

ACP901 - appSEAL qPCR Plate Seal

Product Description	A transparent, optically clear, DMSO resistant, non-tacky film which adheres only when pressure is applied. It is nonpierceable and peelable.	Physical Properties	Pressure sensitive adhesive tape, so the seal side doesn't feel sticky, mainly used for bonding materials to various substrates. Temperature Range: -40°C to +110°C.
Visual Description	Clear plastic, reflective, glossy on the top. Very thin and light and doesn't crease easily.	Application	qPCR (94 or 384well) and situations where fluorescence is experienced and optical clarity is required.

TEST PROCEDURES

Mass Loss	Confirming the materials ability to resist high temperatures	Results: PASS
Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance.		
Pierce	Measuring the force required to push a standardised needle through the material via compression measuring equipment	Results: N/A
Details: 5 tests run using a standardised needle, ensuring that less than 10N is required to pierce the surface & access the wells. Equipment: Instron 3343 Tensometer.		
Optical	Determining the materials optical clarity by measuring the transmission of emissive dye through the material	Results: PASS
Details: Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment: BMG Labtech - FluroStar.		
Peel	Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment	Results: PASS
Details: Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment: Instron 3343 Tensometer.		
Low Temp. Seal Test	Confirming the materials ability to resist low temperatures	Results: PASS
Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal integrity. Equipment: Laboratory Cold storage unit.		
Solvent	Evaluating the materials resistance to solvents (DMSO used as an aggressive standard)	Results: N/A
Details: Sealed plate is subjected to a high concentration of DMSO for a time period at low temperatures after which seal damage & volume loss are determined. Equipment: Laboratory Cold storage unit, DMSO solution.		

Recommended Storage Conditions:	Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from the date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging.
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Plate Types:	Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC), Polycarbonate (PC)
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