

# QuickSeal qPCR Optical™

## IST-128 Self Adhesive Sealing Film

<b>Product Description</b>	A transparent, optically clear, DMSO resistant, non-tacky film which adheres only when pressure is applied. It is non-pierceable and peelable.	<b>Physical Properties</b>	Pressure sensitive adhesive tape, so the seal side doesn't feel sticky, mainly used for bonding materials to various substrates. Temperature Range: -80°C to +121°C.
<b>Visual Description</b>	Clear plastic, reflective, glossy on the top. Very thin and light and doesn't crease easily.	<b>Application</b>	qPCR (96 or 384 well) 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>Details:</b> Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. <b>Equipment:</b> ABI Thermocycler, Precision Balance.	
<b>Optical</b>	Determining the materials optical clarity by measuring the transmission of emissive dye through the material
<b>Details:</b> Record the light transmission of a sealed microplate using a Fluorophore dye stock solution and a microplate reader. <b>Equipment:</b> BMG Labtech -FluroStar.	
<b>Peel</b>	Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment
<b>Details:</b> Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. <b>Equipment:</b> Instron 3343 Tensometer.	
<b>Low Temp. Seal Test</b>	Confirming the materials ability to resist low temperatures
<b>Details:</b> Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal integrity. <b>Equipment:</b> Laboratory Cold storage unit.	
<b>Solvent</b>	Evaluating the materials resistance to solvents (DMSO used as an aggressive standard)
<b>Details:</b> 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. <b>Equipment:</b> 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 five years from the date of purchase.  
Five 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), Polycarbonate (PC)

### Ordering:

Part Number	Format	Presentation	
IST-128-080LS	LabSheet™	100 Sheets	140 mm × 80 mm
IST-128-080TS	Trial LabSheet™	5 Sheets	140 mm × 80 mm