

## QuickSeal qPCR Crystal™ IST-121 Clear, Non-Tacky, Pressure Sensitive Film

### Product Description

A transparent, optically clear, DMSO resistant, non-tacky film which adheres only when pressure is applied. It is non-pierceable and peelable.

### Visual Description

Clear plastic, reflective, glossy on the top. Very thin and light and doesn't crease easily.

### 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.

### Application

qPCR (96 or 384well) and situations where fluorescence is experienced and optical clarity is required.

### Test Procedures:

<b>Mass Loss</b>	Confirming the materials ability to resist high temperatures	<b>Results:</b>	<b>PASS</b>
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**Details:** Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. **Equipment:** ABI Thermocycler, Precision Balance.

<b>Pierce</b>	Measuring the force required to push a standardised needle through the material via compression measuring equipment.	<b>Results:</b>	<b>N/A</b>
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**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.

<b>Optical</b>	Determining the materials optical clarity by measuring the transmission of emissive dye through the material	<b>Results:</b>	<b>PASS</b>
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**Details:** Record the light transmission of a sealed microplate using a Fluorophore dye stock solution and a microplate reader. **Equipment:** BMG Labtech - FluroStar.

<b>Peel</b>	Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment.	<b>Results:</b>	<b>PASS</b>
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**Details:** Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. **Equipment:** Instron 3343 Tensometer.

<b>Low Temp. Seal Test</b>	Confirming the materials ability to resist low temperatures	<b>Results:</b>	<b>PASS</b>
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**Details:** Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal integrity. **Equipment:** Laboratory Cold storage unit.

<b>Solvent</b>	Evaluating the materials resistance to solvents (DMSO used as an aggressive standard)	<b>Results:</b>	<b>PASS</b>
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**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.

### Plate Types:

Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC)

### Recommended Sealing Equipment:

KAPS 500/Sealit 100/Manual Roller IST-202-102HR

### Ordering:

Part Number	Format	Presentation	
IST-121-080LR	Std LabRoll™	1 Roll	100M × 80mm
IST-121-080SR	Sterile LabRoll™	1 Roll	100M × 80mm
IST-121-080LS	Std LabSheet™	100 Sheets	135 mm × 80mm
IST-121-080SS	Sterile LabSheet™	100 Sheets	135 mm × 80mm
IST-121-080TS	Trial LabSheet™	5 Sheets	135 mm × 80mm
IST-121-080TR	Trial LabRoll™	1 Roll	5M × 80mm