# **INDUSTRIAL FILMS**

## Metallized Laminates for Vacuum Insulation Panels

Item number: V08311B



#### Description:

A multi-laminate of metallized polyester film with Aluminum foil, a coex of LDPE/ HDPE sealing layer, and a protective Nylon layer. Designed for high barrier applications such as extremely long term Vacuum Insulation Panels requiring absolute barrier of the envelope and edges, and engineered compared to other commercially available laminates<sup>1</sup> to enhance the mechanical durability of the VIP envelope, and reduce side permeation.compared to other commercially available laminates.

### **Product Specifications:**

PROPERTY	TEST METHOD	V08311B	
Thickness	-	91 3.6	[micron] [mil]
Area Yield	_	8.9 6270	[m²/kg] [in²/lb]
Heat Seal Strength Heat Seal Break Point	175°C, 4kg/cm², 2 sec	>2.0 >6350	[N/mm] [g/in]
Puncture Resistance	FTMS 101C 2065	<b>110</b> [N]	<b>34</b> [lb]
Puncture Resistance (Japanese Sting Strength)	JIS Z1707	13 [N]	<b>2.9</b> [lb]
MVTR	ASTM F-1249-90 38°C 90% RH 100°F 90% RH	<0.01 <0.00645	[gr/m²day] [gr/100in ²day]
GTR* (Gas Transmission Rate) @ 22°C/50% RH	Hanita's internal test method*	<2.0	[cc (STP)/ m²/year]











<sup>&</sup>lt;sup>1</sup> For a sample comparison report of Hanita laminates with other commercially available laminates, please see "Comparison of Barrier of VIP Laminates - New PST Technology" under Technical Downloads on our site. More data can be provided by our technical support team technicals upport team terms/durations mentioned in this data sheet.





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\* GTR is the rate of gas permeation into a panel, while OTR is oxygen permeation rate through a flat film. As air contains mainly nitrogen and the application is VIP, gas permeation is a more relevant value for the film performance. Detailed test description can be found under "Hanita testing methodology for VIP" on our site.

Please note that the lifetime of the products will differ based on the type of application. For an specific indication of lifetime properties of the products related to a specific application, please contact the Avery Dennison Hanita technical support team <a href="technical-userydennison.com">tech.industrial@eu.averydennison.com</a>. The life time indication given by the Avery Dennison Hanita technical support team is based on a calculation believed to be reliable but shall not constitute a guarantee or warranty.

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