

THERMOBONDING SELECTOR GUIDE

YOUR MATERIALS

OUR FILMS	YOUR MATERIALS														
	TEXTILES				WOOD	FOAMS		PLASTICS						ELASTO-MERS	METALS
	Synthetic fibers	Natural fibers	Mineral fibers	Leather		PE	PU	PE	PP	ABS	PS	PET	PVC		
EVA	☑	■	☑	☑	☑	■	☑	■	☑	□	☑	☑	□	■	☑
PE	☑	☑	■	□	■	☑	☑	■	□	□	☑	☑	□	■	■
PP	☑	□	☑			□	■	□	■		□	□		☑	■
TPU	■	■	☑	■	☑	☑	■			☑	□	□	■	☑	□
CoPA	■	■	■	☑	☑	□	■			■	■	■	■	☑	□
CoPES	■	■	■	☑	☑	□	☑			□	□	☑	■	☑	□

■ Very good adhesion ☑ Good adhesion □ To be tested

The values contained in this document result from trials and measures done by our laboratory in specific conditions controlled by our R&D. They are given as an indication. We propose you to test those characteristics more accurately for your own applications and uses.

BARRIER FILMS PROPERTIES

- Waterproof
- Industrial fluids
- Physical liquids
- Light (Black-Out)
- Hydrolysis resistance
- UV resistance
- Plasticizers resistance
- PU foam injection

BREATHABLE MEMBRANES PROPERTIES

- Soft
- Flexible
- Breathable
- Waterproof
- Windproof
- Hydrophilic
- Skin friendly

OPTIONS

Corona Treatment, Colors, Micro-perforation, Flame Retardant films, Widths from 200 mm to 3000 mm, Roll length from 500 lm to 4000 lm

THERMOBONDING FILMS

	POLYOLEFINS							TPU				CoPA - CoPES		
Films	TC 1001	TC 1027	TC 1007	TC 1060	TC 1500	TC 1730	TC 3070	TC 5002	TC 5006	TC 5011	TC 5017	TC 203	TC 255	TC 420
Material	EVA	EVA	EVA	EVA	PE	PE	PP	TPU	TPU	TPU	TPU	CoPA	CoPA	CoPES
Melting range (°C)	58-62	75-85	90-95	105-115	100-105	115-130	130-140	70-90	70-85	115-125	145-155	110-120	115-125	115-120
Fluidity	Medium	High	Medium	Medium	Medium	Low	Medium	Low	Medium	Medium	Medium	High	High	High
Washing resistance (°C)	-	-	60	60	60	60	60	-	30	60	60	60	-	60
Dry cleaning resistance	-	-	-	-	-	-	-	-	-	yes	yes	yes	-	yes
Plasticizers resistance	-	-	-	-	-	-	-	yes	-	-	-	yes	-	yes
Hydrolysis resistance	yes	yes	yes	yes	yes	yes	yes	-	-	-	-	yes	-	yes
Minimum thickness (µm)	25	25	25	25	25	25	30	15	15	15	15	15	15	15
Structure*	A	A	A	A	A	A	A	A/S	A/S	A - A/S	A - A/S	A/S	A - A/S	A - A/S
Comments	Very low activation temperature	High fluidity EVA for textile applications	EVA for foam and metal applications	EVA for high temperature applications	Versatile PE film with large bonding range	Excellent adhesion on bituminous heavy layers, metals and elastomers	Special PP bonding film	Excellent adhesion on flexible PVC	Excellent versatile TPU bonding film	Excellent bonding on PU foams and textiles	Excellent bonding on PU foams and textiles	Strong adhesive, barrier to PVC plasticizers	Steam activable CoPA	Strong CoPES adhesive

