INDUSTRIAL FILMS

Metallized Laminates for Vacuum Insulation Panels

Item number: **V11840B**

VACUUM INSULATION PANEL
VIPA
GLOBAL ASSOCIATION

Description:

A laminate comprising Al Foil, metallized PET, a BOPP protective layer and a coex of LDPE/ LLDPE as sealing layer. The laminate has very high resistance to heat and humidity, with very high barrier qualities of very low GTR and low MVTR compared to other commercially available laminates[1].
The laminate is designed for long term vacuum insulation panel applications that require extremely good barrier, durability and higher mechanical stability.

Product Specifications:

PROPERTY	TEST METHOD	V11810B	
Thickness	—	**123** **4.8**	[micron] [mil]
Area Yield	—	**7.59** **5348**	[m^2/kg] [in^2/lb]
Heat Seal Strength Heat Seal Break Point	165°C, 4kg/cm^2, 2 sec	**>3.0** **>7600**	[N/mm] [g/in]
Puncture Resistance	FTMS 101C 2065	**180** [N]	**57** [lb]
Puncture Resistance (Japanese Sting Strength)	JIS Z1707	**21** [N]	**6.6** [lb]
MVTR	ASTM F-1249-90 38°C 90% RH 100°F 90% RH	**<0.01** **<0.000645**	[gr/m^2day] [gr/100in ^{2}day]
GTR* (Gas Transmission Rate) @ 22°C/50% RH	Hanita's internal test method*	**<2.0**	[cc (STP)/ m^2/year]

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[1]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 tech.industrial@eu.averydennison.com. Please note that this footnote is applicable to all references to 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 tech.industrial@eu.averydennison.com . 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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