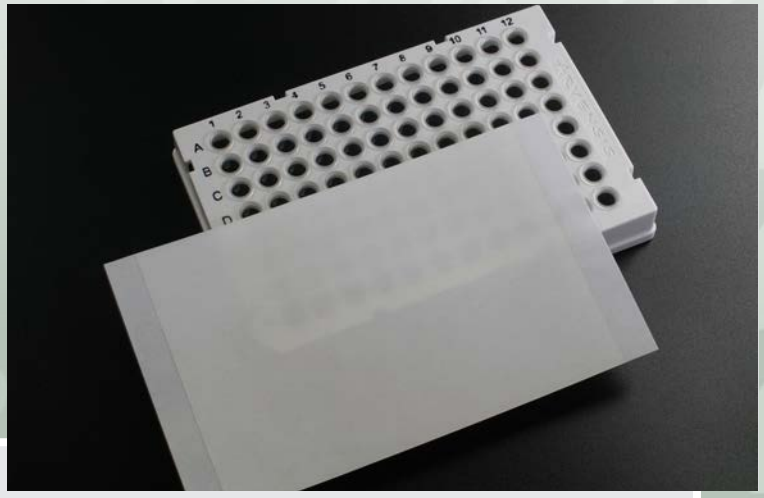
ARVENSIS®

In the Field of Sustainable Science

Microplate Sealing

Adhesive Seals for Microplates



Clear PCR Adhesive Seal

- Appropriate for PCR, qPCR, optical and storage applications
- Clear polyester film with a strong adhesive layer
- Peelable
- Seal integrity: -20°C to 110°C
- Certified free from DNase, RNase, nucleases and human gDNA

Clear PCR Adhesive Seal is comprised of a transparent polyester film with a strong acrylic adhesive. The adhesive achieves a durable seal and effectively prevents sample evaporation. Two end-tabs without adhesive facilitate easy handling. This product is recommended for PCR, qPCR and optical applications, such as fluorescence and colorimetric measurements, as well as general sample storage.

www.arvensis.uk | **info@arvensis.uk**

Foil Adhesive Seal

- Appropriate for PCR, storage, incubation, and other high temperature applications
- Peelable
- Pierceable
- Seal integrity: -40°C to 120°C
- Certified free from DNase, RNase, nucleases and human gDNA

Foil Adhesive Seal is made from aluminum foil and a strong acrylic adhesive. This product has a very durable seal designed to prevent sample evaporation and maintain seal integrity during high temperature applications, such as PCR and incubations. This seal can be pierced with pipette tips. End-tabs enable easy application and removal.

Optically Clear qPCR Adhesive Seal

- Ideal for qPCR, fluorescent applications, plate readers, microscopy, and protein crystallization
- Peelable
- Non-pierceable
- Seal integrity: -80°C to 110°C
- Certified free from DNase, RNase, nucleases and human gDNA

Optically Clear qPCR Adhesive Seal is intended for optical applications, particularly qPCR. The adhesive is activated by pressure; it is not tacky when removed from the packaging. After the seal is positioned on the plate, pressure is applied to activate the adhesive and form a seal with the rim of each well. This unique adhesive design provides outstanding optical clarity. The adhesive does not leave any tacky residue on the plate after removal of the seal.

www.arvensis.uk | **info@arvensis.uk**

Standard Clear Adhesive Seal

- Suitable for short-term aqueous sample storage
- Peelable
- Seal integrity: -20°C to 80°C
- Certified free from DNase, RNase, nucleases and human gDNA

Standard Clear Adhesive Seal utilizes a transparent polyester film and a low strength adhesive. It is ideal as a general use microplate sealing option, particularly suitable for short-term sample storage. End-tabs allow for easy placement. The seal is easily removed from the plate. After removal, there is no tacky residue remaining on the plate.

ORDERING DETAILS

Adhesive Seals for Microplates	
AMS-1001	Clear PCR Adhesive Seal, 100 sheets per pouch
AMS-1002	Foil Adhesive Seal, 100 sheets per pouch
AMS-1003	Optically Clear qPCR Adhesive Seal, 100 sheets per pouch
AMS-1004	Standard Clear Adhesive Seal, 100 sheets per pouch

Heat Seals for Microplates

Foil Heat Seal, Peelable and Pierceable

- Appropriate for PCR and short term compound storage
- Seals PP and PS plates
- Peelable
- Pierceable
- Resealable
- Moderate solvent resistance
- Autoclavable
- Seal integrity: -20°C to 110°C
- Certified free from DNase, RNase, nucleases and human gDNA

