VERSAFLEX™ PF

Tack Layer for Surface Protective Films

TECHNICAL BULLETIN

AVIENT™

PHYSICAL PROPERTIES OF SELECTED VERSAFLEX PF TACK LAYER FORMULATIONS

Properties	Versaflex PF MD6727	Versaflex PF MD6741	Versaflex PF MD6649	Versaflex PF 9512	Versaflex PF MD6666	Versaflex PF MD6748	Versaflex PF MD6700
Features	Low Tack	Low Tack; Used for tailoring tack with MD6700	Low-Medium Tack	Value Offering	Medium Tack Low Gel/Residuals	Low Tack Build	High Tack
Peel Strength	Low	Low-Medium	Medium	Medium-High	Medium-High	High	High
Applications	Optical Films	Home Appliances	Plastics	Construction/Bare Metals	Finished Metals	Steel/Painted Metals	Bare Metals
MFR @ 190°C/2.16 kg	--	4.5	17	5.4	21	4.8	6.5
MFR @ 230°C/2.16 kg	10	20	--	--	--	--	--
Specific Gravity, g/cc	0.92	0.91	0.92	0.92	0.94	0.94	0.94
Hardness, Shore A	50	49	37	38	37	31	30
G' @ 23°C, Pa	28.0×10^5	10.4×10^6	8.3×10^5	--	9.9×10^5	11.8×10^5	10.0×10^5
DMA Tg, °C	-29	-30	-9	10	11	15	21
LDPE/Versaflex PF Film[1] 180° Peel, N/25mm							
Stainless Steel							
after 20 min @ 25°C	0.5	2.2	3.2	6.1	6.7	8.5	8.6
after 7 days @ 25°C	0.6	2.7	4.3	5.5	8.2	8.3	10.3
PMMA[2]							
after 20 min @ 25°C	1.1	1.7	3.8	4.9	6.9	8.3	8.8
after 20 min @ 75°C	2.8	4.1	5.1	6.9	9.0	10.7	11.8
after 7 days @ 75°C	4.0	4.4	5.9	9.8	8.4	9.8	10.3
Polycarbonate[3]							
after 20 min @ 25°C	1.4	2.2	3.8	6.8	6.3	8.4	7.0
after 20 min @ 75°C	3.4	4.8	6.7	8.8	8.8	10.0	11.8
after 7 days @ 75°C	4.6	6.5	7.5	10.6	11.6	10.6	13.8

[1] Film thickness: 51 micron LDPE/25 micron Versaflex PF
[2] Arkema Plexiglas™ V052-100 (Plexiglas is a trademark of Arkema France Corp.)
[3] Sabic Lexan™ L52-111 (Lexan is a trademark of Sabic Innovative Plastics)

PRODUCT DESCRIPTION

Versaflex™ PF formulations are specially developed for the manufacture of co-extruded surface protective films that apply easily, maintain tack with minimal build, peel smoothly and remove completely with little-to-no residue or ghosting. In addition to simplifying processing, Versaflex PF formulations reduce volatile organic compound (VOC) emissions during manufacturing.

BENEFITS OF VERSAFLEX PF FOR SURFACE PROTECTIVE FILMS:

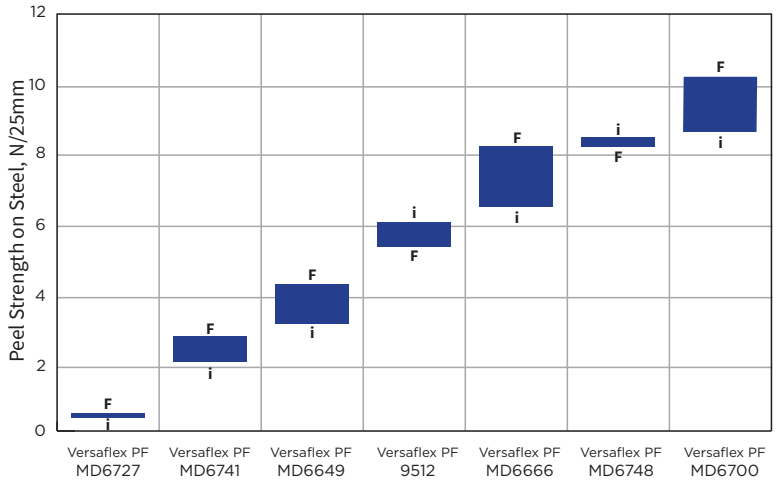
- Customizable tack
- Single-step manufacturing process (co-extrusion)
- Low volatile organic compound (VOC) emissions during manufacturing
- Eliminates secondary coating and drying operations
- Eliminates hazardous liquid chemicals compared to solvent systems
- Reduces converting costs versus coating
- Reduces energy consumption

MARKETS AND APPLICATIONS

Versaflex PF formulations, customizable based on desired level of tack, are co-extruded with protective films to provide just the right amount of protection during the fabrication, assembly, shipment, storage and installation of finished goods in many industries and end-use applications including:

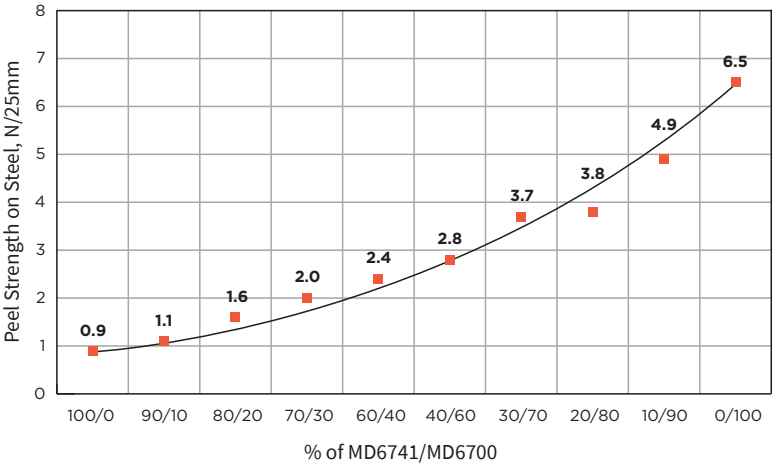
- Optical films and display panels for consumer electronics
- Home appliances
- Construction and building materials
- Furniture and cabinetry
- Automotive and other transportation

PEEL STRENGTH ON STAINLESS STEEL
Film Thickness:
51 micron LDPE/25 micron Versaflex PF



F = Final tack after 7 days @ 25° C **i** = Initial tack after 20 mins @ 25° C

TAILORING TACK BY BLENDING VERSAFLEX PF
Film Thickness:
39 micron LDPE/13 micron Versaflex PF



Degree of tack can be customized for substrate surfaces.

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