

ThermASeal Foil™

IST-108 Heat Sealing Film

Product Description	A strong bonding foil to Polypropylene which is ideal for water thermal cyclers. The foil has good solvent resistance including DMSO and is peelable and non-pierceable.	Physical Properties	Foil, thermal seal. Resistant to high and low temperatures. Thick, quite easy to crease but still flexible. Temperature Range: 200°C to +110°C.
Visual Description	Upper highly reflective metallic with a gloss finish. Seal side burnished metal, duller but still shiny, less reflective.	Application	PCR, Storage of solvents and other organics. Long term storage. Transportation at low temperature.

Test procedures

Mass Loss	Confirming the materials ability to resist high temperatures
Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance.	
Peel	Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment
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
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)
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

Sealing Temp + Dwell Times:

Temperature and Dwell Time: 175°C, 2 seconds.

Plate Types:

Polypropylene(PP)

Recommended Sealing Equipment:

*Manual heat sealers

** Automated roll-fed heat sealers

*** Agilent VII Plateloc, REMP (LHS/SHS)

Ordering:

Part Number	Format	Presentation	
IST-108-078LR**	LabRoll™	1 Roll	500M x 78 mm
IST-108-078SR**	Sterile LabRoll™	1 Roll	500M x 78 mm
IST-108-115SR***	Sterile LabRoll™	1 Roll	350M x 115 mm
IST-108-115LR***	VII LabRoll™	1 Roll	350M x 115 mm
IST-108-078LS*	LabSheet™	100 Sheets	125 mm x 78 mm
IST-108-078SS*	LabSheet™	100 Sheets	125 mm x 78 mm
IST-108-078TR*	TrialLabRoll™	1 Roll	5M x 78 mm
IST-108-115TR	TrialLabRoll™	1 Roll	5M x 115 mm
IST-108-078TS	Trial LabSheet™	5 Sheets	125 mm x 78 mm