Foil Heat Seal is for polypropylene and polystyrene plates. The aluminum foil can be pierced with a pipette tip or by automated liquid handling systems. After piercing, the plate can be resealed with additional layers sealed directly over the first seal. The seal can be completely removed by peeling off the plate. The sealing has moderate solvent resistance to DMSO and other organic solvents, best used for short term storage applications. The red stripe provides an easy reference to the non-sealing surface and consistent seal orientation.

www.arvensis.uk | info@arvensis.uk

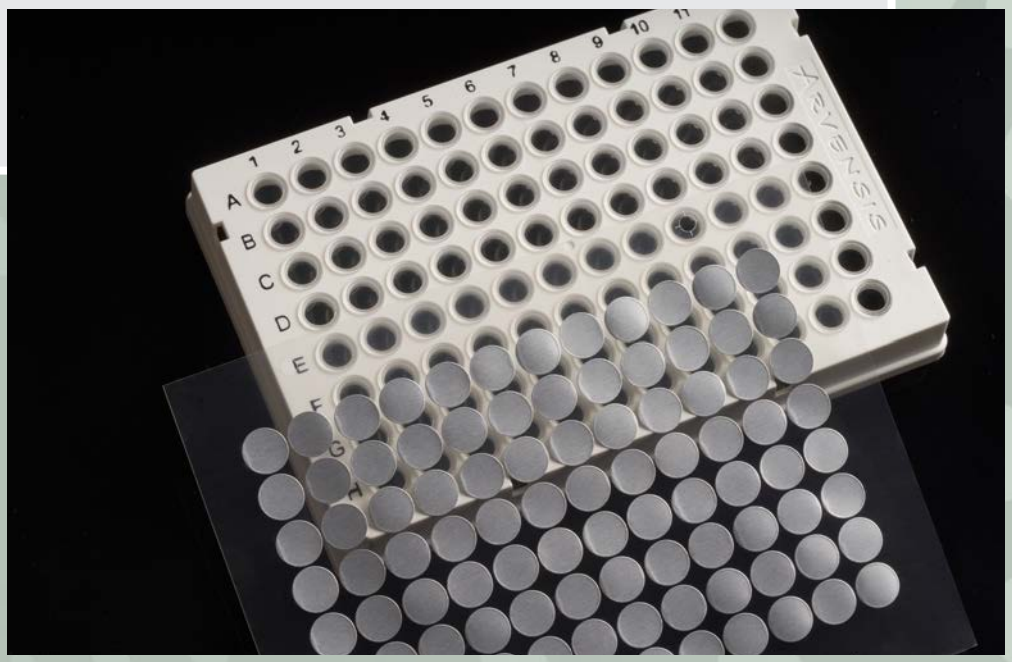
Thin Foil Heat Seal, Pierceable

- Appropriate for PCR and long term compound storage
- Seals PP and PE plates
- Good solvent resistance
- Pierceable with pipette tips
- Autoclavable
- Seal integrity: -20°C to 120°C
- Certified free from DNase, RNase, nucleases and human gDNA

Thin Foil Heat Seal is for polypropylene and polystyrene plates. The aluminum foil is thin enough to be easily pierced with a pipette tip or by automated liquid handling systems. After piercing, the plate can be resealed with additional layers sealed directly over the first seal. The sealing material has good solvent resistance to DMSO and other organic solvents. The blue stripe provides an easy reference to the non-sealing surface and consistent seal orientation.

Random Access Heat Seals

- Identical heat sealing material to our Thin Foil Heat Seal
- 96 Individual sealing discs on removable clear backing liner
- 4 indexing holes enable precise positioning onto the plate using a seal placement adapter

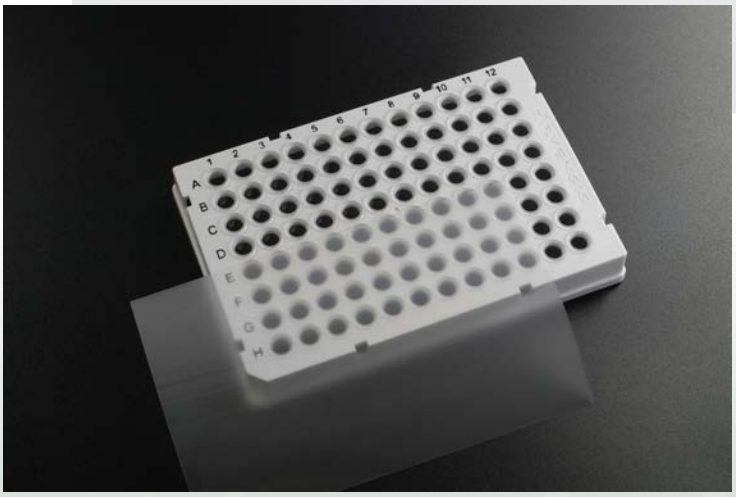


www.arvensis.uk | **info@arvensis.uk**

Clear Heat Seal, Peelable

- Optically clear, ideal for PCR, qPCR, fluorescence detection, and colorimetric assays
- Seals PP, PS, PC, PE, and COC plates
- Peelable
- Seal integrity: -80°C to 80°C
- Can be used up to 110°C when using a PCR instrument with pressurized heated lid
- Certified free from DNase, RNase, nucleases and human gDNA

