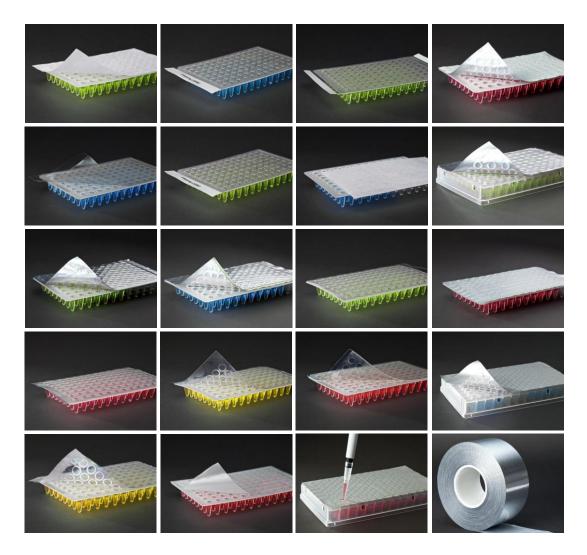


Sealing Foils & Films 2021





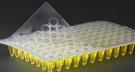
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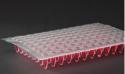
Gas Perm Woven





A clear film with good optical clarity and moderate solvent resistant properties. Description The film is peel-able and non-pierceable. 9095-10101-078LR ** Std LabRoll™ 1 Roll 500m х 78mm ** Sterile 9095-10101-078SR LabRoll™ 1 Roll 500m 78mm х *** VII Std LabRoll™ 9095-10101-115LR 1 Roll 350m х 115mm *** Sterile VII 9095-10101-115SR LabRoll™ 1 Roll 350m 115mm х * Std LabSheet™ Ordering 9095-10101-078LS 100 Sheets 125mm 78mm х * Sterile 9095-10101-078SS LabSheet™ 100 Sheets 125mm х 78mm LabRoll™ 9095-10101-078TR Trial 1 Roll 78mm 5m х LabRoll™ 9095-10101-115TR Trial 1 Roll 5m х 115mm 9095-10101-078TS Trial LabSheet™ 5 Sheets 125mm 78mm х Polypropylene (PP), Polyethylene (PE), Polystyrene (PS) and Cyclic Compatibility Olefin Copolymer (COC) plates. Application qPCR, short term compound storage. Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original Storage packaging. Temperature range -80°C to 80°C Properties Temperature and Dwell Time: 180° C, 2 seconds Recommended sealing Sealing Equipment: * Efly, Kseal, 4s2 ** Wasp, ThermoALPS300/3000, Kube, Flexiseal, Chameleon, REMP (PHS) *** Agilent VII Plateloc, REMP (LHS/SHS) Specifications Visual Description Clear and thick plastic seal. Sealing surface on inside of roll and is less reflective. Flexible plastic, difficult to crease, upper surface feels very smooth, sealing side has a slight rough feel. Temperature **Physical Properties** Range: -80°C to +80°C. Test procedures Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment. Results: N/A Pierce 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. Determining the materials optical clarity by measuring the transmission of emissive dye through the material. **Results: Pass** Optical Details: Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. **Results: Pass** Peel Details: Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to resist low temperatures. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. 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 Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution. Plate Types, Sealing Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC) Temp. Time Settings Details: Temperature and Dwell Time: 175°C, 2 seconds.

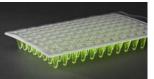




9095-10102 Clear Seal Weld

A strong, clear bonding film which is ideal for water thermal cyclers. The film has good optical clarity is solvent Description resistant and has a permanent seal. It is nonpierceable and non peelable. 9095-10102-078LR ** Std LabRoll™ 1 Roll 610m х 78mm ** Sterile 9095-10102-078SR LabRoll™ 1 Roll 610m 78mm х *** VII Std LabRoll™ 1 Roll 9095-10102-115LR 500m х 115mm *** Sterile VII 9095-10102-115SR LabRoll™ 1 Roll 500m 115mm х * Std LabSheet™ Ordering 9095-10102-078LS 100 Sheets 125mm x 78mm * Sterile 9095-10102-078SS LabSheet™ 100 Sheets 125mm х 78mm LabRoll™ 9095-10102-078TR Trial 1 Roll 78mm 5m х LabRoll™ 9095-10102-115TR Trial 1 Roll 5m х 115mm LabSheet™ 9095-10102-078TS Trial 5 Sheets 125mm 78mm х Compatibility A Permanent seal to Polypropylene (PP) qPCR, PCR, (water bath thermal cycling), storage, sample inspection, disposal of hazardous materials, use with Application DMSO. Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from Storage date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging. Temperature range -80°C to 110°C Properties Temperature and Dwell Time: 175° C, 2 seconds Recommended sealing Equipment: * Efly, Kseal, 4s2 ** Wasp, ThermoALPS300/3000, Kube, Flexiseal, Sealing Chameleon, REMP (PHS) *** Agilent VII Plateloc, REMP (LHS/SHS) Specifications Very clear and thick plastic seal. The seals two sides are very similar, so care must be taken Visual Description when sealing. Flexible plastic, not easily creased upper feels very smooth, sealing surface on inside of roll and feels rougher to the **Physical Properties** touch. Temperature Range: -80°C to +110°C. Test procedures Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment. Results: N/A Pierce 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 Determining the materials optical clarity by measuring the transmission of emissive dye through the material. **Results: Pass** Optical Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. Results: N/A Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to resist low temperatures. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. 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 Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution. Plate Types, Sealing Polypropylene (PP) Temp. Time Settings Details: Temperature and Dwell Time: 175°C, 2 seconds.

