# **DOUBLE SIDED PRODUCT GUIDE** < Bonding you can trust >







# WHY SCAPA

Scapa is a leading global manufacturer and supplier of technical adhesive tape solutions to virtually every industry. Scapa offers specialist application expertise and products from stock or as custom design, either directly or through a network of authorised distributors.

Our portfolio of double sided and transfer tapes includes solvent acrylics, hot melt, rubber and high performance silicone adhesive systems. These products deliver high-performance in the most demanding of applications in markets such as: electronics, industrial, graphics, and retail industries.

In addition to our comprehensive double sided and transfer tapes ranges, we also produce a range of single sided filmic, cloth, foil and foam products, plus specialist tape solutions for niche market areas.

#### OUR DOUBLE SIDED Bonding Materials can:

- > Reduce mechanical fixing / relieve stress concentrations
- > Bond dissimilar materials and a process aid in fabrication
- > Accommodate thermal expansion
- > Be a thermal insulator / electrical insulator
- > Acts as a separator and maintain a constant gap between two substrates
- > May act as an anti-vibration and dampening medium

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Scapa's acrylic adhesives bond rapidly and are very strong due to the cross linking of the polymers created from the acrylic acid. This leads to an improved adhesion performance in terms of shear, tack and peel.

#### COMMON FEATURES ASSOCIATED WITH THESE PRODUCTS ARE:

- Excellent temperature resistance from -40°C to + 150°C (and for short term a higher operating temperature)
- > Great adhesion onto a variety of surfaces
- > Solvent, humidity and UV resistance



## FIRM

Product	Description	Total Thickness mm (mils)	Colour	Carrier	Liner	Peel Adhesion N/25mm (oz./in)	Operating Temperature	Applications
S408X	Very thin double coated acrylic product. Firm and cohesively strong adhesive.	0.046 (1.8)	Transparent	Polyester	Kraft	11 (40)	-40°C to +149°C (+182°C) -40°F to +300°F (+356°F)	High temperature gasketing. Lami- nation to foam for sound control.
U880	Good shear strength and long term ageing properties.	0.05 (2)	Transparent	-	Polycoated	15 (53)	-40°C to +149°C -40°F to +300°F	High temperature mounting gasketing, splicing of film and paper webs, membrane switch fabrication.
UJ504	High peel, shear and heat resistance. High cohesive strength provides resistance to creep.	0.127 (5.1)	Transparent	-	Polycoated	23 (81)	-40°C to +149°C (+182°C) -40°F to +300°F (+356°F)	High temperature gasketing. Lamination to foam for sound control.
AS1100	UV cured, clear acrylic bonding transfer tape. Used on a wide variety of substrates: metals, glass as well as many plastics	0.25 (9.8)	Transparent	-	Glassine	25 (124)	-30°C to +120°C (+180°C -22°F to +250°F (+356°F)	Signage manufacturing, trim attachment, metal stiffener and electronic component bonding.

# MEDIUM FIRM MF 1

Product	Description	Total Thickness mm (mils)	Colour	Carrier	Liner	Peel Adhesion to Steel N/25mm (oz./in)	Operating Temperature	Approvals	Applications
4440	General purpose light weight hand tearable tissue. Good UV and ageing properties.	0.1 (3.5)	White	Tissue	Polycoated	9.6 (39)	-20°C to +120°C -4°F to +250°F		Core starting,end tabbing. Fascia assembly. Nameplate bonding.
4450 / 4456 <b>*</b>	Excellent UV and temperature resistance. Long ageing performance. Adhesive contains glass fibres for easier converting.	0.04 (1.6)	Clear	-	Glassine	6.5 (25)	-30°C to +150°C (+180°C) -22°F to +300°F (+356°F)	Acid free / pH neutral - compliant to ISO 18902. Photographic activity test (PAT) for enclosure materials - compliant to ISO 18916.	Core starting and end tabbing. Display item mounting, albums, POS assembly.
S234 / S234R	High tack and fast grab. Provides excellent quick stick, holding power and heat resistance.	0.086 (3.5)	Translucent / Red	Polyester	Kraft	12.5 (44)	-40°C to +121°C -40°F to +250°F		High speed flying splice of papers, film and foils.
SG357E	Fast grabbing acrylic with excellent holding power and heat resistance.	0.089 (3.5)	Translucent	Polyester	Kraft	12.5 (44)	-40°C to +121°C -40°F to +250°F		High speed splicing of papers, films and foils. Resealable polybags.
T001* / T002	Excellent UV and temperature resistance. Long ageing performance. Adhesive contains glass fibres for easier converting.	0.04 (1.6)	Clear	-	Glassine	6.5 (25)	-30°C to +150°C (+180°C) -22°F to +300°F (+356°F)	Acid free / pH neutral - compliant to ISO 18902. Photographic activity test (PAT) for enclosure materials - compliant to ISO 18916.	Splicing, product assembly laminating, flying splice (paper and cardboard).
TD200*	Permanent acrylic adhesive reverse wound for tape dispensing system. Adhesive contains glass fibres for easier converting.	0.048 (2)	Translucent	-	Kraft	11.7 (41)	-40°C to +121°C -40°F to +250°F		Picture framing, graphic arts, product assembly.
TD500*	Permanent acrylic adhesive reverse wound for tape dispensing system. Adhesive contains glass fibres for easier converting.	0.127 (5.1)	Translucent	-	Kraft	16.4 (58)	-40°C to +121°C -40°F to +250°F		Picture framing, graphic arts, product assembly.
U261	Thicker high performance transfer adhesive system for demanding high speed flying splices. Adhesive contains glass fibres for easier converting.	0.127 (5.1)	Transparent	-	Kraft	16.4 (58)	-40°C to +121°C -40°F to +250°F		High speed flying splices (paper and plastic films).
U263-1	Thin high performance transfer adhesive system for demanding high speed flying splices. Adhesive contains glass fibres.	0.05 (2)	Transparent	-	Kraft	11.7 (41)	-40°C to +121°C -40°F to +250°F		High speed flying splices (paper and plastic films).
U263-PK	Pink acrylic transfer adhesive specifically for demanding high speed flying splices. Very high quick stick. Excellent holding power at elevated oven temperatures. Adhesive contains glass fibres for easier converting.	0.048 (2)	Pink	-	Kraft	11.4 (40)	-40°C to +121°C -40°F to +250°F		Flying splices, envelope closure.

\* For use with dispenser

# **MEDIUM FIRM MF 2**

Product	Description	Total Thickness mm (mils)	Colour	Carrier	Liner	Peel Adhesion to Steel N/25mm (oz./in)	Operating Temperature	Applications
SA307E	Good tack and peel adhesion with moderate shear and heat resistance.	0.076 (3.1)	Translucent	Polyester	Kraft	13.9 (49)	-40°C to +121°C -40°F to +250°F	Bonding faceplates, decorative trims, photo mounting.
S1097W	Double coated PP carrier with acrylic adhesive providing excellent balance of peel, tack and holding power.	0.088 (3.5)	White	Polypropylene	Polycoated	12.5 (45)	-40°C to +121°C -40°F to +250°F	For photo mounting. Does not discolour photographs.
UA154	High tack and quick stick, excellent adhesion to glass and paper, good peel and cohesive strength.	0.038 (1.6)	Transparent	-	Polycoated	19 (67)	-40°C to +121°C -40°F to +250°F	General purpose bonding. Nameplates and faceplate mounting. