

PierceASeal Foil™ IST-106 Pierceable Foil Heat Seal with Good Solvent Resistance

Product Description

A pierceable foil seal with easy sealing surface identification and high solvent resistance including DMSO. The film is non-peelable, pierceable and re-sealing is permissible.

Physical Properties

Very flexible foil, not easily creased. Temperature Range: -20°C to 120°C.

Visual Description

Metallic reflective foil, with both sides appearing very similar. Dashed line denotes the upper surface.

Application

PCR, compound storage, sample shipping.

Test Procedures:

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

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| Pierce | Measuring the force required to push a standardised needle through the material via compression measuring equipment. | Results: | PASS |
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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. Test Value = 4.49N

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| Burst Testing | Determining the materials adhesion to the plate | Results: | PASS |
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Details: Microplates are sealed and tested under pressure. Tests passed once achieved 2 bar of pressure or greater. **Equipment:** Miniburst 5

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| Peel | Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. | Results: | N/A |
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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.

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| Low Temp. Seal Test | Confirming the materials ability to resist low temperatures | Results: | PASS |
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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.

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| Solvent | Evaluating the materials resistance to solvents (DMSO used as an aggressive standard) | Results: | PASS |
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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.

Sealing Temp + Dwell Times:

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

Plate Types:

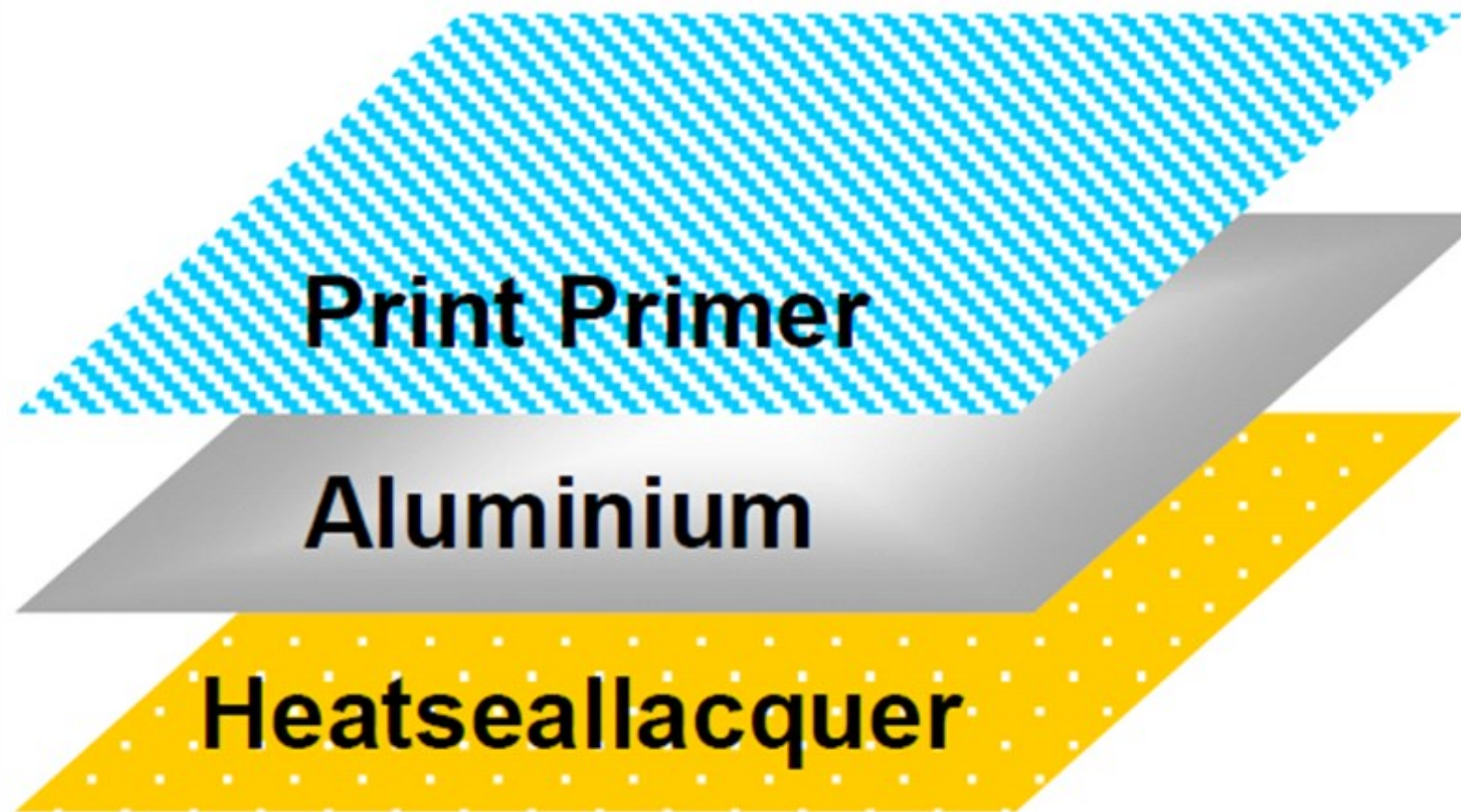
Polypropylene(PP), Polystyrene (PS)

Recommended Sealing Equipment:

- * Efly, Kseal, 4s2
- ** Wasp, Thermo ALPS300/3000, Kube, Flexiseal, Chameleon, REMP (PHS)
- *** Agilent VII Plateloc, REMP (LHS/SHS)

Ordering:

| Part Number | Format | Presentation | |
|------------------|----------------------|--------------|----------------|
| IST-106-078LR** | Std LabRoll™ | 1 Roll | 610M × 78 mm |
| IST-106-078SR** | Sterile LabRoll™ | 1 Roll | 610M × 78 mm |
| IST-106-115LR*** | VII Std LabRoll™ | 1 Roll | 500M × 115 mm |
| IST-106-115SR*** | Sterile VII LabRoll™ | 1 Roll | 500M × 115 mm |
| IST-106-078LS* | Std LabSheet™ | 100 Sheets | 125 mm × 78 mm |
| IST-106-078SS* | Sterile LabSheet™ | 100 Sheets | 125 mm × 78 mm |
| IST-106-078TR | Trial LabRoll™ | 1 Roll | 5 M × 78 mm |
| IST-106-115TR | Trial LabRoll™ | 1 Roll | 5 M × 115 mm |
| IST-106-078TS | Trial LabSheet™ | 5 Sheets | 125 mm × 78 mm |



| Material-Description | Base | Thickness or Grammage |
|----------------------------|--|------------------------------------|
| Print primer | CN-based | 1,5 ± 0,5 g/m ² |
| Aluminium hard dull/bright | Alloy min. 98,8 % = AA 8079 | 54,0 g/m ² = 20 µm ± 8% |
| Heatseallacquer | Styrol-copolymerisat, Methylstyrol, PP-Dispersion | 3,5 ± 0,5 g/m ² |
| | | |
| Total weight | 59,0 g/m² (16,9 m²/kg) ±10% | |