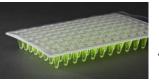




9095-10103 Clear Seal Pierce

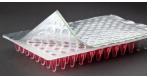
Description	A clear heat-seal film solvent resistance, it i) sequencer. The fil	m has good	optio	cal clarity and moderate
	9095-10103-078LR	** Std	LabRoll™	1 Roll	610m		78mm
	9095-10103-078SR	** Sterile	LabRoll™	1 Roll	610m	x x	78mm
	9095-10103-0785R	*** VII Std	LabRoll™	1 Roll	500m	x	115mm
	9095-10103-115ER	*** Sterile VII	LabRoll™	1 Roll	500m	x	115mm
Ordering	9095-10103-078LS	* Std	LabSheet™	100 Sheets	125mm	x	78mm
Ordering	9095-10103-078SS	* Sterile	LabSheet™	100 Sheets	125mm	x	78mm
	9095-10103-078TR	Trial	LabRoll™	1 Roll	5m	x	78mm
	9095-10103-115TR	Trial	LabRoll™	1 Roll	5m	x	115mm
	9095-10103-078TS	Trial	LabSheet™	5 Sheets	125mm	x	78mm
Compatibility	Polypropylene (PP), P (COC) plates.	olyethylene (PE),	Polystyrene (PS) a	nd Cyclic Olefin Co	polymer		
Application	Recommended for us	e with the Abi 373	30 Sequencer as tl	he thinner structur	e pierces mo	ore ea	asily
Storage	Store in a cool place. <i>A</i> date of purchase. Thr packaging.						vithin three years from ct sunlight, in original
Properties	Temperature range -8	30°C to 80°C or 11	0°C with pressuris	ed PCR heated lids			
	Temperature and Dw	ell Time: 175° C, 2	seconds Recomm	nended sealing			
Sealing	Equipment: * Efly, Kse Chameleon, REMP (Pl	eal, 4s2 ** Wasp,	ThermoALPS300/	3000, Kube, Flexise	al,		
		Sner	ifications —				
		566	incations				
Visual Description	Clear and thick plastic seal. Sealing surface on inside of roll and is less reflective.						
Physical Properties	Flexible plastic, difficu range -80°C to 80°C or				side has a sli	ght r	ough feel. Temperature
		——— Test p	orocedures —				
Mass Loss	Confirming the mater Details: Mass loss of so Precision Balance.				nme. Equipn	nent	: ABI Thermocycler,
	Measuring the force r	equired to push a	standardised ne	edle through the n	naterial via c	omp	ression measuring
	equipment. Results: F	•					
Pierce		ng a standardised	-	that less than 10N	is required t	o pie	rce the surface & access
	Determining the mate			he transmission of	omissivo d	10 th	rough the material
	Results: Pass		cy sy measuring t		ciliasive uy	e ul	South the material.
Optical			•	ate using a Fluroph	ore dye stoc	k sol	ution and a microplate
				ability to be remov	ued via exte	nsio	n measuring equipment.
	Results: N/A	and permanence	a auncsion & its	asinty to be relifion	reu, via exte		a measuring equipment.
Peel				r & Successful Peel	are measure	ed &	recorded after a 180° peel
	Confirming the mater	ials ability to resi	st low temperatu	ires. Results: Pass			
Low Temperature	Details: Microplates a	-			o a series of	tecto	s to substantiate seal
Seal Test	integrity. Equipment:				0 0 50/105 01		
			-		، م ا مع مامير ۱	Der	ulter NI / A
Solvent	Evaluating the mater Details Sealed plate is seal damage & volum	subjected to a hip	gh concentration	of DMSO for a time	e period at lo	w te	mperatures after which
Diato Tunos Sealing	Delumerular a (DD) D	alvethulers (DC)	Debuetures - (DC)		umar (000)		
Plate Types, Sealing	Polypropylene(PP), P			Cyclo Olefin Copol	ymer (COC)		
Temp. Time Settings	Details: Temperature	and Dwell Time: 1	L75°C, 2 seconds.				





Description	Optically clear adhesive film, pressure activated adhesive, suitable for qPCR and other imaging techniques including crystaqllisation.
Ordering	9095-10103-100M Lab Roll 1 Roll 80mm x 100 metres
Application	qPCR. High degree of optical clarity for ease of read through. Little or no auto-fluorescence for a high degree of light transmission. Chemically inert extractables except at extreme pH. Adheres well to a wide range of substrates
Storage	Room temperature. Avoid direct exposure to light and high humidity
Sealing	For all adhesive seals the best sealing results are achieved using a hand-held pressure roller.
Properties —	Temperature range -80°C to 110°C with pressurised heated PCR Lid.
Composition	Polyolefin film with pressure sensitive silicone adhesive and coated polyester film release liner. Non-tacky to skin and gloves
Safety	Non-hazardous. This is a pressure seal. The adhesive is released when pressure Is applied firmly and evenly to the seal.
Schematic	Outward surface Sealing surface
Note	Non-hazardous. This is a pressure seal. The adhesive is released when pressure Is applied firmly and evenly to the seal.

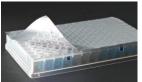




9095-10104 **Peel Seal Foil**

	A real able fail lawin	ata haat aaal film			latas Thafil		a a an ad line tid bandar
Description	and moderate resista					m na	as a good liquid barrier
	9095-10104-078LR 9095-10104-078SR	** Std ** Sterile	LabRoll™ LabRoll™	1 Roll 1 Roll	610m 610m	x x	78mm 78mm
	9095-10104-115LR	*** VII Std	LabRoll™	1 Roll	500m	х	115mm
O utlanting	9095-10104-115SR	*** Sterile VII	LabRoll™	1 Roll	500m	X	115mm
Ordering	9095-10104-078LS 9095-10104-078SS	* Std * Sterile	LabSheet™ LabSheet™	100 Sheets 100 Sheets	125mm 125mm		78mm 78mm
	9095-10104-078TR	Trial	LabRoll™	1 Roll	5m	x	78mm
	9095-10104-115TR	Trial	LabRoll™	1 Roll	5m	x	115mm
	9095-10104-078TS	Trial	LabSheet™	5 Sheets	125mm	х	78mm
Compatibility	Polypropylene (PP) Pl	ates.					
Application	PCR, low temperature days).	e, short term comp	oound storage, sh	ort term room ter	perature co	mpo	und storage (less than 5
Storage	Store in a cool place. date of purchase. Thr packaging.	•	•				vithin three years from ct sunlight, in original
Properties	Temperature range -8	80°C to 110°C					
	Temperature and Dw	,		0			
Sealing	Equipment: * Efly, Kse Chameleon, REMP (Pl				al,		
		Spec	ifications —				
Visual Description Metallic with upper surface gloss white. Seal surface metallic burnished foil.							
Physical Properties	Flexible, not easily cre	ased. Temperatu	e Range: -80°C to) +110°C			
		——— Test p	orocedures —				
Mass Loss	Confirming the mater Details: Mass loss of so Precision Balance.				mme. Equipr	nent	: ABI Thermocycler,
Pierce	Measuring the force r equipment. Results: N		standardised ne	edle through the n	naterial via c	omp	pression measuring
	Details 5 tests run usin the wells. Equipment	-	-	that less than 10N	is required t	o pie	erce the surface & access
	Determining the mate	erials optical clari	ty by measuring t	he transmission o	f emissive dy	ye th	rough the material.
Optical	-			ate using a Fluroph	ore dye stoc	k sol	ution and a microplate
	reader. Equipment BN			ability to be remo	ved, via exte	nsio	n measuring equipment.
Peel	Results: Pass	re, Adhesive Tran	sfer, Material tea				recorded after a 180° peel
Low Temperature Seal Test	Confirming the mater Details: Microplates a integrity. Equipment:	re sealed at speci	fied low temperat		to a series of	test	s to substantiate seal
	Evaluating the mater	ials resistance to	olvents (DMSO u	ised as an aggressiv	ve standard)	Res	ults: N/A
Solvent		subjected to a high	gh concentration	of DMSO for a time	e period at lo	ow te	emperatures after which
Plate Types, Sealing	Polypropylene(PP), w	elds to Polyethyle	ene (PE) and certa	ain Cyclo Olefin Co	polymer (CC	DC)	
Temp. Time Settings	Details: Temperature	and Dwell Time: 1	.75°C, 2 seconds.		-		





A DMSO resistant foil laminate suited for Polypropylene plates, with a good liquid barrier and high solvent-

