Cat. No.	Description	Qty/Pk	Qty/Case
6551	96 well, Segmented Skirt, Clear	25	25

Corning Thermowell GOLD Polypropylene PCR Microplates

Cat. No.	Description	Qty/Pk	Qty/Case
3752	96 well, Full Skirt, Clear	10	50
3751	96 well, Full Skirt, Black	10	50
3753	96 well, Half Skirt, Clear	10	50
3755	96 well, Half Skirt, Black	10	50
3754	96 well, Elevated Skirt, Clear	10	50
3757	384 well, Clear	10	50
3756	384 well, Black	10	50

Costar Polycarbonate PCR Microplates

Cat. No.	Description	Qty/Pk	Qty/Case
6509	96 well, Model P, 200 μL	1	25
6511	96 well, Model M, 200 μL	1	25

Accessories

Cat. No.	Description	Qty/Pk	Qty/Case
3087	96 well Silicone Rubber Septa Mat	10	50
6570	96 well Aluminum Sealing Tape	100	100
6569	384 well Aluminum Sealing Tape	100	100
6524	96 well Polyethylene Sealing Tape	100	100
6575	Universal Optical Sealing Tape*	100	100

^{*}For real-time PCR

For additional product or technical information, please e-mail us at **clstechserv@corning.com**, visit **www.corning.com/lifesciences**, or call 800.492.1110. Customers outside the United States, call +1.978.635.2200 or contact your local Corning sales office listed below.

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