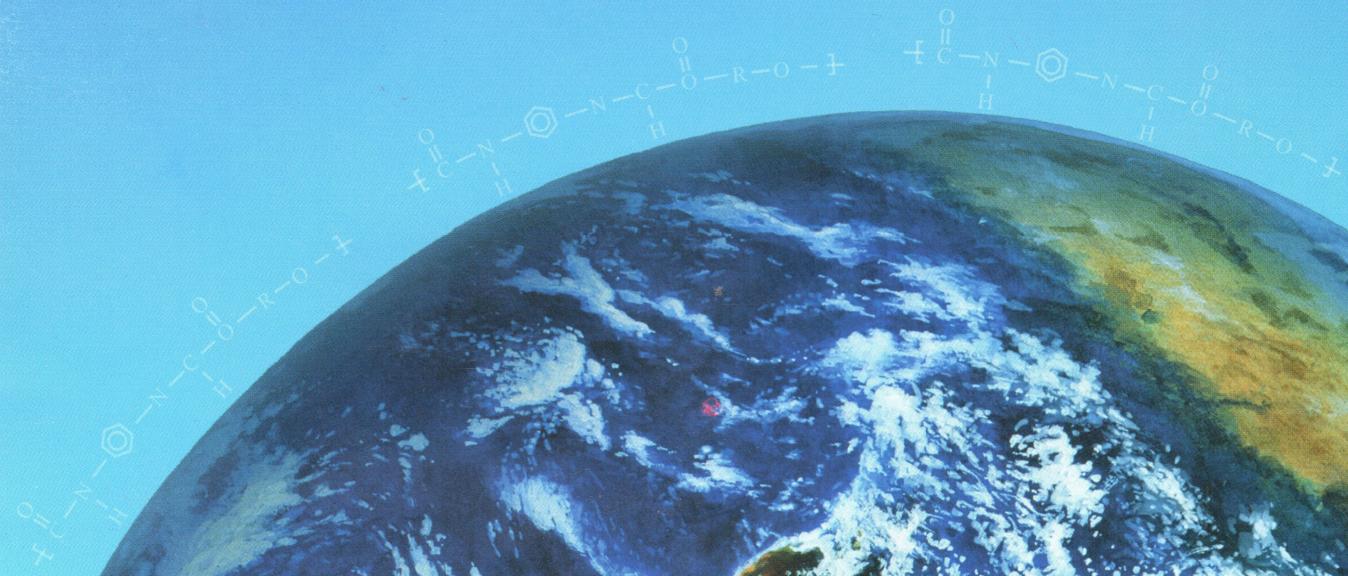


e.TEX®

Thermoplastic Polyurethane

TPU FILM





至達

實業股份有限公司創立於西元1984年，迄今二十年來，從事鞋材、潛水衣布料、運動醫療護具、成衣...等工業用布之貼合，秉持專業技術，為早期台灣經濟奇蹟貢獻一份心力。于西元1998年開始規劃TPU薄膜事業，成立製二課部門，歷經三年之技術研發開始量產，並且於西元2004年增設第二條生產線，來服務客戶之不斷成長之需求。

e.TEX® Film為至達實業所生產之TPU薄膜(熱可塑性聚胺酯膜)，其具有非常優良的耐磨性、柔軟性、高強度、耐寒性，可回收分解無毒之環保材(PVC之最佳替代材)，其加工性特佳，高週波、超音波、熱壓、真空成型、貼合、車縫、印刷等都非常適合。

e.TEX® 系列產品已廣泛應用在各種工業上，在最終產品上，除了供應Film & Sheet外，並且運用二十年來貼合專業技術，將各種基布貼合TPU Film的作業，於一貫化連續生產薄膜線上，同時完成品質優良的**e.TEX®** 貼合系列產品，另有新開發TPU Foam發泡系列產品。

Jiundar Industrial Co. Ltd, established in 1984, has specialized in the lamination of industrial fabric used in Shoe making, Diving suits, Sports medicine and garments. In 1988, we began planning the development of TPU film and with three years of research and development started mass production in 2001. Subsequently in 2004 we added a second production line to respond to the ever increasing demand from the market.

e.TEX® film is the TPU film we produce which has the superior physical properties of abrasion resistant, great flexuosity, excellent strength and low temperature tolerance. TPU is biodegradable, so it is the best substitute for Vinyl. TPU can be processed in many ways: Radio frequency welding, ultrasonic welding, heat press, vacuum forming, laminating, sewing and printing.

e.TEX® series has already been used widely in all kinds of industries. We provide not only TPU films and sheets, our expertise also enables us to process the extrusion of TPU and lamination of fabric such as nylon woven or knitted (onto TPU) simultaneously. Our latest edition is TPU foam series. We invite you to try and experience this new incredible material with us.



註：**e.TEX®** 為至達實業TPU系列產品之註冊商標 **e.TEX®** is Jiunder's trademark for TPU series product.

聚醚系列 Ether Based

e. TEX® 聚醚系列有較佳的耐低溫性、耐水解性以及防霉抗
菌性，廣泛用在與水接觸的相關製品上。

Ether series have the superior features of withstanding low
temperature, hydrolysis resistant, anti-microbial and anti-mildew.
It is widely used on products that come in contact with water.

**聚酯系列 Ester Based**

e. TEX® 聚酯系列有較佳的耐熱性以及耐化學藥品性、耐磨
擦、耐低溫，廣泛用在取代PVC製品的用途上。

Ester series have the superior features of heat-resistant,
chemical-resistant, abrasion-resistant and can also withstand
low temperature. They are widely used as the substitute for
vinyl products.

**貼合系列 Lamine Products**

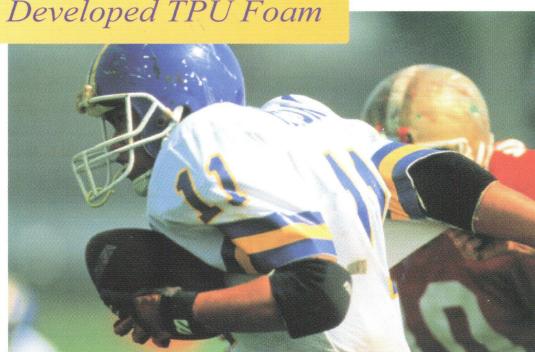
e. TEX® Film可與NYLON，Polyester P.P.等紡織品，直接在
生產線上一次貼合完成，並有低、中、高透濕，高接著強度，
等產品。

TPU film can be extruded and laminated onto various kinds of
fabric such as nylon, polyester, and polypropylene- one time
processing on the production line. The finished products bear
strong bond, and depend on the thickness of TPU and the
laminated fabric, it can have low, medium or high wicking feature.

**TPU FOAM 系列 TPU Foam Series Products Newly Developed TPU Foam**

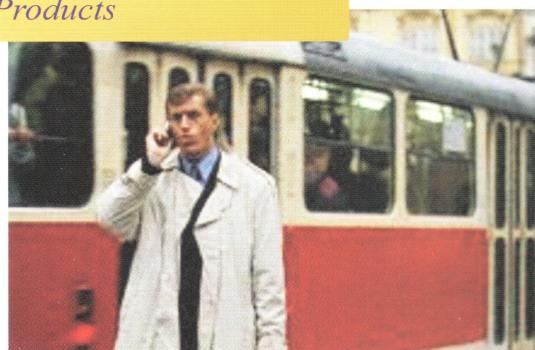
e. TEX® TPU FOAM具有輕量化，耐衝擊、加工容易，可應用
於充氣包裝材、鞋材等用品。

Newly developed TPU foam is light weight, yet endures high
impact, and very easy to work with. It is recommended for
inflatables and shoes.

**TPU 熱熔膠膜系列 TPU Hot Melt Adhesive Series Products**

e. TEX® 熱熔膠膜系列提供您乾淨、簡單、方便、無污染的
加工環境與方式，不同種類的膠膜讓您利用熱熔的方式簡單的
接著任何材質。

The hot melt adhesive series provide clean, simple, convenient
and no pollution working environment. Three different films
bear different melting temperatures let the users work with
their equipments to bond almost all materials easily.



e.TEX® Film 薄膜系列產品 Film Series Products

1. 寬幅1000mm~1500mm (或40"~60")；厚度0.025mm~2.0mm；長度30M~200M (or 30YD~200YD)；硬度65A~95A。
2. 加工性適合：熱壓、高週波、超音波、真空成型、貼合、印刷等加工條件。
3. 依種類功能有：聚酯類 (ester)、聚醚類 (ether) 耐水解型、熱熔膠型、防火阻燃型、耐熱抗UV不黃變形、食品級、醫療級……等符合美國FDA、NSF之要求等規格齊全。
4. TPU具有耐磨性佳、抗撕裂性佳、彎曲性佳、可塑性佳、抗張強度大、斷裂延伸率大，更具有耐低溫可達-50°C，長期壓縮變形率低，耐油、耐脂肪族溶劑、耐碳氫溶劑，對氧及臭氧具有抵抗性、耐老化等特性。
5. 表面處理：透明、半透明、霧面、全霧面、亮面、顏色、紋路…等可依客戶指定生產。
6. 替代PVC之環保材料，不含可塑劑、無吐油之問題，燃燒時無空污問題，土壤掩埋3~5年，溼氣及微生物可將之分解，回歸大自然。



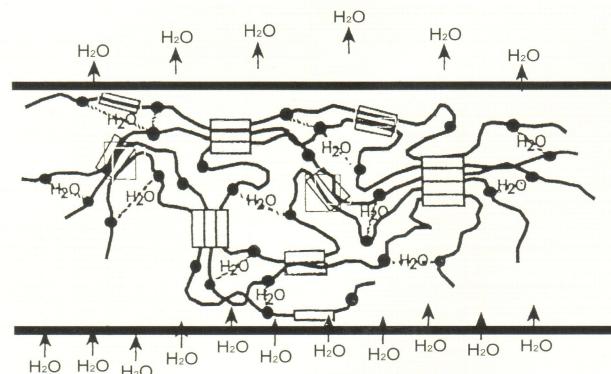
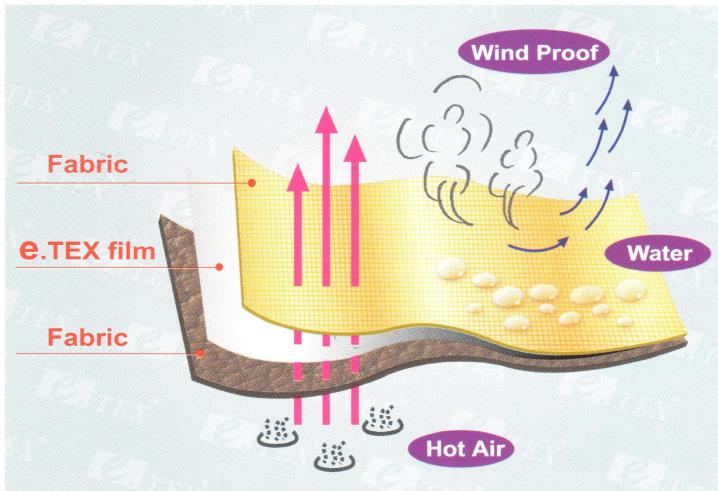
1. Width 1000mm~1500mm(or 40"~60"); Thickness 0.025mm~2.0mm; Length 30M~200M(or 30yd-200yd); Hardness 65A~95A.
2. Ways of processing: heat bond, radio frequency welding, ultrasonic welding, vacuum forming, laminating and printing.
3. Available types: ester, ether (hydrolysis resistant), heat melt adhesive, UV stable non-yellowing, fire retardant, food grade and medical grade...etc. It also meets FDA and NSF requirements in the U.S.A.
4. Product features: abrasion resistant, great tear strength, great flexuosity, great elongation coefficient, low temperature tolerance reaches -50°C, low transfiguration rate after long time compression, oil resistant, aliphatic solvent resistant, hydrocarbon solvent resistant, anti-oxidation, anti-ozone, and anti-aging.
5. Surface available: transparent, semi-transparent, matted, glossy, colors and textured...etc.
6. TPU is a green product. No air pollution when burned. TPU is Biodegradable after 3-5 years in soil. It will be widely used to replace PVC (Vinyl) for environmental protection.



一般貼合產品 (General laminate products)

- 寬幅1000mm~1500mm (or 40"~60")、厚度0.02mm~2.0mm、長度30M~200M (or 30YD-200YD)。
 - 可用40°C~70°C的水洗滌，手感柔軟，依產品用途剝離強度可已做到高達80kg/cm³，所以多洗也不會影響貼合的效果。
 - 一般貼合是將泛用基布(平織、針織)於生產TPU Film線上，同時且一次完成單貼或雙貼(三明治貼合)之作業程序，來滿足客戶對品質之需求。
- Width 1000mm~1500mm (or 40"~60"), Thickness 0.02mm~2.0mm, Length 30M~200M (or 30YD-200YD).
 - Can be Washed in water temperature 40°C to 70°C, product remains soft to touch, and the delaminating strength can achieve as high as 80kg/cm³, therefore it can endure frequent wash without problem.
 - Our Lamination adopts fabrics (woven and knitting) on TPU film production line. It can complete single or double sides (Sandwich) lamination with TPU film production at one time.

A 基 布 Fabric	薄膜厚度 Thickness (mm)	剝離強度 (kg) Peel Strength ASTMD 1876	抗拉強度 (kg) Tensile Strength ASTMD 5034	產品用途
平織布	NYLON 40D	> 0.020	2.0 ↑	> 5 ↑ 救生氣囊
	NYLON 70D	> 0.020	5.0 ↑	> 10 ↑ 醫療充氣囊
	NYLON 210D	> 0.020	10.0 ↑	> 20 ↑ 水袋、救生衣 Water bag、Life jacket
	高單尼數NYLON布	> 0.020	20.0 ↑	橡皮艇等特殊用途
針織布	雙面貼佳積布	> 0.020	> 2.0 ↑	X 防水、透溼
	彈性磨毛布	> 0.020	> 5.0 ↑	X 耐水洗70°C 襯裡布
	天鵝絨布	> 0.020	> 5.0 ↑	X 血壓計專用布



特殊貼合產品 (Special laminate products)

- 防水透溼布：可承受水壓 (W.P.R) 10,000mm H₂O以上
透溼度(M.V.T)可達1,500~14,000 g/m²/day (ASTM E96BW)
以上防水透溼原理如上圖所示：
 - 各式特殊材：3D立體電鍍膜、NYLON6膜、電鍍網材、玻纖布、碳纖布...等較不易施工貼合之素材，唯有 e.TEX® 獨特一貫作業之特殊貼合方式，使之與TPU Film緊密結合，可解決業者對其剝離強度之要求。
- Waterproof and moisture vapor transmission cloth: It can bear water pressure (W.P.R.) 10,000mmH₂O and above.
Moisture Vapor Transmission (M.V.T.) can reach 1,500~14,000 g/m²/day (ASTM E96BW) above.
 - The unique quality of TPU allows the lamination of otherwise resistant Materials such as 3D electro plating film, nylon6 film, electro plating mesh material, fiber glass fabric, carbon fabric...etc. Only the unique laminating method of consistent operation of e.TEX® can tightly laminate these materials with TPU film.

〈以上規格僅供參考，本公司保留更改之權利。This specification is for reference only, our company reserve the right to amend.〉

物性/特性 Physical property	單位 Unit	測試方法 Test Standard (ASTM)	J501	J502	J516	J518	J519	J528
聚 酤 Ether								
聚 酯 Ester			●	●	●	●	●	●
硬 度 Hardness (Durameter)	Shore A	D-2240	96	92	65	82	81	73
比 重 Density	g/cm³	D-792	1.20	1.21	1.20	1.20	1.18	1.18
抗 拉 強 度 Tensile Strength	PA	D-412	38	42	29.6	28.9	50	16
撕 裂 強 度 Tear Strength	KN / M	D-624	149	112	36	61.4	50	50
延 伸 率 Elongation	%	D-412	484	542	800	600	600	800
加 工 溫 度 Processing Temperature	°C		220	200	115	135	135	140~160
耐 水 解 性 Hydrolysis Resistant	Grade	D-3137	▲	▲	▲	▲	◎	▲
抗 紫 外 線 U.V. Stability	Grade	D-1148	■	■	◎	◎	◎	◎
透 溼 度 Moisture Vapor Transmission(M.V.T.)	g/M²/day	E96BW						
耐 水 壓 W. P. R.	mm H₂O	JIS L1092	◎	◎	◎	◎	◎	◎
襯 底 材 Carrier								
產品特性 Features			<ul style="list-style-type: none"> ● 高抗拉性 ● 耐撕裂 ● 耐温高 ● 成型性佳 ● 耐油性佳 ● High tensile strength ● High tear strength ● High temperature resistance ● Easy to form ● Oil resistance 	<ul style="list-style-type: none"> ● 高抗拉性 ● 耐温高 ● 耐撕裂 ● 成型性佳 ● High tensile strength ● High tear strength ● High temperature resistance ● Easy to form 	<ul style="list-style-type: none"> ● 低硬度 ● 柔軟近似橡膠彈性 ● 有H.M.A之特性適合加熱接著與被貼合物結合展現Q度及非常優越手感 ● 斷裂延伸極大 ● 抗UV佳 ● 耐曲折性 ● Low hardness ● Similar to rubber ● High flexibility and elongation ● UV resistance 	<ul style="list-style-type: none"> ● 透明性佳 ● 耐温性好 ● 高撕裂性 ● 高彈性 ● 耐曲折性 ● 耐油性 ● 耐化學性 ● 低黏著度 ● Transparent ● High tear strength and flexibility ● Temperature resistance ● Oil and chemical resistance ● Low adhesion 	<ul style="list-style-type: none"> ● 手感0度佳 ● 高抗拉性 ● 耐曲折性 ● 耐刮性佳 ● 耐磨性優 ● 消光霧面特優 ● Flexible ● Low hardness ● High tensile strength ● High tear strength ● Scratch resistance ● Excellent friction 	<ul style="list-style-type: none"> ● 柔軟性佳 ● 耐低温 ● 耐曲折 ● 貼合成衣 ● 面料 ● Soft ● Low temperature resistance ● Flexing resistance ● Lamination for garment ● Fabric material
產品應用 Applications			<ul style="list-style-type: none"> ● 充氣材 ● 包裝材 ● 貼合高壓力充氣材 ● 油槽 ● Inflatable material ● Packaging ● Lamination for high pressure inflatable material ● Oil tank 	<ul style="list-style-type: none"> ● 充氣材 ● 真空成型 ● 包裝材 ● 鞋面料 ● 揚聲器 ● 皮包面料 ● Inflatable material ● Vacuum forming ● Packaging ● Shoe material ● Speaker ● Bag 	<ul style="list-style-type: none"> ● 軟包材 ● 成衣 ● 夾克 ● Softy Material ● Garment ● Jackets 	<ul style="list-style-type: none"> ● 灰網專用 ● 三明治貼合膜 ● 鞋面材 ● 亮面材 ● Sandwich fitting membrane ● Shoe upper material 	<ul style="list-style-type: none"> ● 風衣 ● 夾克 ● 貼合專用皮膜 ● 包材面料 ● Jacket ● Bag material 	<ul style="list-style-type: none"> ● 圍裙 ● 雨衣 ● 皮包面料 ● Apron ● Rain coat ● Bag/ Purse

備註： ◎ 極佳 Excellent ■ 佳 Good ▲ 尚可 Fair

J529	J530	J533	J535	J535X	J538	J542	J545	J556	J580	J611	
●	●	●	●	●	●	●	●	●	●	●	
85	88	92	85	87	87	75	88	95	93	73	
1.20	1.20	1.21	1.21	1.20	1.20	1.17	1.15	1.22	1.21	1.07	
19.5	28	30	41.4	43	43	48.3	30	44	55.2	25	
65	88	90	73.6	76	62	68.3	115	94.4	105.1	39	
600	579	500	550	600	675	680	800	540	450	700	
45~165	170~190	175~195	140	145	140	135	150	155	150	125	
▲	▲	▲	■	■	■	◎	▲	▲	■	◎	
▲	▲	▲	▲	▲	▲	◎	▲	■	■	◎	
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
耐曲折 易裁切 成型熔斷性佳	●耐曲折 ●易裁切 ●貼合各式布料	●高抗拉性 ●耐温高 ●成型性佳	●高黏著性 ●高抗拉性 ●高韌性 ●耐温高 ●耐曲折性 ●耐油性 ●耐化學性 ●最佳薄膜 ●貼合材 ●易加工 ●耐低溫性 ●符合F.D.A ●High adhesion toughness, and tensile strength ●High and low temperature resistance ●Oil and chemical resistance ●Best lamination material ●Easy for secondary processing ●FDA standard	●符合UL94 VO ●高抗拉性 ●高撕裂性 ●高彈性 ●耐温高 ●耐曲折 ●耐刮性佳 ●耐油性 ●耐化學性 ●耐化學性 ●耐低溫 ●耐燃性佳 ●半非鹵素 ●UL 94 V0 standard ●High tensile strength, toughness ●High, low temperature resistance ●Oil and chemical resistance ●High flame resistance ●Half of non-halogen	●高抗拉性 ●高撕裂性 ●富彈性 ●耐油性 ●耐刮性佳 ●耐油性 ●耐化學性 ●耐化學性 ●耐低溫 ●耐燃性佳 ●半非鹵素 ●UL 94 V0 standard ●High tensile strength, toughness ●High flexibility ●Oil resistance ●Good scratch resistance ●Good forming fusing	●高抗拉性 ●高延伸性 ●似鬆緊帶特性 ●貼合性佳 ●High tensile strength, and tear strength ●High flexibility ●Oil resistance ●Good scratch resistance ●Chemical resistance ●High temperature resistance ●Good forming fusing	●高抗拉性 ●高延伸性 ●恢復性特優 ●撕裂性強 ●比重輕 ●High tensile strength, tear strength and elongation ●Low hardness ●Similar to elastic band ●High temperature resistance ●Good forming fusing	●高抗拉性 ●低硬度 ●High tear strength ●Easy to form ●Easy Laminating	●高硬度 ●撕裂性佳 ●成型性佳 ●貼合性佳 ●High tensile strength ●High tear strength ●Easy to form ●Low hardness ●Similar to elastic band ●High temperature resistance ●Good forming fusing	●透明度佳 ●高抗拉性 ●撕裂性特強 ●物性強 ●高熔點 ●抗UV ●包覆密閉性佳 ●耐油性特佳 ●低延伸性 ●High hardness, and tensile strength ●Superior tear strength ●High properties ●UV resistance ●Excellent oil resistance ●Low elongation	●低硬度 ●低密度 ●耐60°C 水洗佳 ●耐低温優 ●抗菌性佳 ●Low hardness and density ●Washable/ 60°C ●Low temperature resistance ●Anti-bacteria
商標 鞋材面料 皮包面料 Label Shoe/ Purse material	●球類貼合 ●貼合各式 工業用布料 ●鞋材面料	●充氣材 ●包裝材 ●皮包面料	●充氣救生衣 專用 ●內囊膜 ●球具面膜	●防火皮膜 ●家飾皮 ●Fireproof ●Furniture	●喇叭皮膜 ●防水條 ●包材面料 ●Speaker ●Water- proof tape ●Bladder	●鬆緊帶 ●Rubber/ elastic Band	●充氣材 ●鞋材面料 ●球類面料 ●貼合工業 用布 ●Inflatable material ●Shoe material ●Ball ●Laminate to industrial fabrics	●充氣床墊材 ●鞋面材 ●Inflatable mattress ●Shoe Upper	●充氣內膽 ●喇叭皮膜 ●防塵套 ●球面膜 ●Speaker ●Dirt-proof ●Inflatable bladder	●充氣內囊 皮膜 ●座椅皮膜 ●Inflatable bladder ●Car seat material	

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物性/特性 Physical property	單位 Unit	測試方法 Test Standard (ASTM)	J620	J622	J623	J631	J632	J633
聚 醚 Ether			●	●	●	●	●	●
聚 酯 Ester								
硬 度 Hardness (Durameter)	Shore A	D-2240	85	85	85	84	98	90
比 重 Density	g/cm ³	D-792	1.12	1.13	1.19	1.08	1.18	1.12
抗 拉 強 度 Tensile Strength	PA	D-412	48.3	37	50	25	30	32
撕 裂 強 度 Tear Strength	KN / M	D-624	83.2	110	55	50	80	110
延 伸 率 Elongation	%	D-412	570	600	500	550	500	700
加 工 溫 度 Processing Temperature	°C		140	140	140	150	180	140
耐 水 解 性 Hydrolysis Resistant	Grade	D-3137	◎	◎	◎	◎	◎	◎
抗 紫 外 線 U.V. Stability	Grade	D-1148	■	◎	◎	▲	▲	▲
透 溼 度 Moisture Vapor Transmission(M.V.T.)	g/M ² /day	E96BW				■	■	▲
耐 水 壓 W. P. R.	mm H ₂ O	JIS L1092	◎	◎	◎	◎	◎	◎
襯 底 材 Carrier								
產品特性 Features			<ul style="list-style-type: none"> ●高抗拉性 ●高撕裂性 ●符合F.D.A ●符合N.S.F ●耐水解優 ●耐海水性 ●耐老化 ●抗菌性佳 ●High tensile strength, tear strength ●FDA, NSF standard ●Excellent hydrolysis ●Corrosion resistance in sea water ●Aging resistance ●Anti-bacteria 	<ul style="list-style-type: none"> ●耐水解特優 ●抗菌性強 ●耐低温優 ●Superior hydrolysis ●Excellent anti-bacteria ●Low temperature resistance 	<ul style="list-style-type: none"> ●抗UV ●耐水解特優 ●耐磨耗佳 ●耐海水性 ●高抗拉性 ●高撕裂性 ●耐老化 ●UV resistance ●Superior hydrolysis ●High abrasion resistance ●High tensile strength, tear strength ●Aging resistance ●Corrosion resistance in sea water 	<ul style="list-style-type: none"> ●抗拉性佳 ●耐低温 ●貼合性佳 ●High tensile strength ●Low temperature resistance ●Easy to laminate 	<ul style="list-style-type: none"> ●高抗拉性 ●耐温高 ●耐油性佳 ●符合F.D.A ●High tensile strength ●High temperature resistance ●Oil resistance ●F.D.A standard 	<ul style="list-style-type: none"> ●高抗拉性 ●低粘度 ●成型性佳 ●High tensile strength ●Less sticky ●Easy to form
產品應用 Applications			<ul style="list-style-type: none"> ●水袋材 ●橡皮艇皮膜 ●冰熱敷袋皮膜 ●Water bladder ●Rafting boats ●Ice bag/ hot compress bag 	<ul style="list-style-type: none"> ●充氣用貼合皮膜 ●救生衣貼合膜 ●Inflatable ●Life jacket ●Soft ice bag 	<ul style="list-style-type: none"> ●橡皮艇專用皮膜 ●水袋皮膜 ●Rafting boats ●Water bladder 	<ul style="list-style-type: none"> ●冰袋 ●雨衣 ●充氣材 ●貼合各式工業用布 ●Ice bag ●Rain coat ●Inflatable material for high pressure application 	<ul style="list-style-type: none"> ●油槽 ●水管 ●高壓力充氣材 ●Oil tank ●Water pipe ●Inflatable material for high pressure application 	<ul style="list-style-type: none"> ●工業用雨衣 ●充氣材 ●水床 ●皮包面料 ●Industrial rain coat ●Inflatable material ●Water bed Purse material