9095-10105 Pierce Seal Foil DMSO

automating today for a changing tomorrow

Description resistance (at high temperatures). The seal is peel-able and non-pierceable. 9095-10105-078LR ** Std LabRoll™ 1 Roll 610m 78mm х ** Sterile 9095-10105-078SR LabRoll™ 1 Roll 610m 78mm х *** VII Std LabRoll™ 1 Roll 9095-10105-115LR 500m 115mm х 9095-10105-115SR *** Sterile VII LabRoll™ 1 Roll 500m 115mm х * Std LabSheet™ Ordering 9095-10105-078LS 100 Sheets 125mm 78mm х * Sterile LabSheet™ 9095-10105-078SS 100 Sheets 125mm х 78mm 9095-10105-078TR Trial LabRoll™ 1 Roll 5m 78mm х LabRoll™ 9095-10105-115TR Trial 1 Roll 5m х 115mm 9095-10105-078TS Trial LabSheet™ 5 Sheets 125mm х 78mm Compatibility Polypropylene (PP) Plates. Application Low temperature and ambient temperature storage with DMSO and other solvents Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original Storage packaging. Temperature range -20°C to 120°C Properties Temperature and Dwell Time: 175° C, 2 seconds Recommended sealing Equipment: * Efly, Kseal, 4s2 ** Wasp, ThermoALPS300/3000, Kube, Flexiseal, Sealing Chameleon, REMP (PHS) *** Agilent VII Plateloc, REMP (LHS/SHS) Specifications Visual Description Upper glossy metallic surface. Sealing surface less reflective, more highly burnished and smoother. **Physical Properties** Flexible, not easily creased. Temperature Range: -80°C to +80°C. Test procedures Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment. Results: N/A Pierce 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. Determining the materials optical clarity by measuring the transmission of emissive dye through the material. Results: N/A Optical Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar. Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. **Results: Pass** Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to resist low temperatures. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. 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 Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution Plate Types, Sealing Polypropylene (PP), certain Cyclo Olefin Copolymer(COC) plates, welds to Polyethylene (PE) Temp. Time Settings 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. QC testing is carried out to ensure that products are free from nucleases (DNases & RNases) as well as human genomic DNA. Although every effort is made, including cleanroom manufacture, to maintain this level of cleanliness, best laboratory practice with regards to duplicate testing should be followed. www.kbiosystems.com Page 7 sales@kbiosystems.com





9095-10106 Pierce Seal Foil

A pierceable foil seal with easy sealing surface identification and high solvent resistance including DMSO. The film is Description non-peelable, pierceable and re-sealing is permissible. 9095-10106-078LR ** Std LabRoll™ 1 Roll 610m 78mm х ** Sterile 9095-10106-078SR LabRoll™ 1 Roll 610m 78mm х *** VII Std LabRoll™ 9095-10106-115LR 1 Roll 500m 115mm х 9095-10106-115SR *** Sterile VII LabRoll™ 1 Roll 500m 115mm х * Std LabSheet™ Ordering 9095-10106-078LS 100 Sheets 125mm 78mm х * Sterile LabSheet™ 9095-10106-078SS 100 Sheets 125mm х 78mm 9095-10106-078TR Trial LabRoll™ 1 Roll 5m 78mm х 9095-10106-115TR LabRoll™ Trial 1 Roll 5m х 115mm 9095-10106-078TS Trial LabSheet™ 5 Sheets 125mm х 78mm Compatibility Polypropylene (PP), Polystyrene (PS). Low temperature and ambient temperature storage with DMSO and other solvents. PCR, compound storage, Application sample shipping. Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original Storage packaging. Temperature range -20°C to 120°C Properties Temperature and Dwell Time: 175° C, 2 seconds Recommended sealing Sealing Equipment: * Efly, Kseal, 4s2 ** Wasp, ThermoALPS300/3000, Kube, Flexiseal, Chameleon, REMP (PHS) *** Agilent VII Plateloc, REMP (LHS/SHS) Specifications Metallic reflective foil, with both sides appearing very similar. Dashed line denotes the upper surface. Visual Description Very flexible foil, not easily creased. Temperature Range: -20°C to 120°C. **Physical Properties Test procedures** Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment, Results: Pass Pierce 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 Determining the materials adhesion to the plate. Results Pass **Burst Testing** Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar. Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. **Results: Pass** Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to resist low temperatures. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. 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 Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution. Plate Types, Sealing Polypropylene(PP), Polystyrene (PS) Temp. Time Settings 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. QC testing is carried out to ensure that products are free from nucleases (DNases & RNases) as well as human genomic DNA. Although every effort is made,

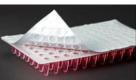




9095-10107 Pierce Seal Foil PS

A pierceable A high grade foil with good solvent resistance including DMSO, easy sealing surface identification with multiple sealing and resealing properties. The seal is peel-able Polystyrene only and pierceable. foil seal with easy Description sealing surface identification and high solvent resistance including DMSO. The film is non-peel-able, pierceable and resealing is permissible. 9095-10107-078LR ** Std LabRoll™ 1 Roll 610m х 78mm ** Sterile 9095-10107-078SR LabRoll™ 1 Roll 610m х 78mm *** VII Std 9095-10107-115LR LabRoll™ 1 Roll 500m 115mm х *** Sterile VII 9095-10107-115SR LabRoll™ 1 Roll 500m 115mm х 9095-10107-078LS * Std LabSheet™ 100 Sheets 125mm x 78mm Ordering * Sterile 9095-10107-078SS LabSheet™ 100 Sheets 125mm x 78mm 9095-10107-078TR Trial LabRoll™ 78mm 1 Roll 5m х LabRoll™ 115mm 9095-10107-115TR Trial 1 Roll 5m х LabSheet™ 5 Sheets 9095-10107-078TS Trial 125mm х 78mm Compatibility Polypropylene (PP), Polystyrene (PS). PCR low temperature compound storage, short term room temperature compound storage. Application Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original Storage packaging. Properties Temperature range -20°C to 110°C Temperature and Dwell Time: 175° C, 2 seconds Recommended sealing Sealing Equipment: * Efly, Kseal, 4s2 ** Wasp, ThermoALPS300/3000, Kube, Flexiseal, Chameleon, REMP (PHS) *** Agilent VII Plateloc, REMP (LHS/SHS) Specifications Visual Description Metallic reflective foil, with both sides appearing very similar. Printed line denotes upper surface. Very flexible foil, not easily creased. Temperature Range: -20°C to 110°C. **Physical Properties Test procedures** Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment. Results: Pass Pierce Details 5 tests run using a standardised needle, ensuring that less than 10N is required to pierce the surface & access the wells. Test Value = 7.22N. Equipment Instron 3343 Tensometer. Determining the materials adhesion to the plate. Results Pass **Burst Testing** Details Microplates are sealed and tested under pressure. Tests passed once achieved 2 bar of pressure or greater. **Equipment Miniburst 5** Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. **Results: Pass** Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to resist low temperatures. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. 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 Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution. Plate Types, Sealing Polypropylene(PP), Polystyrene (PS) Temp. Time Settings Temperature and Dwell Time: 175°C, 2 seconds.





