

TECHNICAL PRODUCT DATA SHEET **TECHNIPAQ** INC.

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TC-101 HSC Tyvek® 1059B Data Sheet

Material

Technipaq's heat seal adhesive, TC-101 air-knife coated on medical grade Tyvek® 1059B to create a consistent clean-peel, highly durable and breathable sterile barrier material with superb microbial barrier properties.

Application & Suitability

Excellent compatibility with gamma & ethylene oxide sterilization for application in lid stock and pouch materials. Broad applicability from vacuum-thermoformed rigid plastics (HIPS, PETG, Styrene, HDPE, and PVC) to flexible poly-based films (PET, Polyethylenes and Nylon)

Property	Test Method	Typical Value	Units
Microbial barrier	ASTM F1608	~ 45	LRV
	ASTM F2638	~ <0.5	% pMax
Basis Weight	ASTM D3376	39.6	lbs./ream
Adhesive Weight	ASTM F2217	6.0-7.0	lbs./ream
Area Yield	ASTM D4321	9450	nn ² /lbs.
Thickness	EN ISO 534	7.0	Mils
Elongation (CD)	EN ISO 1924-2	23	%
Elongation (MD)	EN ISO 1924-2	19	%
Tensile (CD)	EN ISO 1924-2	42	lbf
Tensile (MD)	EN ISO 1924-2	39	lbf
Elmendorf Tear (CD)	ASTM D1424	0.8	lbf
Elmendorf Tear (MD)	ASTM D1424	0.7	lbf
Mullen Burst	ISO 2758	149	psi
Spencer Puncture	ASTM D3420	42	in.-lbf/in ²
Opacity	ISO 2471	92	%
Gurley Porosity	ASTM D3420	<80	in.-lbf/in ²

Sealing Conditions

Deriving optimized sealing parameters is considerably dependent on type of equipment, material, design, and a statistical process development approach. Therefore, the sealing parameters listed below are a starting point.

Time = 1s

Temperature = 250F

Pressure = 60 psi

Regulatory

Technipaq is an ISO13485 certified manufacturer that maintains conformity with BS EN ISO 11607-1:2020+A11:2022 and BS EN ISO 11607-2:2020+A11:2022. Further information on material safety and applicable compliance standards can be provided at customer request.

Shelf life & Storage conditions

Sterile barrier materials provided by Technipaq are designed to be stable for longer durations under ambient conditions (as defined by ASTM F1980), however it is customer's responsibility to establish shelf life at a sterile barrier system level.

Techni-coat HSC Tyvek® 1059B is stable for minimum of 2 years shelf life.

Techni-coat HSC Tyvek® 1059B & PET/PE combination is stable for minimum of 5 years shelf life.