備註: ◎ 極佳 Excellent ■ 佳 Good ▲ 尚可 Fair

3	J636	J645	J650	J661	J680	J688	J800	J810	J820	J850	
	●	●	●	●	●	●	●	●	●	●	
	80	92	87	90	93	94	74	90	80	85	
2	1.11	1.13	1.12	1.17	1.02	1.16	1.08	1.22	1.21	1.25	
1	30	57.9	48.2	40	30	51.7	26.2	50.4	27.6	27.6	
0	90	104	76.2	140	61.2	118.2	67.6	84.1	68.3	63.1	
0	750~900	450	490	450	755	400	660	500	800	650	
0	185	150	142	185~205	140	140	135	145	140	145	
	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	
	▲	■	■	▲	■	■	■	■	■	■	
	▲			▲			> 3000	> 7000	>10000		
	◎	◎	◎	◎	◎	◎	>10000	>10000	>10000		
							PE/PA	PE/PA	PE/PA		
主 要 性 能 form	● 高抗拉性 ● 符合F.D.A ● 柔軟性佳 ● 耐低温 ● High tensile strength ● F.D.A standard ● Soft ● Low temperature resistance	● 低伸率 ● 抗拉特強 ● 柔軟性佳 ● 耐低温 ● 低伸率 ● 符合V0 ● 高抗拉性 ● 高熔點 ● 耐水解佳 ● 易真空成型 ● Low elongation ● Excellent tensile strength ● High tear strength and melting point ● Good hydrolysis ● Easy for vacuum forming	● 高抗拉性 ● 檢測性特強 ● 抗菌性佳 ● 高熔點 ● 耐水解優 ● 易真空成型 ● High tensile strength ● Anti-bacteria ● F.D.A standard ● Excellent hydrolysis	● 耐溫高 ● 符合V0 ● 防火標準 ● High temperature resistance ● V0 FR standard	● 高伸率 ● 高熔點 ● 適真空成型 ● 防霉抗菌佳 ● 耐水解 ● 耐溫佳 ● 低密度 ● High elongation and melting point ● Good for vacuum forming ● Anti-mildew and bacteria ● Hydrolysis ● Temperature resistance ● Low density	● 高伸率 ● 高熔點 ● 適真空成型 ● 防霉抗菌佳 ● 耐水解 ● 耐溫佳 ● 低密度 ● High tear strength and melting point ● Good for vacuum forming ● Anti-bacteria ● Hydrolysis ● Temperature resistance ● Low density	● 高撕裂性 ● 高熔點 ● 適真空成型 ● 抗菌性 ● 耐水解 ● 耐溫佳 ● 低密度 ● High tear strength and melting point ● Good for vacuum forming ● Anti-bacteria ● Hydrolysis ● Temperature resistance ● Low density	● 親水性薄膜 ● 透濕防水 ● 耐水解 ● 抗撕列強 ● 耐水解 ● 低密度 ● 超柔軟 ● 耐溫佳 ● 低密度 ● Hydrophilic ● Breathable ● Waterproof ● Anti-bacteria ● Hydrolysis ● Superior tear strength ● Low density ● Very soft ● High temperature resistance for sterilization ● Washable ● Low temperature resistance	● 親水性薄膜 ● 透濕防水 ● 抗撕列強 ● 耐水解 ● 低密度 ● 可醫療高溫消毒 ● 耐水洗 ● 良好低溫曲折性 ● Hydrophilic ● Breathable ● Waterproof ● Anti-bacteria ● Hydrolysis ● Superior tear strength ● Low density ● Very soft ● High temperature resistance for sterilization ● Washable ● Low temperature resistance	● 親水性薄膜 ● 透濕防水 ● 耐水解 ● 抗靜電 ● 親水性 ● 透濕防水 ● 抗靜電 ● 耐水解 ● 低密度 ● 超柔軟 ● 耐溫佳 ● 低密度 ● Hydrophilic ● Breathable ● Waterproof ● Anti-bacteria ● Hydrolysis ● Superior tear strength ● Low density ● Very soft ● High temperature resistance for sterilization ● Washable ● Low temperature resistance	● 耐燃吹燃級 ● 符合UL94 V0 ● 乳白霧面 ● 耐水解優 ● Flame resistance ● UL 94 V0 standard ● Hydrolysis
衣 物 料 ed	● 冰袋 ● 雨衣 ● 充氣泳圈 ● 水床 ● 皮包面料 ● Ice bag ● Rain coat ● Inflatable swimming tube ● Water bed ● Purse	● 真空成型 ● 水床皮料 ● Vacuum forming ● Water mattress	● 醫療充氣床專用皮膜 ● 救生衣氣囊 ● Medical inflatable mattress ● Life jacket bladder	● 電線材 ● 汽車材 ● 充氣材 ● Electrical wire ● Automobile ● Inflatable material	● 真空成型 ● Vacuum forming	● 真空成型 ● Vacuum forming	● 手套 ● 風衣、雨衣 ● 泳衣 ● 泳帽 ● Gloves ● Windcoats ● Rain coats ● Swimsuits ● Swim caps	● 殺菌抗黴手套 ● 風衣、雨衣 ● 雪衣 ● 雨衣 ● 鞋子 ● Gloves for sterilizing, anti-mildew ● Snow suits ● Rain coats ● Shoes	● 防寒夾克 ● 運動韻律衣 ● Warm jacket ● Aerobic/rhythm suits	● 帳篷 ● 防火衣皮覆材 ● Tent ● Fire proof	

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1. 寬幅：1350mm~1500mm(or 53"~60")、
厚度：0.4mm~3mm、
長度：30M~100M(or 30YD~100YD)、
硬度：65A~95A、比重 $0.3\text{g}/\text{cm}^3$ ~ $0.8\text{g}/\text{cm}^3$ 。
2. 類別：聚酯類(ester)、聚醚類(ether)。
3. 輕量化、彈性佳、耐磨性強、耐老化、可印刷等特性。
4. 產品可廣泛應用於：
 - (1) 電子包裝防震材。
 - (2) 鞋材面料
 - (3) 橡皮艇及救生衣之充氣浮具。
 - (4) 運動護具、滑雪、滑草、衝浪、潛水等運動器材之專用材料。
 - (5) 汽車、機車、腳踏車、沙發等座椅之專用材料。

1. Width 1350mm~1500mm(or 53"~60"),
Thickness 0.4mm~3mm,
Length 30M~100M(or 30YD~100YD),
Hardness 65A~95A, Specific gravity $0.3\text{g}/\text{cm}^3$ ~ $0.8\text{g}/\text{cm}^3$.
2. Classification : ester, ether.
3. Superior features include light weight, great flexuosity, strong abrasion resistance, aging resistance and printable.
4. This product can be used for :
 - (1) Quakeproof packaging material for electronic devices.
 - (2) Shoe material.
 - (3) Floating devices for rubber dinghy and life vest.
 - (4) Exclusive material for various sport gears in the field of orthopedic protection, skiing, surfing and diving.
 - (5) Exclusive material for seats in automobile, motorcycle, bike and sofa.