Clear Heat Seal is an optically clear laminate film. It forms an excellent heat seal with plates made from polypropylene, polystyrene, polycarbonate, polyethylene, and cyclic olefin copolymer. The optical clarity supports its use for imaging applications, including fluorescent detection methods, qPCR and colorimetric assays. Clear Heat Seal is appropriate for high temperature applications, incubations, and PCR when used with a pressurized heated lid. This seal has moderate solvent resistance and can be utilized for short term compound storage at ambient temperatures.



Peelable Heat Seal with White Backing

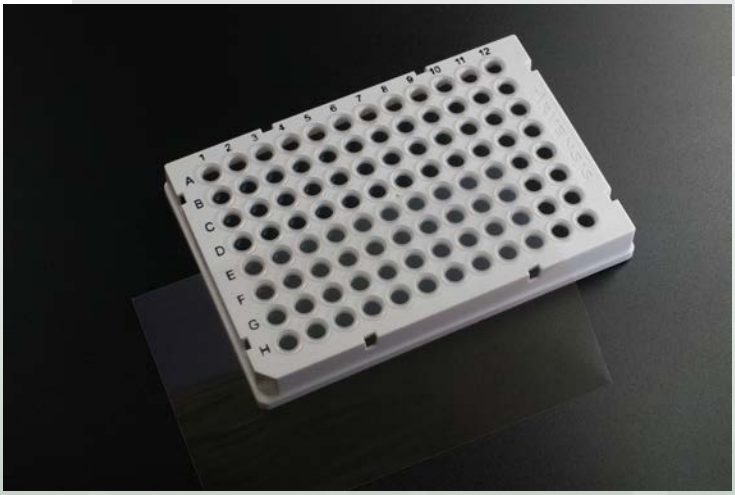
- Appropriate for PCR and other high temperature applications
- Appropriate for low temperature and ambient temperature sample storage
- Seals PP, PS, PC, PE, and COC plates
- Peelable
- Pierceable with autosampler needles
- Resealable by applying another Peelable Heat Seal directly on top of a previously pierced seal
- Autoclavable
- Seal integrity: -80°C to 90°C
- Can be used up to 110°C when using a PCR instrument with pressurized heated lid
- Certified free from DNase, RNase, nucleases and human gDNA

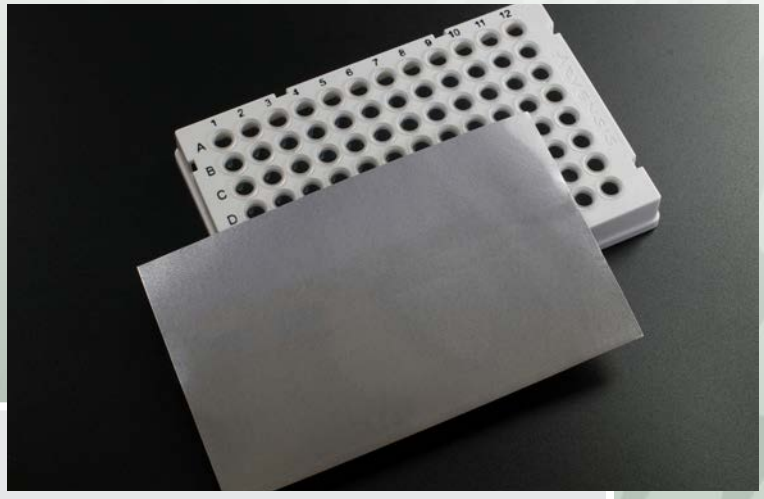
Peelable Heat Seal will seal to all microplate materials; polypropylene, polystyrene, polycarbonate, polyethylene and cyclic olefin copolymer. It can be used for high temperature uses, including PCR (when used with a pressurized heated lid). The sealing material has moderate solvent resistance and is appropriate for low temperature applications such as compound storage. The seal can be easily removed by peeling off the microplate. It can also be pierced with autosampler needles. After piercing, the plate can be resealed with additional layers sealed directly over the first seal.