9095-10108 Therm Seal Foil

Description	A strong bonding foil including DMSO and is			water thermal cycle	ers. The foil	has Į	good solvent resistance	
	9095-10108-078LR	** Std	LabRoll™	1 Roll	500m	x	78mm	
	9095-10108-078SR	** Sterile	LabRoll™	1 Roll	500m	x	78mm	
	9095-10108-115LR 9095-10108-115SR	*** VII Std *** Sterile VII	LabRoll™ LabRoll™	1 Roll 1 Roll	350m 350m	x x	115mm 115mm	
Ordering	9095-10108-078LS	* Std	LabSheet™	100 Sheets	125mm	x	78mm	
ordernig	9095-10108-078SS	* Sterile	LabSheet™	100 Sheets	125mm	x	78mm	
	9095-10108-078TR	Trial	LabRoll™	1 Roll	5m	x	78mm	
	9095-10108-115TR	Trial	LabRoll™	1 Roll	5m	х	115mm	
	9095-10108-078TS	Trial	LabSheet™	5 Sheets	125mm	х	78mm	
Compatibility	Polypropylene (PP), P	olystyrene (PS).						
Application	PCR, specifically wate term storage. Transpo		•	ts and other organi	cs, including	; acio	ds and alkaline. Long	
Storage	Store in a cool place. A date of purchase. Thr packaging.						vithin three years from ct sunlight, in original	
Properties	Temperature range -2	0°C to 110°C						
	Temperature and Dw	ell Time: 175° C, 2	seconds Recomm	nended sealing				
Sealing	Equipment: * Efly, Kse Chameleon, REMP (Pl	eal, 4s2 ** Wasp, ⁻	ThermoALPS300/3	3000, Kube, Flexise	al,			
				. ,				
		•	ifications —					
Visual Description	Upper highly reflective	e metallic with a g	loss finish. Seal sio	de burnished meta	l, duller but	still s	shiny, less reflective.	
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.							
		— Test p	orocedures —					
Mass Loss	Confirming the mater Details: Mass loss of so Precision Balance.	•	• •		nme. Equipn	nent	: ABI Thermocycler,	
	Measuring the force r	equired to push a	standardised ne	edle through the m	aterial via o	omr	pression measuring	
Diamo	equipment. Results: F							
Pierce	Details 5 tests run usir the wells. Equipment			that less than 10N	s required t	o pie	erce the surface & access	
	Determining the m	aterials adhesio	on to the plate.	Results Pass				
Burst Testing	-	e sealed and teste	•		e achieved 2	bar	of pressure or greater.	
	Measuring the mater	ials permanence of	of adhesion & its	ability to be remov	ed, via exte	nsio	n measuring equipment.	
Peel	Results: Pass				,		5 1 F	
Peel	Details Cohesive Failu test. Equipment Instru			r & Successful Peel	are measure	ed &	recorded after a 180° peel	
	Confirming the mater	ials ability to resi	st low temperatu	ires. Results: Pass				
Low Temperature Seal Test	Details: Microplates a integrity. Equipment:	re sealed at speci	fied low temperat		o a series of	test	s to substantiate seal	
	Evaluating the mater	als resistance to	solvents (DMSO u	ised as an aggressiv	e standard)	Res	ults: Pass	
Solvent		subjected to a hig	gh concentration	of DMSO for a time	period at lo	w te	emperatures after which	
Plate Types, Sealing	Polypropylene(PP), P	olystyrope (DS)						
Temp. Time Settings			cocondo					
	Temperature and Dw	en rime: 175°C, 2	seconds.					

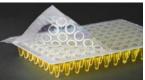




9095-10110 Gas Perm Seal

Description	An opaque, non-woven porous and gas permeable film which acts as a barrier to solid contaminants. It seals to Polypropylene and Polystyrene plates. The seal is pierceable and peel-able, and not certified free from nucleases and DNA.							
	9095-10110-078LR 9095-10110-078SR 9095-10110-115LR 9095-10110-115SR	** Std ** Sterile *** VII Std *** Sterile VII	LabRoll™ LabRoll™ LabRoll™ LabRoll™	1 Roll 1 Roll 1 Roll 1 Roll 1 Roll	200m 200m 200m 200m	x 78mm x 78mm x 115mm x 115mm		
Ordering	9095-10110-078LS 9095-10110-078SS 9095-10110-078TR	* Std * Sterile Trial	LabSheet™ LabSheet™ LabSheet™	100 Sheets 100 Sheets 1 Roll	125mm 125mm 5m	x 78mm x 78mm x 78mm		
	9095-10110-115TR 9095-10110-078TS	Trial Trial	LabRoll™ LabSheet™	1 Roll 5 Sheets	5m 125mm	x 115mm x 78mm		
Compatibility	Polypropylene (PP), P	olystyrene (PS).						
Application	Short term incubation	, agriculture and s	seed storage, inse	ct storage, cell cult	ure.			
Storage	Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging.							
Properties	Temperature range -20°C to 80°C							
Sealing	Sealing Temperature and Dwell Time: 170° C, 2 seconds Recommended sealing Equipment: * Efly, Kseal, 4s2 ** Wasp, ThermoALPS300/3000, Kube, Flexiseal, Chameleon, REMP (PHS) *** Agilent VII Plateloc, REMP (LHS/SHS)							
		Spec	ifications —					
Visual Description	White non-woven. Sea	Il side has a shiny	lacquer coating					
Physical Properties	Temperature Range: -		· · · ·	ropylene (PP), Poly	styrene (PS)			
		— Test p	orocedures —					
Mass Loss	Confirming the mater Details: Mass loss of so Precision Balance.				nme. Equipm	nent: ABI Thermocycler,		
Pierce	Measuring the force required to push a standardised needle through the material via compression measuring equipment. Results: Pass 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 N/A Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar.							
Peel	Results: Pass	re, Adhesive Tran	sfer, Material tea	-		nsion measuring equipment. ed & recorded after a 180° peel		
Water Vapour Transmission	Confirming the mater Details: Measure the Ref ASTM E-96-66, Ta	weight loss of wat	er during a set tin		iture and hui	midity Test Method: T30/001,		
Solvent	Evaluating the materi Details Sealed plate is seal damage & volum	subjected to a hig	gh concentration	of DMSO for a time	period at lo	w temperatures after which		
Plate Types, Sealing Temp. Time Settings	Polypropylene(PP), Polypropylene		seconds.					





Description	A clear, perforated ga solvent resistance. Th	•		d seed culture, wit	h good optical c	larity and moderate
	9095-10111-078LR 9095-10111-078SR 9095-10111-115LR	** Std ** Sterile *** VII Std	LabRoll™ LabRoll™ LabRoll™	1 Roll 1 Roll 1 Roll	610m x 610m x 500m x	78mm 115mm
Ordering	9095-10111-115SR 9095-10111-078LS 9095-10111-078SS	*** Sterile VII * Std * Sterile	LabRoll™ LabSheet™ LabSheet™	1 Roll 100 Sheets 100 Sheets	500m x 125mm x 125mm x	78mm
	9095-10111-078TR 9095-10111-115TR 9095-10111-078TS	Trial Trial Trial	LabRoll™ LabRoll™ LabSheet™	1 Roll 1 Roll 5 Sheets	5m x 5m x 125mm x	115mm
Compatibility	Polypropylene (PP), P Olefin Copolymer (CO		Polystyrene (PS) a	nd Cyclic		
Application	Short-term incubatior	n, agriculture and	seed storage, inse	ect storage, cell cul	ture.	
Storage			-			within three years from ect sunlight, in original
Properties	Temperature range -8	30°C to 80°C, or 11	0°C with pressuri	sed PCR heated lid	s.	
Sealing	Temperature and Dw Equipment: * Efly, Kse Chameleon, REMP (Pl	eal, 4s2 ** Wasp, HS) *** Agilent VI	ThermoALPS300/	3000, Kube, Flexise	eal,	
Physical Properties	Temperature Range: -			rized PCR heated li	ds	
		Test p	orocedures			
Mass Loss	Confirming the mater Details: Mass loss of so Precision Balance.	•	• •		mme. Equipmer	t: ABI Thermocycler,
Pierce	Measuring the force r equipment. Results: N Details 5 tests run usin the wells. Equipment	N/A ng a standardised	needle, ensuring	-		pression measuring
Optical	Determining the mate Results: Pass Details Record the ligh reader. Equipment BM	nt transmission of	a sealed micropla		-	hrough the material.
Peel	Results: N/A	re, Adhesive Tran	sfer, Material tea	-	-	on measuring equipment & recorded after a 180° pe
Low Temperature Seal Test	Confirming the mater Details: Microplates a integrity. Equipment:	re sealed at speci	fied low temperat		to a series of tes	ts to substantiate seal
Solvent	Evaluating the mater Details Sealed plate is seal damage & volum	subjected to a hi	gh concentration	of DMSO for a time	e period at low	emperatures after which
Plate Types, Sealing Temp. Time Settings	Polypropylene (PP), P Details: Temperature			, Cyclo Olefin Copo	lymer (COC)	