物性 / 特性	單位 Unit	測試方法 Test Standard (ASTM)	酯類 (ester)		醚類 (ether)	
			J515-P	J535-P	J675-P	J690-P
硬度 / Hardness	Shore A	DIN 53505	62	66	62	72
比重 / Density	g/cm^3	DIN 53479	0.67 ± 0.05	0.43 ± 0.05	0.75 ± 0.05	0.67 ± 0.05
抗拉強度 / Tensile Strength	kg/cm^2	DIN 53504	133	122	69	120
伸長度 / Elongation	%	DIN 53504	500	325	370	340
撕裂強度 / Tear Strength	kg/cm^2	DIN 53515	> 26	> 25	> 20	> 25
特性及用途 / Application Guide			<ul style="list-style-type: none"> 彈性特佳 鞋材面料 座椅皮套料 	<ul style="list-style-type: none"> 比重輕 充氣防震 包裝材 	<ul style="list-style-type: none"> 耐黃變 防霉抗菌 救生衣 醫療床 	<ul style="list-style-type: none"> 耐黃變 耐水解 水上用品 橡皮艇

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1. 特點：無溶劑污染、無化學接著劑時效限制、加熱立即接著、加工容易，適合多種材質之接著，接著性、防水性特佳等。
2. 種類功能：抗UV型聚酯類及耐水解型聚醚類兩大類。
3. 規格：寬幅1000mm~1500mm(or 40"~60")；厚度0.025mm~1.0mm；長度30M~200M(or 30YD~200YD)；硬度65A~95A、熱壓接著加工溫度80°C~160°C、組成可有無離型基材(紙/PE)。
4. 热壓加工方式：可用紅外線、熱風、蒸汽、頻率震盪等熱源系統，加熱於上下平板或滾輪方式進行壓合接著。
應用加工機具如：熱滾輪貼合機、燙化機、熱氣縫合機、高週波、超音波、熱壓機等。
5. **e.TEX®** 熱熔膠膜於生產線上，可與基布進行淋膜貼合一次完成，節省再上膠貼合之流程。

1. Characteristics: No pollution from solvent; no limitation of time effect from adhesive; instant hot melt adhesive; clean and easy to apply; suitable for bonding of various materials, excellent bonding and water proof effect.
2. Types available: UV resistant ester and hydrolysis resistant ether.
3. Specification: Width 1000mm~1500mm(or 40"~60"); thickness 0.025mm~1.0mm; Length 30M~200M(or 30YD to 200YD); Harness 65A~95A; hot melt adhesive applying temperature 80°C~160°C; can be with or without release PE film (Paper/PE).
4. On the production line, **e.TEX®** hot melt adhesive film and fabrics can be interlined simply by applying heat/pressure and saving the procedure of lamination by solvent.

TPU Hot melt adhesive 優點 superior features

- 無溶劑污染、符合環保
- 儲存時效長
- 適合各種材質的接著
- 加熱加壓，立即接著
- 非常適合DIY產品接著之運用
- 可代客分條最小寬度20mm

- No pollution from solvent, conform with environmental protection
- Long storage time
- Suitable for bonding of various kinds of material
- Adhered instantly by heat and pressure
- Most suitable to bond between parts for DIY products
- Available in strip at requested width (minimum 20mm)



加工作業方式 Ways of Processing

- | | |
|--------------|--|
| ●高週波、超音波或燙畫機 | ●Radio frequency welding, ultrasonic welding or heat press machine |
| ●紅外線加熱方式貼合 | ●Infrared heating system |
| ●加熱平板壓合、熱壓機 | ●Heat press board |
| ●熱滾輪貼合機 | ●Hot roller press and laminating |
| ●熱風機、燙斗 | ●Industrial hot blow dryer/Industrial iron |

物性/特性 Physical property	單位 Unit	測試方法 Test Standard (ASTM)	J802	J861	J863	J865	J867	J868
聚 醚 Ether								
聚 酯 Ester			●	●	●	●	●	●
硬 度 Hardness	Shore A	D-2240	78	56	80	78	80	80
比 重 Density	g/cm ³	D-792	1.19	1.15	1.20	1.19	1.18	1.18
抗 拉 強 度 Tensile Strength	PA	D-412	36.5	11	30	36.5	26	26.2
撕 裂 強 度 Tear Strength	KN/M	D-624	79	24	65	79	70	70
延 伸 率 Elongation	%	D-412	700	715	850	700	660	660
加 工 溫 度 Processing Temperature	°C		120~160	110~150	110~150	130~170	100~150	110~160
襯 底 材 Carrier						PE/PA	PE/PA	PE/PA

適用接著材質 Suitable bonding material

熱塑性聚氨酯 TPU		◎	◎	◎	◎	◎	◎
PU泡綿 PU Foam		◎	◎	◎	◎	◎	◎
聚碳酸脂 PC		▲	▲	▲	▲	▲	▲
尼龍纖維 Nylon Textile		◎	◎	◎	◎	◎	◎
聚脂纖維 Polyester Textile		◎	◎	◎	◎	◎	◎
棉、毛料 Cotton and Wool		◎	◎	◎	◎	◎	◎
木 材、紙 Wood and Paper		◎	◎	◎	◎	◎	◎
金 屬 metal		▲	▲	▲	▲	▲	▲
皮 革 Leather		▲	▲	▲	▲	▲	▲

備註： ◎ 極佳 Excellent ■ 佳 Good ▲ 尚可 Fair

J869	J870	J874	J875	J880	J885	J886	J887	J895	J899	
									●	
●	●	●	●	●	●	●	●	●		
80	75	90	97	75	80	80	70	92	70	
1.18	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	
26	20	30	25	20	30	30	20	16	15	
70	43	300	52	42	65	45	40	33	32	
660	600	700	950	800	850	830	600	550	700	
60	140~150	120~160	120~160	70~100	120~150	130~160	100~140	110~150	130~160	120~150
	Free		Free	PE/PA	PE/PA		PE/PA	Free	PE/PA	

◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
◎	◎	◎	◎	◎	◎	◎	◎	◎	◎
▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

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物性/特性 Physical property	單位 Unit	測試方法 Test Standard (ASTM)	J230	J231	J233	J234	J254
VA含量 VA Content			16	20	19	13.62	33
硬度 Hardness	Shore A	D-2240	36	36	32	42	70
密度 Density	g/cm ³	D-792	0.93	0.93	0.93	0.94	0.95
抗拉強度 Tensile Strength	PA	D-412	27	18	12.7	10.8	7
撕裂強度 Tear Strength	KN / M	D-624	170	180	127	108	70
延伸率 Elongation	%	D-412	700	725	790	820	900
操作溫度 Processing Temperature	°C		89	82	82	90~130 / 5~10	63
抗水解性 Hydrolysis Resistant			◎	◎	◎	◎	◎
抗紫外線 U.V. Stability			▲	▲	▲	▲	▲
襯底材 Carrier							

適用接著材質 Suitable bonding material							
聚丙烯 Polypropylene PP		◎	◎	◎	◎	◎	◎
人造橡膠 SBR、CRPVC		◎	◎	◎	◎	◎	◎
聚乙烯 Polyethylene PE		◎	◎	◎	◎	◎	◎
尼龍纖維 Nylon Textile		■	■	■	■	■	■
聚脂纖維 Polyester Textile		◎	◎	◎	◎	◎	◎
棉、毛料 Cotton and Wool		◎	◎	◎	◎	◎	◎
木材、紙 Wood and Paper		■	■	◎	◎	◎	◎
聚烯類 Polyolefines		◎	◎	◎	◎	◎	◎
玻璃 Glass		■	■	■	■	■	■

備註： ◎ 極佳 Excellent ■ 佳 Good ▲ 尚可 Fair

物性/特性 Physical property	單位 Unit	測試方法 Test Standard (ASTM)	J276	J280	J300-1	J900	J901
材質 Material			Polyethylene (PE)	Polypropylene (PP)	Thermoplastic Olefin (TPO)	Polypropylene (PP)	Polypropylene (PP)
硬度 Hardness	Shore A	D-2240	83	67	62.2	67	61
密度 Density	g/cm ³	D-792	0.91	0.86	0.86	0.86	0.861
抗拉強度 Tensile Strength	PA	D-412	10.8	9.7	7.78	9.7	7.31
撕裂強度 Tear Strength	KN / M	D-624	17.4	38	34	38	188
延伸率 Elongation	%	D-412	471	948	2000	948	2000
操作溫度 Processing Temperature	°C		124	46	195~200	46	118
抗水解性 Hydrolysis Resistant	Grade	D-3137	◎	◎	◎	◎	◎
抗紫外線 U.V. Stability	Grade	D-1148	▲	▲	▲	▲	▲
襯底材 Carrier							
產品特性 Features			<ul style="list-style-type: none"> ● 低温熔接 ● 柔軟性佳 ● 加工容易 ● 延伸性佳 <ul style="list-style-type: none"> ● Low temperature welding ● Softy ● Easy for secondary processing ● Good Elongation 	<ul style="list-style-type: none"> ● 低温熔接 ● 柔軟性佳 ● 加工容易 ● 延伸性佳 <ul style="list-style-type: none"> ● Low temperature welding ● Softy ● Easy for secondary processing ● Good Elongation 	<ul style="list-style-type: none"> ● 低温熔接 ● 柔軟性佳 ● 加工容易 ● 延伸性佳 <ul style="list-style-type: none"> ● Low temperature welding ● Softy ● Easy for secondary processing ● Good Elongation 	<ul style="list-style-type: none"> ● 低温熔接 ● 柔軟性佳 ● 加工容易 ● 延伸性佳 <ul style="list-style-type: none"> ● Low temperature welding ● Softy ● Easy for secondary processing ● Good Elongation 	<ul style="list-style-type: none"> ● 低温熔接 ● 柔軟性佳 ● 加工容易 ● 延伸性佳 <ul style="list-style-type: none"> ● Low temperature welding ● Softy ● Easy for secondary processing ● Good Elongation
產品應用 Applications			<ul style="list-style-type: none"> ● 射出熔接 ● 可與polyester/ PP織品/PP紙 作貼合 ● 商標貼合 <ul style="list-style-type: none"> ● Injection welding ● Laminate with polyester/ PP fabric/ PP paper ● Label lamination 	<ul style="list-style-type: none"> ● 射出熔接 ● 可與polyester/ PP織品/PP紙 作貼合 ● 商標貼合 <ul style="list-style-type: none"> ● Injection welding ● Laminate with polyester/ PP fabric/ PP paper ● Label lamination 	<ul style="list-style-type: none"> ● 射出熔接 ● 可與polyester/ PP織品/PP紙 作貼合 ● 商標貼合 <ul style="list-style-type: none"> ● Injection welding ● Laminate with polyester/ PP fabric/ PP paper ● Label lamination 	<ul style="list-style-type: none"> ● 射出熔接 ● 可與polyester/ PP織品/PP紙 作貼合 ● 商標貼合 <ul style="list-style-type: none"> ● Injection welding ● Laminate with polyester/ PP fabric/ PP paper ● Label lamination 	<ul style="list-style-type: none"> ● 射出熔接 ● 可與polyester/ PP織品/PP紙 作貼合 ● 商標貼合 <ul style="list-style-type: none"> ● Injection welding ● Laminate with polyester/ PP fabric/ PP paper ● Label lamination

〈以上規格僅供參考，本公司保留更改之權利。This specification is for reference only, our company reserve the right to amend.〉