

# Heat Sealing and Adhesive Sealing

4titude offers a wide range of heat sealing and adhesive sealing materials.

All seals are certified free from nucleases and human genomic DNA contamination.



## Heat Sealing

NAME	DESCRIPTION	SEAL INTEGRITY RANGE	APPLICATION	CATALOGUE NUMBER	DIMENSIONS
<b>Clear-Seal</b>	Clear polymer forming a peelable seal to PP and PS plates. Good optical clarity. Some solvent resistance.	-80°C to +120°C	QPCR	4ti-0540 4ti-0540S 4ti-0542 4ti-0541	500m x 78mm Roll Trial Roll 500m x 115mm Roll 100 Sheets (125mm x 78mm)
<b>Clear Weld-Seal</b>	Weld seal to PP that can not be peeled and is difficult to pierce. Good optical clarity and solvent resistance.	-80°C to 120°C	PCR, especially water bath cyclers. Storage and disposable of hazardous materials. Sample inspection. Recommended for use with DMSO	4ti-0570 4ti-0570S 4ti-0571	610m x 78mm Roll Trial Roll 100 Sheets (125mm x 78mm)
<b>Clear Seal 3730</b>	Clear polymer. Seals to PP, PS, PE. Piercable. Good optical clarity, some solvent resistance. To thin to peel.	-80°C to 80°C or 120°C with pressurised PCR heated lids.	Recommended for use with the ABI 3730 Sequencer as the thinner structure pierces more easily.	4ti-0580 4ti-0580S 4ti-0581	610m x 78mm Roll Trial Roll 100 Sheets (125mm x 78mm)
<b>Pierce-Seal</b>	Heat seal to PP plates that can be easily pierced with a tip. Very good solvent resistance including DMSO. Resealing onto existing seal is possible.	-80°C to +120°C	PCR Compound storage Sample shipping	4ti-0530 4ti-0530S 4ti-0532 4ti-0531	610m x 78mm Roll Trial Roll 500m x 115mm Roll 100 Sheets (125mm x 78mm)
<b>Peel-Seal</b>	Peelable heat seal to PP plates. Can be peeled directly from freezer. Good barrier to aqueous solutions. Moderate resistance to solvents at room temperature.	-80°C to +120°C	Low temperature Compound storage Short term room temperature Compound storage PCR	4ti-0520 4ti-0520S 4ti-0522 4ti-0522S 4ti-0521	610m x 78mm Roll Trial Roll 500m x 115mm Roll Trial Roll 100 Sheets (125mm x 78mm)
<b>Foil-Seal</b>	Heat seal to PP and PS plates that can be pierced with a tip or peeled off by hand. Very good solvent resistance including DMSO. Resealing onto existing seal is possible.	-80°C to +120°C	Compound storage Sample shipping PCR	4ti-0535 4ti-0535S 4ti-0536	610m x 78mm Roll Trial Roll 100 Sheets (125mm x 78mm)
<b>Thermal Bond</b>	Seals to PP with a very strong peelable seal. High degree of sample protection. Good solvent resistance including DMSO.	-200°C to 120°C	Long term storage including storage and transportation at low temperature. PCR, especially water bath cyclers.	4ti-0590 4ti-0590S 4ti-0591 4ti-0592 4ti-0592S	500m x 78mm Roll Trial Roll 100 Sheets (125mm x 78mm) 500m x 115mm Roll Trial Roll
<b>Black Seal</b>	A foil based heat seal coated on the sealing surface with a low fluorescence black pigment. Forms a peelable seal to PP and PS plates.	-80°C to 120°C	Fluorescent and other light sensitive assays	4ti-0525 4ti-0525S 4ti-0526 4ti-0526S 4ti-0527	610m x 78mm roll Trial Roll 500m x 115mm roll Trial Roll 100 sheets (125mm x 78mm)
<b>Gas Permeable Heat Seal</b>	A woven heat seal that is permeable to gasses but providing a barrier to solid contaminants. Permeability rate >4000g/sqm/24h. Pore size up to 35 Microns. Seals to PP and PS plates.	-20°C to 60°C	Cell culture. Overnight incubation.	4ti-0596 4ti-0596S 4ti-0595	275m x 78mm roll Trial Roll 100 sheets (125mm x 78mm)



## Adhesive Sealing

NAME	DESCRIPTION	SEAL INTEGRITY RANGE	APPLICATION	CATALOGUE NUMBER	DIMENSIONS
<b>Adhesive PCR Seal</b>	Transparent adhesive seal recommended for PCR Suitable for fluorescence applications Peelable	-20°C to +120°C	PCR	4ti-0500	100 Sheets (135mm x 80mm)
<b>Adhesive Microplate Seal</b>	Transparent plate seal for polypropylene and polystyrene plates Peelable	-40°C to +80°C	Sample storage	4ti-0510	100 Sheets (135mm x 80mm)
<b>Adhesive PCR Foil Seal</b>	Piercable and peelable foil seal	-70°C to +150°C	PCR and Sample storage	4ti-0550	100 Sheets (135mm x 80mm)
<b>Adhesive QPCR Seal</b>	Optically clear film recommended for QPCR and other fluorescence applications	-80°C to +110°C	QPCR	4ti-0560	100 Sheets (135mm x 80mm)
<b>Piercable Solvent Resistant Adhesive Foil</b>	Piercable foil with good solvent resistance	-20°C to 80°C	Sealing microplates containing solvents including DMSO	4ti-0511	100 Sheets (122mm x 80mm)
<b>Peelable Solvent Resistant Adhesive Foil</b>	Peelable barrier film with good solvent resistance	-20°C to 80°C	Sealing microplates containing solvents including DMSO	4ti-0512	100 Sheets (122mm x 80mm)
<b>Gas Permeable Adhesive Seal</b>	An adhesive microplate seal that is permeable to gasses but providing a barrier to bacteria and other solid contaminants.	-20°C to 80°C	Cell culture	4ti-0595	100 sheets (135mm x 80mm)



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