

Automated Roll Heat Sealer Reference Sheet

Heat Sealing Materials for use with the Automated Roll Heat Sealer

The Automated Roll Heat Sealer is compatible with a wide range of heat sealing materials available on the market. Note: Some seals available Gama Irradiated or Ethylene Oxide treated on request.

HEAT SEALING MATERIAL ORDERING INFORMATION (ROLL WIDTH 78 MM)						
Heat seal	Clear Heat Seal	Clear Heat Seal Plus	Clear Weld Heat Seal Mark	Clear Heat Seal Easily Pierceable	Peel Heat Seal	DMSO Resistant Peel Heat Seal
Large diameter roll (length/number of seals)	4ti-0540 (500m/4,200 seals)	4ti-0549 (250m/2,100 seals)	4ti-0573 (610m/5,000 seals)	4ti-0580 (610m/5,000 seals)	4ti-0520 (610m/5,000 seals)	4ti-0585 (500m/4,200 seals)
Small diameter roll (length/number of seals)	4ti-0540/80 (80m/640 seals)	Please inquire	4ti-0573/122 (122m/1,000 seals)	4ti-0580/122 (122m/1,000 seals)	4ti-0520/122 (122m/1,000 seals)	4ti-0585/100 (100m/800 seals)
APPLICATIONS AND SPECIFICATIONS						
Application	- qPCR - Short term compound storage	- Bead mill applications - PCR - qPCR	- PCR (esp. water bath) - qPCR - Storage & disposal of hazardous materials	- qPCR - For use with ABI 3730 Sequencer	- Low temperature, compound storage - Short term room temperature compound storage (<5 days) - PCR	Low temperature/ room temperature compound storage with DMSO & other organic solvents
Special properties	- Good optical clarity - Moderate solvent resistance	- High tensile strength - Good optical clarity	- Good optical clarity - Resistance to DMSO	- Good optical clarity - Some solvent resistance	- Can be peeled directly from -80°C freezer - Moderate resistance to solvents at room temperature	- Can be peeled directly from -80°C freezer - High resistance to solvents even at elevated temperatures
Min temp	-80°C	-80°C	-80°C	-20°C	-80°C	-80°C
Max temp	80°C (or 110°C with pressurised PCR heated lid)	80°C (or 110°C with pressurised PCR heated lid)	110°C	80°C (or 110°C with pressurised PCR heated lid)	90°C (or 110°C with pressurised PCR heated lid)	40°C
Pierceable				✓		
Peelable	✓	✓			✓	✓
RNase / DNase free	✓	✓	✓	✓	✓	✓
Material	Laminate	Laminate	Laminate	Polymer	Laminate	Laminate
Seals to	PP, PE, PS, COC	PP, PS, COC	PP	PP, PE, PS, COC	PP, COC	PP, PE, COC
SEALING TEMPERATURE (°C) AND DWELL TIME (SEC)						
96well PP plates	175 / 4	175 / 4	170 / 4	170 / 4	175 / 4	175 / 4
96well 2-component plates	175 / 3	175 / 3	170 / 3	170/ 3	175 / 3	175 / 3
384well PP plates	175 / 4	175 / 4	170 / 4	170 / 4	175 / 4	175 / 4
384well 2-component plates	175 / 3	175 / 3	170 / 3	170/ 3	175 / 3	175 / 3

Automated Roll Heat Sealer Reference Sheet (cont.)

HEAT SEALING MATERIAL ORDERING INFORMATION (ROLL WIDTH 78 MM)							
Heat seal	Pierce Heat Seal	Pierce Heat Seal Strong	Foil Heat Seal	Polystyrene Foil Heat Seal	Thermal Bond Heat Seal	Black Heat Seal	Gas Permeable Heat Seal
Large diameter roll (length/number of seals)	4ti-0530 (610m/5,000 seals)	4ti-0538 (610m/5,000 seals)	4ti-0535 (610m/5,000 seals)	4ti-0545 (610m/5,000 seals)	4ti-0590 (500m/4,200 seals)	4ti-0525 (610m/5,000 seals)	4ti-0598 (610m/5,000 seals)
Small diameter roll (length/number of seals)	4ti-0530/122 (122m/1,000 seals)	Please inquire	4ti-0535/122 (122m/1,000 seals)	4ti-0545/122 (122m/1,000 seals)	4ti-0590/100 (100m/800 seals)	Please inquire	4ti-0598/122 (122m/1,000 seals)
APPLICATIONS AND SPECIFICATIONS							
Application	- PCR, compound storage - Sample shipping	- PCR - Sample shipping - Low and room temperature compound storage with DMSO and other organic solvents	- Low temperature compound storage - storage short-term room temperature compound storage - PCR	- Low temperature compound storage - Short-term room temperature compound storage - PCR	- Low temperature transportation & storage - PCR, esp. water bath cyclers - Storage of organicsolvents, acids & alkalines	Fluorescent & other light sensitive assays	- Cell culture - Over night incubation - Seed and insect storage
Special properties	- Easily pierceable - Resistant to DMSO - Re-sealable with another Pierce Seal - Color print identifies nonsealing surface	- Suitable for long term storage - Pierceable Peelable from COC - Very good solvent resistance, including DMSO	- Re-sealable with another Foil Seal - Resistant to DMSO - Colour print identifies non-sealing surface	- Re-sealable with another Foil Seal - Resistant to DMSO	- Very strong seal with PP - Resistant to DMSO and other solvents	- A foil-based heat seal - Coated on the sealing surface with a low fluorescence black pigment	- Small pore size that allows gaseous exchange, but limits evaporation - Permeability rate >20g/m2/24h 20µm pore size
Min temp	-20°C	-20°C	-20°C	-20°C	-200°C	-80°C	-20°C
Max temp	120°C	120°C	110°C	110°C	110°C	120°C	80°C
Pierceable	✓	✓	✓	✓			✓
Peelable		✓	✓	✓	✓	✓	✓
RNase / DNase free	✓	✓	✓	✓	✓	✓	
Material	Foil	Foil	Foil	Foil	Laminate	Foil	Woven material
Seals to	PP, PS	PP, COC	PP	PS	PP	PS	PP, PS, COC
SEALING TEMPERATURE (°C) AND DWELL TIME (SEC)							
96well PP plates	175 / 4	175 / 4	175 / 4	175/ 4	175 / 4	175 / 4	175 / 4
96well 2-component plates	175 / 3	175 / 3	175 / 3	175 / 3	175 / 3	175 / 3	175 / 3
384well PP plates	175 / 4	175 / 4	175 / 4	175 / 4	175 / 4	175 / 4	175 / 4
384well 2-component plates	175 / 3	175 / 3	175 / 3	175 / 3	175 / 3	175 / 3	175 / 3