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Fran Caraway
TM Poly Film
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WVTR on "Sample 2" Film

Fran,

We have completed the WVTR testing on the "Sample 2" film sample that was recently submitted. The testing was performed on a MOCON PERMATRAN-W® Model 700.

The WVTR was determined to be 0.187 g/100in^2/day at 37.8°C, 90% RH which converts to 0.089 US Perms per the method in the following table.

Description	(units)	Value	Row	Comment
Film Gauge	(mils)	5.49	---	Thickness of film sample
WVTR @ 37.8°C, 100%RH	(g/100in^2/day)	0.187	A	Measured WVTR value in MOCON at 37.8°C, 100%RH
WVTR @ 37.8°C, 90%RH	(g/100in^2/day)	0.168	B	Correct to 90% RH by multiplying Row A by 0.9
"	(g/in^2/day)	0.00168	C	Convert to g/in^2/day by dividing Row B by 100
"	(g/ft^2/day)	0.242	D	Convert to g/ft^2/day by multiplying Row C by 144
"	(grains/ft^2/day)	3.74	E	Convert to grains/ft^2/day by multiplying Row D by 15.4324
"	(grains/ft^2/hr)	0.156	F	Convert to grains/ft^2/hr by dividing Row E by 24
Vapor Pressure of Water @ 100%RH, 37.8°C	(inHg)	1.94	G	Vapor Pressure of Water from online reference https://www.weather.gov/epz/wxcalc_vaporpressure
Vapor Pressure of Water @ 90%RH, 37.8°C	(inHg)	1.75	H	Correct Vapor Pressure to 90% RH by multiplying Row G by 0.9
Perms (US Units)	(grains/ft^2/hr/inHg)	0.089	I	Calculate US Perms by dividing Row F by Row H

Please contact me if you have any questions.

Regards,

James Solis
Technical Service Engineer

cc: David Black
Larry Szmutko