* A: Adhesive B: Barrier S: PE Carrier

THERMOBONDING FILMS + BARRIER

	POLYOLEFINS							TPU				CoPA		
Films	TC 1006 CX 00	TC 1500 CX 01	TC 1005 CX 91	TC 1600 CX 91	TC 3300 CX 18	TC 3300 CX 70	TC 5125 CX 18	TC 5025 CX 03	TC 5020 CX 11	TC 5025 CX 11	TC 4070 CX 20	TC 205 CX 07	TC 203 CX 176	TC 5526 CX 205
Material	EVA/PE	PE/PE	EVA/Elastomere	PE/Elastomere	EVA/PP	PP/PP	EVA/TPU	TPU/TPU	TPU/TPU	TPU/TPU	TPU/CoPES	CoPA/EVA	CoPA/PE	CoPA/TPU
Adhesive melting range	75-85	100-105	75-85	105-115	80-85	130-140	80-85	70-85	115-125	115-125	145-155	90-95	115-130	110-120
Barrier melting range	115-120	125-135	130-140	130-140	155-165	155-165	160-175	160-175	145-155	160-175	215-225	110-120	110-120	165-170
Fluidity (adhesive layer)	High	Medium	High	Low	Medium	Medium	Medium	Medium	Medium	Medium	Medium	High/Medium	High/Medium	High
Washing resistance (°C)	30	60	30	60	60	60	60	30	60	60	60	60	60	60
Dry cleaning resistance	-	-	-	-	-	-	-	-	yes	yes	yes	-	-	yes
Plasticizers resistance	-	-	-	-	-	-	-	-	-	-	-	yes	yes	yes
Hydrolysis resistance	yes	yes	yes	yes	yes	yes	-	-	-	-	-	yes	yes	yes
Minimum thickness	25	25	30	30	30	30	25	20	40	20	35	25	25	25
Structure*	A/B - A/B/A	A/B - A/B/A	A/B/A	A/B/A	A/B	A/B	A/B - A/B/A	A/B - A/B/S	A/B/A	A/B - A/B/S	A/B	A/A	A/A	A/B
Comments	Low melting EVA film with PE barrier	General purpose multilayer PE film	Low melting EVA film with high temperature barrier	High temperature multilayer film with good elongation properties	Bilayer film with good resistance to industrial fluids	High temperature bilayer film with good resistance to industrial fluids	Strong EVA adhesive with high temperature TPU barrier	Bilayer TPU film for foam covering	Trilayer TPU film	Bilayer TPU film for foam and textile lamination	Adhesive TPU with a stable barrier up to 200°C	Strong dual adhesive film	Specific film to bond ABS and PA on other substrates	Bilayer film combining a strong adhesive and a high chemical resistant barrier

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BARRIER FILMS

Films	POLYOLEFINS		TPU Ester				TPU Ether		CoPES	CoPA
	TC 1201	TC 3300	TC 5015	TC 5018	TC 5025	TC 5030	TC 5528	TC 5562	TC 4070	TC 206
Material	PE	PP	TPU	TPU	TPU	TPU	TPU	TPU	CoPES	CoPA
Melting range	125-135	155-165	140-160	155-165	160-175	170-190	165-170	180-185	215-225	110-120
Hydrolysis resistance	yes	yes	-	-	-	-	yes	yes	yes	yes
UV resistance	yes	yes	-	-	-	-	-	yes	-	yes
Minimum thickness	30	30	15	15	15	15	15	15	20	15
Structure*	B	B	B - B/S	B - B/S	B - B/S	B - B/S	B - B/S	B - B/S	B	B - B/S
Comments	High temperature PE barrier	High elongation PP barrier	Crystal clear TPU barrier with high mechanical properties	Recommended film for foam injection	Recommended film for flame lamination	Elastic TPU film	Recommended film for inflates	UV stabilized TPU film	Very high temperature resistant barrier	Barrier to PVC plasticizers

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MEMBRANES

Films	POLYOLEFIN	TPU			PES		
	AA 7070	AA 5360	IRT 1	IRT 4	IRT A	IRT N	IRT E
Material	PP	TPU	TPU	TPU	PES	PES	PES
Melting range	130-140	160-165	160-165	160-170	150-160	200-210	210-220
MVTR (g/m ² /24h)**	< 500	< 1000	< 1000	3500	3500	2850	2500
RET	N.A.	N.A.	N.A.	0,8	0,8	0,7	1,2
Water column (mm)	10000	10000	10000	10000	10000	10000	10000
Minimum thickness	30	15	15	12	15	12	12
Structure*	B	B - B/S	B - B/S	B - B/S	B - B/S	B - B/S	B - B/S
Comments	PVC alternative membrane	Dedicated to mattress protection	UV stabilized TPU membrane	High breathable membrane	Food and drugs application	High performance and soft PES membrane	High temperature PES membrane

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** ASTM E96-53T (upright cup)

PROCHIMIR
TECHNICAL FILMS

Versatile production & Production capacity

SUPPLY SECURITY

Efficient R&D & Customized development

COST EFFECTIVE PRODUCTS

ISO 9001v2008 & 20 years of experience

QUALITY