9095-10113 Gas Perm Seal 2

Description		seals to Polyprop				neable and a Barrier to and peel-able, and not
	9095-10113-078LR 9095-10113-078SR 9095-10113-115LR 9095-10113-115SR	** Std ** Sterile *** VII Std *** Sterile VII	LabRoll™ LabRoll™ LabRoll™ LabRoll™	1 Roll 1 Roll 1 Roll 1 Roll 1 Roll	610m x 610m x 500m x 500m x	78mm 78mm 115mm 115mm
Ordering	9095-10113-078LS 9095-10113-078SS	* Std * Sterile	LabSheet™ LabSheet™	100 Sheets 100 Sheets	125mm x 125mm x	78mm 78mm
	9095-10113-078TR 9095-10113-115TR 9095-10113-078TS	Trial Trial Trial	LabRoll™ LabRoll™ LabSheet™	1 Roll 1 Roll 5 Sheets	5m x 5m x 125mm x	78mm 115mm 78mm
Compatibility	Polypropylene (PP), P	olystyrene (PS).				
Application	- Short term incubatior	n, agriculture and s	seed storage, inse	ect storage, cell cul	ture.	
Storage	Store in a cool place. date of purchase. Thr packaging.	•	•			vithin three years from ct sunlight, in original
Properties	Temperature range -2	20°C to 80°C				
Sealing	Temperature and Dw Equipment: * Efly, Ks Chameleon, REMP (Pl	eal, 4s2 ** Wasp, ⁻	ThermoALPS300/	3000, Kube, Flexise	eal,	
		Spec	ifications —			
Visual Description	Upper 60gsm paper. S	eal side grid effect	t lacquer coating			
Physical Properties	Temperature Range: -	-20°C to +80°C. Co	mpatibility: Polyp	ropylene (PP), Poly	ystyrene (PS)	
		——— Test p	orocedures —			
Mass Loss	Confirming the mater Details: Mass loss of so Precision Balance.			•	mme. Equipment	: ABI Thermocycler,
Pierce	Measuring the force r equipment. Results: F Details 5 tests run usin the wells. Equipment	Pass ng a standardised	needle, ensuring	-		pression measuring prce the surface & access
Optical	-	nt transmission of	a sealed micropla		-	rough the material. ution and a microplate
	reader. Equipment BN			- h:!!:		
Peel	Results: Pass	ire, Adhesive Tran	sfer, Material tea	-		n measuring equipment. recorded after a 180° peel
Porosity Bendsten	Confirming the mater Details: Measure the Units ml/min Target:	defined volume of			specified pressur	e. Test Method: ISO3781,
Solvent	Evaluating the mater Details Sealed plate is seal damage & volum	subjected to a high	gh concentration	of DMSO for a time	e period at low te	emperatures after which
Plate Types, Sealing Temp. Time Settings	Polypropylene (PP) P Temperature and Dw		clo Olefin Copoly	mer (COC)		

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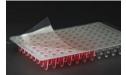
	A "stick to all" pool ab	la fail laminata h	oat coal film whic	h is suited for all pl	ato tunos [Dolum	ropulana (DD)		
Description	A "stick to all" peel-ab Polystyrene (PS) and C to solvents. It is peel-a aspect.	yclo Olefin Copoly	vmer (COC). The fi	Im has a good liqui	d barrier an	d hig	h resistance		
	9095-10114-078LR 9095-10114-078SR 9095-10114-115LR 9095-10114-115SR	** Std ** Sterile *** VII Std *** Sterile VII	LabRoll™ LabRoll™ LabRoll™ LabRoll™	1 Roll 1 Roll 1 Roll 1 Roll 1 Roll	610m 610m 500m 500m	x x x x	78mm 78mm 115mm 115mm		
Ordering	9095-10114-078LS 9095-10114-078LS 9095-10114-078SS 9095-10114-078TR 9095-10114-115TR 9095-10114-078TS	* Std * Sterile Trial Trial Trial	LabSheet™ LabSheet™ LabRoll™ LabRoll™ LabSheet™	100 Sheets 100 Sheets 1 Roll 1 Roll 5 Sheets	125mm 125mm 5m 5m 125mm		78mm 78mm 78mm 115mm 78mm		
Compatibility	Polypropylene (PP), P	olystyrene (PS) &	Cyclo Olefin Copo	lymer (COC) plates					
Application	PCR, low temperature days).	e, short term comp	oound storage, sh	ort term room tem	perature co	mpou	und storage (less than 5		
Storage	Store in a cool place. date of purchase. Thr packaging.	•					ithin three years from t sunlight, in original		
Properties	Temperature range -8	80°C to 110°C							
Sealing	Sealing Temperature and Dwell Time: 175° C, 2 seconds Recommended sealing Equipment: * Efly, Kseal, 4s2 ** Wasp, ThermoALPS300/3000, Kube, Flexiseal, Chameleon, REMP (PHS) *** Agilent VII Plateloc, REMP (LHS/SHS)								
		Spec	ifications —						
Visual Description									
Physical Properties	Flexible, not easily cre	ased. Thicker than	n IST-104. Temper	rature Range: -80°C	C to +110°C				
		— Test p	orocedures —						
Mass Loss	Confirming the mater Details: Mass loss of so Precision Balance				nme. Equipr	nent:	ABI Thermocycler,		
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 mate Results N/A Details Record the ligh reader. Equipment BN	nt transmission of	a sealed micropla		-		rough the material. ution and a microplate		
Peel	Results: Pass	re, Adhesive Tran	sfer, Material tea				n measuring equipment. recorded after a 180° peel		
Low Temperature Seal Test	Confirming the mater Details: Microplates a integrity. Equipment:	re sealed at speci	fied low temperat		o a series of	tests	to substantiate seal		
Solvent	Evaluating the mater Details Sealed plate is seal damage & volum	subjected to a hig	gh concentration	of DMSO for a time	period at lo	ow te	mperatures after which		
Plate Types, Sealing Temp. Time Settings	Polypropylene (PP), F plates. Temperature and Dw			. Cyclo Olefin Copo	lymer (COC)	and	non-binding coated		