Clear Heat Seal, Permanent Bond

- Appropriate for PCR, qPCR, long term storage, and disposal of hazardous substances
- Ideal for use with water bath thermal cyclers
- Seals PP plates
- Permanent seal, non-peelable
- Good resistance to DMSO and other organic solvents
- Difficult to pierce; retrieve samples by using a blade, autosampler needle, or other seal piercing tool
- Autoclavable
- Seal integrity: -80°C to 110°C
- Certified free from DNase, RNase, nucleases and human gDNA

Clear Heat Seal with Permanent Bond is an optically clear polymer film that achieves a permanent seal to polypropylene plates, essential for very high temperature applications and to prevent any sample loss. This seal is ideal for use in water bath thermal cyclers, and appropriate for PCR, and qPCR, even without the use of a pressurized heated lid. The optical clarity of this seal is suitable for imaging applications, including fluorescent detection methods, qPCR, and colorimetric assays. This seal material has good solvent resistance and can be utilized for long term compound storage at ambient and low temperatures. Samples can be retrieved by piercing the seal with a blade, autosampler needle, or other seal piercing tool.





Thermal Bond Thick Foil Heat Seal

- Ideal for PCR, especially water bath thermal cycler applications
- Appropriate for long term sample storage and transportation
- Appropriate for low temperature sample storage
- Strong, peelable bond to PP plates
- Pierceable
- Excellent solvent resistance
- Autoclavable
- Seal integrity: -200°C to 110°C
- Certified free from DNase, RNase, nucleases and human gDNA

Thermal Bond Thick Foil Heat Seal is a laminate aluminum foil seal suitable for providing a strong yet peelable seal. The seal will form a strong bond with polypropylene plates, protecting your samples and preventing sample loss due to leaks or evaporation. It is an ideal choice for use with water bath thermal cyclers. Thermal Bond has very good solvent resistance and can be used for low temperature compound storage, including use of DMSO and other organic solvents, and for long term ambient temperature storage. The aluminum foil can be pierced with a pipette tip, automated liquid handling systems, autosampler needle, or seal-piercing tool.

Solvent Resistant Peelable Heat Seal

- Very high solvent resistance to DMSO and other organic solvents
- Suitable for long term sample storage, especially compounds stored in DMSO
- Strong yet peelable seal to PP and COC plates
- Forms permanent bond to PE plates
- Seal integrity: -80°C to 40°C
- Certified free from DNase, RNase, nucleases and human gDNA

Solvent Resistant Peelable Heat Seal is an aluminum foil that forms an excellent peelable seal to plates made from polypropylene and cyclic olefin copolymer. This material forms a permanent bond to polyethylene plates and cannot be peeled off. For polyethylene plates, sample retrieval can be done by piercing the foil with a blade, needle, or other seal piercing tool. The outstanding solvent resistance of this seal supports its use for low temperature and ambient temperature compound storage in DMSO and other organic solvents. Our own testing has shown that 100% DMSO can be stored at ambient temperature for 12 months without sample loss or deterioration of the seal.

ORDERING DETAILS

Heat Seals for Microplates	
HMS-1001	Thin Foil Heat Seal, Pierceable, 100 sheets per pouch
HSR-1001	Thin Foil Heat Seal, Pierceable, roll, 78mm x 610m
HSR-1101	Thin Foil Heat Seal, Pierceable, wide roll, 115mm x 500m
RMS-1001	Random Access Heat Seals, Thin Foil Heat Seal, Pierceable, 96 individual sealing discs in sheet format, 100 sheets per pouch
HMS-1002	Foil Heat Seal, Peelable and Pierceable, 100 sheets per pouch
HSR-1002	Foil Heat Seal, Peelable and Pierceable, roll, 78mm x 610m
HSR-1102	Foil Heat Seal, Peelable and Pierceable, wide roll, 115mm x 500m
HMS-1003	Clear Heat Seal, Peelable, 100 sheets per pouch
HSR-1003	Clear Heat Seal, Peelable, roll, 78mm x 500m
HSR-1103	Clear Heat Seal, Peelable, wide roll, 115mm x 350m
HMS-1004	Peelable Heat Seal with White Backing, 100 sheets per pouch
HSR-1004	Peelable Heat Seal with White Backing, roll, 78mm x 610m
HSR-1104	Peelable Heat Seal with White Backing, wide roll, 115mm x 500m
HMS-1005	Clear Heat Seal, Permanent Bond, 100 sheets per pouch
HSR-1005	Clear Heat Seal, Permanent Bond, roll, 78mm x 610m
HSR-1105	Clear Heat Seal, Permanent Bond, wide roll, 115mm x 500m
HMS-1006	Thermal Bond Thick Foil Heat Seal, 100 sheets per pouch
HSR-1006	Thermal Bond Thick Foil Heat Seal, roll, 78mm x 500m
HSR-1106	Thermal Bond Thick Foil Heat Seal, wide roll, 115mm x 300m
HSR-1007	Solvent Resistant Peelable Heat Seal, roll, 78mm x 500m
HSR-1107	Solvent Resistant Peelable Heat Seal, wide roll, 115mm x 500m