

# Peelable Foil Heat Seal

Catalog #181-4045

---

The peelable foil heat seal is ideal for sample storage. This seal can be easily peeled from PCR plates stored in a  $-80^{\circ}\text{C}$  freezer or in liquid nitrogen and is nonpierceable. This seal is also validated for sealing plates used in PCR.

## Features

- Forms a peelable seal with polypropylene and cyclic olefin copolymer\* materials
- Has seal integrity from  $-200$  to  $110^{\circ}\text{C}$
- Demonstrates moderate 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 **white side is facing up**.
3. **Gently place the sealing frame on top of the seal** and align the vertical supports in the grooves on the drawer.
4. Seal the plate. For suggested sealing parameters, refer to Sealing Guidelines for Peelable Foil Heat Seal.

\* Limited and variable compatibility based on plastic composition.

## Sealing Guidelines for Peelable 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	185	4
			White	185	3
Hard-Shell 384-well 480 PCR plates	HSR-4xxx	384	Clear	185	4
			White	185	3
Hard-Shell low-profile 96-well skirted PCR plates	HSP-9xxx	96	Clear	180	3
			White	185	5
Hard-Shell high-profile 96-well semi-skirted PCR plates	HSS-9xxx	96	Clear	185	3
			White	185	3
Multiplate™ low-profile 96-well unskirted PCR plates	MLL-9xxx	96	Clear	185	5
			White	185	3
Multiplate high-profile 96-well unskirted PCR plates	MLP-9xxx	96	Clear	185	3
			White	185	3
iQ™ 96-well PCR plates	223-9441	96	Clear	185	5

## 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.



**Bio-Rad  
Laboratories, Inc.**

Life Science  
Group

**Web site** [www.bio-rad.com](http://www.bio-rad.com) **USA** 800 424 6723  
**Australia** 61 2 9914 2800 **Austria** 01 877 89 01 **Belgium** 09 385 55 11  
**Brazil** 55 11 5044 5699 **Canada** 905 364 3435 **China** 86 21 6169 8500  
**Czech Republic** 420 241 430 532 **Denmark** 44 52 10 00  
**Finland** 09 804 22 00 **France** 01 47 95 69 65 **Germany** 089 31 884 0  
**Greece** 30 210 9532 220 **Hong Kong** 852 2789 3300  
**Hungary** 36 1 459 6100 **India** 91 124 4029300 **Israel** 03 963 6050  
**Italy** 39 02 216091 **Japan** 03 6361 7000 **Korea** 82 2 3473 4460  
**Mexico** 52 555 488 7670 **The Netherlands** 0318 540666  
**New Zealand** 64 9 415 2280 **Norway** 23 38 41 30  
**Poland** 48 22 331 99 99 **Portugal** 351 21 472 7700  
**Russia** 7 495 721 14 04 **Singapore** 65 6415 3188  
**South Africa** 27 861 246 723 **Spain** 34 91 590 5200  
**Sweden** 08 555 12700 **Switzerland** 061 717 95 55  
**Taiwan** 886 2 2578 7189 **Thailand** 800 88 22 88  
**United Kingdom** 020 8328 2000