A "stick to all" surfaces, pierce-able foil seal with easy sealing surface identification and moderate solvent resistance. Description The film is peel-able and pierce-able. 9095-10115-078LR ** Std LabRoll™ 1 Roll 610m 78mm х ** Sterile LabRoll™ 9095-10115-078SR 1 Roll 610m 78mm х *** VII Std 9095-10115-115LR LabRoll™ 1 Roll 500m 115mm х *** Sterile VII LabRoll™ 500m 9095-10115-115SR 1 Roll х 115mm * Std LabSheet™ 100 Sheets Ordering 9095-10115-078LS 125mm х 78mm 9095-10115-078SS * Sterile LabSheet™ 100 Sheets 78mm 125mm х 9095-10115-078TR Trial LabRoll™ 1 Roll 5m 78mm х LabRoll™ 9095-10115-115TR Trial 1 Roll 5m 115mm х 9095-10115-078TS Trial LabSheet™ 5 Sheets 125mm 78mm х Compatibility Polypropylene (PP), Polystyrene (PS) and Cyclo Olefin Copolymer (COC) Application PCR, compound storage, sample shipping. Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from Storage date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging. Temperature range -80°C to 80°C Properties Temperature and Dwell Time: 180° C, 2 seconds Recommended sealing Sealing Equipment: * Efly, Kseal, 4s2 ** Wasp, ThermoALPS300/3000, Kube, Flexiseal, Chameleon, REMP (PHS) *** Agilent VII Plateloc, REMP (LHS/SHS) Specifications Metallic reflective foil, with both sides appearing very similar. Ensure correct surface is being used for sealing. Visual Description **Physical Properties** Flexible foil, not easily creased. Temperature Range: -80°C to 80°C. Test procedures Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment. Results: N/A Pierce 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. Determining the materials optical clarity by measuring the transmission of emissive dye through the material. Results N/A Optical Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar. Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. **Results: Pass** Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to breath. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. Evaluating the materials resistance to solvents (DMSO used as an aggressive standard) Results: Pass Details Sealed plate is subjected to a high concentration of DMSO for a time period at low temperatures after which Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution Plate Types, Sealing Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC) Temp. Time Settings Temperature and Dwell Time: 175°C, 2 seconds.





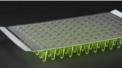
9095-10120 Quick Seal PCR

Description	A "stick to all" surfaces, pierce-able foil seal with easy sealing surface identification and moderate solvent resi. The film is peel-able and pierce-able.	stance.				
Ordering	9095-10120-080LR ** Std LabRoll™ 1 Roll 100m x 80mm 9095-10120-080SR ** Sterile LabRoll™ 1 Roll 100m x 80mm 9095-10120-080SR ** Sterile LabRoll™ 1 Roll 100m x 80mm 9095-10120-080LS * Std LabSheet™ 100 Sheets 135mm x 80mm 9095-10120-080SS * Sterile LabSheet™ 100 Sheets 135mm x 80mm					
	9095-10120-080TS Trial LabSheet™ 5 Sheets 135mm x 80mm					
Compatibility	Polypropylene (PP), Polystyrene (PS) and Cyclo Olefin Copolymer (COC)					
Application	PCR					
Storage	Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in orig packaging.					
Properties	Temperature range -20°C to 100°C					
Sealing	Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller.					
	Specifications					
Visual Description	A transparent self-adhesive seal consisting of a PET backing and a modified acrylic adhesive.					
Physical Properties	High holding power even at elevated temperatures. Superior converting performance due to strong PET backi reduced adhesive mass flow. Temperature Range: -20°C to +110°C	ng and				
	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 Thermocycle Precision Balance.	er,				
Pierce	Measuring the force required to push a standardised needle through the material via compression measurin equipment. Results: N/A Details 5 tests run using a standardised needle, ensuring that less than 10N is required to pierce the surface & 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 equi Results: Pass Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a test. Equipment Instron 3343 Tensometer	-				
Low Temperature Seal Test	Confirming the materials ability to breath. Results: Pass Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate s integrity. Equipment: Laboratory Cold storage unit.	seal				
Solvent	Evaluating the materials resistance to solvents (DMSO used as an aggressive standard) Results: Pass Details Sealed plate is subjected to a high concentration of DMSO for a time period at low temperatures after seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution.	which				
Plate Types	Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC)					



Adhesive Seals





9095-10121 Quick Seal qPCR Crystal

An optically clear, DMSO resistant pressure sensitive seal which is suited for qPCR (96 or 384 well) fluorescence, Description crystallation, storage. A transparent non-tacky film which adheres only when pressure is applied. It is non-pierceable and peel-able. 9095-10121-080LR ** Std LabRoll™ 1 Roll 100m 80mm х ** Sterile LabRoll™ 9095-10121-080SR 1 Roll 100m х 80mm * Std LabSheet™ 9095-10121-080LS 100 Sheets 80mm Ordering 135mm х 9095-10121-080SS * Sterile LabSheet™ 100 Sheets 135mm 80mm х 9095-10121-080TS Trial LabSheet™ 135mm 80mm 5 Sheets х Compatibility Polypropylene (PP), Polystyrene (PS) and Cyclo Olefin Copolymer (COC) gPCR (94 or 384 well) and situations where fluorescence is experienced and optical clarity is required. Application Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from Storage date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging. Properties Temperature range -40°C to 100°C Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller. Sealing Specifications Visual Description Clear plastic, reflective, glossy on the top. Very thin and light and doesn't crease easily. Pressure sensitive adhesive tape, so the seal side doesn't feel sticky, mainly used for bonding materials to various **Physical Properties** substrates. Temperature Range: -40°C to +110°C. **Test procedures** Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment. Results: N/A Pierce 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. Determining the materials optical clarity by measuring the transmission of emissive dye through the material. Results Pass Optical Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar. Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. Results: Pass Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to breath. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. Evaluating the materials resistance to solvents (DMSO used as an aggressive standard) Results: Pass Details Sealed plate is subjected to a high concentration of DMSO for a time period at low temperatures after which Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution. Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC) Plate Types

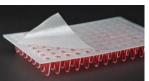




9095-10122 Quick Seal qOptic

Description	A transparent film which is suitable for qPCR. The seal is non-pierceable, is peel-able and contains precise optical windows.
Ordering	9095-10122-080LR ** Std LabRoll™ 1 Roll 100m x 80mm 9095-10122-080SR ** Sterile LabRoll™ 1 Roll 100m x 80mm 9095-10122-080LS * Std LabSheet™ 100 Sheets 140mm x 80mm 9095-10122-080SS * Std LabSheet™ 100 Sheets 140mm x 80mm 9095-10122-080SS * Sterile LabSheet™ 100 Sheets 140mm x 80mm 9095-10122-080TS Trial LabSheet™ 5 Sheets 140mm x 80mm
Compatibility	Polypropylene (PP), Polystyrene (PS) and Cyclo Olefin Copolymer (COC)
Application	qPCR, fluorescence applications.
Storage	Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging.
Properties	Temperature range -20°C to 110°C
Sealing	Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller.
	Specifications
Physical Properties	Temperature Range: -20°C to +110°C
	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° peet test. Equipment Instron 3343 Tensometer.
Low Temperature Seal Test	Confirming the materials ability to breath. 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: Pass 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.

