

# Pierceable Foil Heat Seal

Catalog #181-4040

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The pierceable foil heat seal is a peelable and pierceable seal ideal for PCR and sample storage. This seal has been independently validated for the QX100™ Droplet Digital™ PCR system workflow. Plates with pierced seals can be resealed\* with another pierceable foil heat seal.

## Features

- Forms a complete seal with polypropylene and polystyrene\*\* materials
- Has seal integrity from –20 to 110°C
- Demonstrates high solvent resistance
- Is nonhazardous
- Can be stored at room temperature; avoid direct exposure to light
- Certified RNase and DNase free

## Directions for Use

**Note:** Optimize sealing parameters in an empty plate prior to completing experimental workflows.

1. Place a microplate in the plate support block and position it correctly on the open PX1™ PCR plate sealer drawer.
2. Carefully remove a seal from the bag and place it on the plate so that the **colored line is facing up**.

**Note:** It is not necessary to use the sealing frame with this seal.

3. Seal the plate. For suggested sealing parameters, refer to Sealing Guidelines for Pierceable Foil Heat Seal.

\* Resealing a plate already sealed with a pierceable foil heat seal typically requires a longer sealing time. Repeated sealing makes it more difficult to peel off the original seal.

\*\* Limited and variable compatibility based on plastic composition.

## Sealing Guidelines for Pierceable Foil Heat Seal\*

Product	Catalog Number	Number of Wells	Well Color	Temperature, °C	Time, sec
Hard-Shell® 384-well standard PCR plates	HSP-3xxx	384	Clear White	170 170	3 3
Hard-Shell 384-well 480 PCR plates	HSR-4xxx	384	Clear White	170 170	3 3
Hard-Shell low-profile 96-well skirted PCR plates	HSP-9xxx	96	Clear White	175 175	3 3
Hard-Shell high-profile 96-well semi-skirted PCR plates	HSS-9xxx	96	Clear White	170 175	3 3
Multiplate™ low-profile 96-well unskirted PCR plates	MLL-9xxx	96	Clear White	175 175	3 3
Multiplate high-profile 96-well unskirted PCR plates	MLP-9xxx	96	Clear White	175 175	3 3
iQ™ 96-well PCR plates	223-9441	96	Clear	185	3

\* Resealing a plate already sealed with a pierceable foil heat seal typically requires a longer sealing time. Repeated sealing makes it more difficult to peel off the original seal. \*\* Sealing time may be extended for plates used in the QX100 Droplet Digital PCR system workflow.

## Heat Sealing Film Comparison Chart

Product	Catalog Number	Key Features	Compatibility
Optically clear heat seal	181-4030	<ul style="list-style-type: none"> <li>Validated for real-time PCR</li> <li>Peelable</li> </ul>	PP, COC, PE,* PS
Permanent clear heat seal	181-4035	<ul style="list-style-type: none"> <li>Strongest heat sealing option</li> <li>Ideal for water bath cycling</li> <li>Validated for PCR**</li> </ul>	PP
Pierceable foil heat seal	181-4040	<ul style="list-style-type: none"> <li>Validated for use with the QX100 Droplet Digital PCR system</li> <li>Validated for PCR</li> </ul>	PP, PS*
Peelable foil heat seal	181-4045	<ul style="list-style-type: none"> <li>Ideal for sample storage</li> <li>Validated for PCR</li> </ul>	PP, COC*

\* Limited and variable compatibility based on plastic composition. \*\* Not recommended for real-time PCR. COC, cyclic olefin copolymer; PE, polyethylene; PP, polypropylene; PS, polystyrene.

Practice of the polymerase chain reaction (PCR) may require a license.

Hard-Shell plates are covered by one or more of the following U.S. patents or their foreign counterparts owned by Eppendorf AG: U.S. Patent Numbers 7,347,977; 6,340,589; and 6,528,302.



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