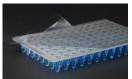




9095-10124 Quick Seal Gas Perm

A transparent, perforated gas permeable film. The seal is perforated and permeable to gases. It is peel-able and Description pierce-able. ** Std 9095-10124-080LR LabRoll™ 1 Roll 100m 80mm х ** Sterile 9095-10124-080SR LabRoll™ 1 Roll 100m 80mm х * Std LabSheet™ Ordering 9095-10124-080LS 100 Sheets 135mm x 80mm 9095-10124-080SS * Sterile LabSheet™ 100 Sheets 135mm 80mm х LabSheet™ 9095-10124-080TS Trial 5 Sheets 135mm х 80mm Compatibility Polypropylene (PP), Polystyrene (PS) and Cyclo Olefin Copolymer (COC) Bacterial culture, Eukaryotic cell culture, Application Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from Storage date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging. Properties Temperature range -20°C to 80°C Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller. Sealing Specifications Visual Description Transparent, Perforated EVA medical Tape, Plastic, weave textured, with a cream coloured Liner. Single coated tape, consisting of a transparent, perforated, hypoallergenic coated, pressure sensitive acrylate **Physical Properties** adhesive. Temperature range: -20°C to +80°C Test procedures Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solutions evaluated after 30 Cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment. Results: Pass Pierce 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. Determining the materials optical clarity by measuring the transmission of emissive dye through the material. Results N/A Optical Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar. Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. Results: Pass Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to resist low temperatures. Results: Pass **Porosity Bendsten** Details: MVTR, gms/m2/day. Air Porosity, Gurley 15 sec/100cc/Sq. in. Confirming the materials ability to breath. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. 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 Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution. Plate Types Polypropylene (PP), Polyethylene (PE), Polystyrene (PS) Cyclo Olefin Copolymer (COC).

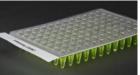




9095-10125 Quick Seal Micro

	A strong transported	lhocius film uh	ich is suitable for s	male storage. The	cool is non nig	reaching and need able
Description	A strong transparent ac with a medium strengt		ich is suitable for sa	imple storage. The	sear is non-pie	rceable and peel-able
	9095-10125-080LR	** Std	LabRoll™	1 Roll	100m x	80mm
	9095-10125-080SR	** Sterile	LabRoll™	1 Roll	100m x	80mm
Ordering	9095-10125-080LS	* Std	LabSheet™	100 Sheets	135mm x	
	9095-10125-080SS	* Sterile	LabSheet™	100 Sheets	135mm x	
	9095-10125-080TS	Trial	LabSheet™	5 Sheets	135mm x	80mm
Compatibility	Polypropylene (PP), Po	lyethylene (PE)), Polystyrene (PS), (Cyclo Olefin Copoly	vmer (COC)	
Application	Sample Storage (aqueo	ous), low cost c	over for application	like centrifugatior	1.	
	Store in a cool place. A	void direct exp	osure to sunlight. It	is recommended	to use the seals	within three years from
Storage —	date of purchase. Thre	e years when s	tored at 21°C (70°F)	, 50% relative hum	hidity, out of dir	ect sunlight, in original
	packaging.					
Properties	Temperature range -20	0°C to 80°C				
Sealing	Recommended sealing	Equipment: KA	APS 500/Seal-it 100,	/Manual Roller.		
		Spe	ecifications —			
Viewel Description						
Visual Description	Opaque, Thin, Plastic m	naterial.				
Physical Properties	Polypropylene – PP – T	op Coated, Glo	ss Clear TC PP			
		—— Test	procedures —			
	Confirming the materia	als ability to re	sist high temperatu	res. Results: Pass		
Mass Loss	Details: Mass loss of so Precision Balance.	lution evaluate	d after 30 cycles of	3 step PCR Program	nme. Equipmer	nt: ABI Thermocycler,
	Measuring the force re		a standardised ne	edie through the h	haterial via com	ipression measuring
Pierce	equipment. Results: N		d noodlo oncuring	that loss than 10N	is required to p	ierce the surface & access
	the wells. Equipment Ir				is required to p	
	Determining the mater	rials optical cla	rity by measuring t	he transmission of	f emissive dye t	hrough the material.
Optical	Results Pass				-	-
	Details Record the light reader. Equipment BM			te using a Fluroph	ore dye stock so	olution and a microplate
		als permanenc	e of adhesion & its	ability to be remov	ved, via extensi	on measuring equipment.
Peel	Results: Pass	• • • =		0.0	-	o
	Details Cohesive Failur test. Equipment Instro	-	-	r & Successful Peel	are measured	& recorded after a 180° peel
Low Temperature	Confirming the materi	-				and a second second second
Seal Test	Details: Microplates ar integrity. Equipment: L			ures & subjected t	o a series of tes	sts to substantiate seal
					–	
	Evaluating the materia					
Solvent			•		•	temperatures after which
	seal damage & volume	loss are deteri	ninea. Equipment l	aboratory Cold sto	orage unit, DMS	U solution.
Plate Types	Polypropylene (PP), P	olyethylene (Pl	E), Polystyrene (PS)	, Cyclo Olefin Copo	olymer (COC)	

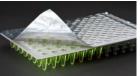




9095-10126 Quick Seal DMSO X

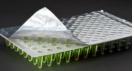
Description	A transparent film which is DMSO resistant. This film is peel-able with crosscuts over the wells making it ideal for auto samplers. It automatically cleans tips on extraction. Re-sealing onto the existing seal is permissible.						
Ordering	9095-10126-080LS * Std LabSheet™ 100 Sheets 140mm x 80mm 9095-10126-080SS * Sterile LabSheet™ 100 Sheets 140mm x 80mm 9095-10126-080TS Trial LabSheet™ 5 Sheets 140mm x 80mm						
Compatibility	Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC)						
Application	Sample access and retrieval for 96 well plates for use with auto samplers and sequencers.						
Storage	Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging.						
Properties	Temperature range -40°C to 80°C						
Sealing	Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller.						
	Specifications						
Visual Description	Clear plastic film with cross cuts over the wells.						
Physical Properties	Temperature Range: -40°C to +80°C						
	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 Temperature Seal Test	Confirming the materials ability to breath. 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.						
Plate Types	Polypropylene (PP), Polystyrene (PS)						





Description	An adhesive, foil barrie adhesive. The seal has						•		
	9095-10127-080LR	** Std	LabRoll™	1 Roll	200m	x	80mm		
	9095-10127-080SR	** Sterile	LabRoll™	1 Roll	200m	x	80mm		
Ordering	9095-10127-080LS	* Std	LabSheet™	100 Sheets	135mm	x	80mm		
oracing	9095-10127-080SS	* Sterile	LabSheet™	100 Sheets	135mm	x	80mm		
	9095-10127-080TS	Trial	LabSheet™	5 Sheets	135mm	x	80mm		
Compatibility	Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC)								
Application	PCR and sample storage	ge.							
Storage	Store in a cool place. A date of purchase. Thre packaging.						vithin three years from ct sunlight, in original		
Properties	Temperature range -4	0°C to 120°C							
Sealing	Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller.								
		Sp	ecifications —						
Visual Description	Thin, Metallic, Reflective, White Liner.								
Physical Properties	Secures well at room temperature while conforming well to irregular surfaces and is suitable for use protecting materials quickly or at high temperature (180°C). Temperature Range: -40°C to +120°C.								
		Tor	- procedures —						
			t 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.								
	Measuring the force re		n a standardised ne	edle through the m	naterial via o	comp	pression measuring		
Pierce	equipment. Results: Pass Details 5 tests run using a standardised needle, ensuring that less than 10N is required to pierce the surface & access								
	the wells. Equipment I								
	Determining the mate Results N/A	rials optical cla	irity by measuring t	ne transmission of	emissive d	ye th	rough the material.		
Optical				te using a Fluroph	ore dye stoc	k sol	ution and a microplate		
		als permanenc	e of adhesion & its	ability to be remov	ved, via exte	ensio	n measuring equipment.		
Peel	Results: Pass Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer.								
	Confirming the mater	ials ability to b	reath. Results: Pass						
Low Temperature Seal Test	Confirming the materials ability to breath. 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.								
	Evaluating the materia	als resistance t	o solvents (DMSO u	sed as an aggressiv	ve standard)	Res	ults: Pass		
Solvent		subjected to a	high concentration	of DMSO for a time	e period at lo	ow te	mperatures after which		
Plate Types	Polypropylene (PP), P	Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC)							



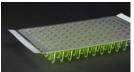


9095-10129 Quick Seal Foil PCR Ultra

An adhesive, foil barrier film which is suited for PCR use. Manufactured from soft aluminium foil with acrylic Description adhesive. The seal has solvent resistance and can be removed, leaving behind no adhesive residue. ** Std 9095-10129-080LR LabRoll™ 1 Roll 150m 80mm х ** Sterile LabRoll™ 9095-10129-080SR 1 Roll 150m 80mm х * Std Ordering 9095-10129-080LS LabSheet™ 100 Sheets 135mm 80mm х 9095-10129-080SS * Sterile LabSheet™ 100 Sheets 135mm 80mm х 9095-10129-080TS LabSheet™ Trial 5 Sheets 135mm х 80mm Compatibility Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC) PCR and sample storage. Application Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from Storage date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging. Properties Temperature range -40°C to 120°C Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller. Sealing Specifications Visual Description Thin, Metallic, Reflective, White Liner. Secures well at room temperature while conforming well to irregular surfaces and is suitable for use protecting **Physical Properties** materials quickly or at high temperature (180°C). Temperature Range: -40°C to +120°C. Test procedures Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment, Results: N/A Pierce

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. Determining the materials optical clarity by measuring the transmission of emissive dye through the material. **Results Pass** Optical Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar. Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. **Results: Pass** Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to breath. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. 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 Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution. Plate Types Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC)

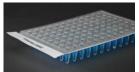




9095-10130 Quick Seal qPCR Ultra

An optically clear, DMSO resistant pressure sensitive seal which is suited for qPCR (96 or 384well) fluorescence, Description crystallation, storage. A transparent nontacky film which adheres only when pressure is applied. It is pierceable and peelable. Good temperature and chemical resistance and withstands tough application environments. High Adhesion Strength. 9095-10130-080LR Standard LabRoll™ 100m 1 Roll х 80mm 9095-10130-080SR LabRoll™ Sterile 1 Roll 100m 80mm х LabSheet™ 9095-10130-080LS Standard 100 Sheets 140mm 80mm х Ordering 9095-10130-080SS Sterile LabSheet™ 100 Sheets 140mm х 80mm LabSheet™ 9095-10130-080TS Trial 140mm 80mm 5 Sheets х LabSheet™ 9095-10130-080TR Trial 1 Roll 5m х 80mm Compatibility Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC) qPCR (94 or 384 well) and situations where fluorescence is experienced. Application Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from Storage date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging. Properties Temperature range -40°C to 110°C Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller. Sealing Specifications Visual Description Clear plastic, reflective, glossy on the top. Very thin and light and does not crease easily. **Physical Properties** Pressure sensitive adhesive tape, so the seal side does not feel sticky. Mainly used for bonding materials to various substrates. Temperature range: -40°C to +121°C **Test procedures** Confirming the materials ability to resist high temperatures. Results: Pass Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment. Results: N/A Pierce 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. Determining the materials optical clarity by measuring the transmission of emissive dye through the material. **Results Pass** Optical Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar. Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. **Results: Pass** Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180°C peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to breath. Results: Pass Low Temperature Details: Microplates are sealed at specified low temperatures & subjected to a series of tests to substantiate seal Seal Test integrity. Equipment: Laboratory Cold storage unit. Evaluating the materials resistance to solvents (DMSO used as an aggressive standard) Results: Pass Details Sealed plate is subjected to a high concentration of DMSO for a time period at low temperatures after which Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution. Plate Types Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC)





9095-10131 Quick Seal DMSO Standard

A transparent, optically clear, DMSO resistant, non-tacky film, which adheres only when pressure is applied. It is non-Description pierceable and peel-able. 9095-10131-080LR Std LabRoll™ 1 Roll 100m х 80mm 9095-10131-080SR Sterile LabRoll™ 1 Roll 100m 80mm х * Std LabSheet™ 9095-10131-080LS 100 Sheets 140mm 80mm Ordering х * Sterile 9095-10131-080SS LabSheet™ 100 Sheets 140mm 80mm х 9095-10131-080TS Trial LabSheet™ 5 Sheets 140mm 80mm х Compatibility Polypropylene (PP), Polyethylene (PE), Polystyrene (PS), Cyclo Olefin Copolymer (COC) Micro-plate sealing containing solvents including DMSO. Application Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from Storage date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging. Properties Temperature range -40°C to 80°C Sealing Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller. Specifications Visual Description A clear polypropylene DMSO resistant film, which is peel-able, but not pierceable. **Physical Properties** Temperature range: -40°C to +80°C

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





9095-10132 Quick Seal Gas Perm Woven

The Seal is Porous, Gas Permeable and a barrier to solid contaminants. Description 9095-10132-080LR ** Std LabRoll™ 1 Roll 150m х 80mm ** Sterile 9095-10132-080SR LabRoll™ 1 Roll 150m 80mm х *** VII Std LabRoll™ 9095-10132-115LR 1 Roll 150m х 80mm *** Sterile VII 9095-10132-115SR LabRoll™ 1 Roll 115mm 150m х 9095-10132-080LS * Std LabSheet™ 100 Sheets Ordering 125mm 80mm х * Sterile LabSheet™ 9095-10132-080SS 100 Sheets 125mm х 80mm LabRoll™ 1 Roll 9095-10132-080TR Trial 80mm 5m х LabRoll™ 9095-10132-115TR Trial 1 Roll 5m х 115mm LabSheet™ 9095-10132-080TS Trial 5 Sheets 125mm х 80mm Compatibility Polypropylene (PP) Polystyrene (PS) Application Short term Incubation, agriculture and seed storage, Insect storage and Cell Culture. Store in a cool place. Avoid direct exposure to sunlight. It is recommended to use the seals within three years from Storage date of purchase. Three years when stored at 21°C (70°F), 50% relative humidity, out of direct sunlight, in original packaging. Temperature range -20°C to 80°C Properties Sealing Recommended sealing Equipment: KAPS 500/Seal-it 100/Manual Roller. Specifications Visual Description White Rayon Nonwoven Tape on Liner **Physical Properties** Temperature range: -40°C to +80°C Test procedures Confirming the materials ability to resist high temperatures. Results: N/A Mass Loss Details: Mass loss of solution evaluated after 30 cycles of 3 step PCR Programme. Equipment: ABI Thermocycler, Precision Balance. Measuring the force required to push a standardised needle through the material via compression measuring equipment, Results: Pass Pierce 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. Determining the materials optical clarity by measuring the transmission of emissive dye through the material. Results N/A Optical Details Record the light transmission of a sealed microplate using a Flurophore dye stock solution and a microplate reader. Equipment BMG Labtech - FluroStar Measuring the materials permanence of adhesion & its ability to be removed, via extension measuring equipment. **Results: Pass** Peel Details Cohesive Failure, Adhesive Transfer, Material tear & Successful Peel are measured & recorded after a 180° peel test. Equipment Instron 3343 Tensometer. Confirming the materials ability to breath. Results: Pass **Porosity Bendsten** Details: Moisture Vapour Transmission-4200gms/m2/24hrs 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 Solvent seal damage & volume loss are determined. Equipment Laboratory Cold storage unit, DMSO solution. Polypropylene (PP) Polystyrene (PS) **Plate Types**



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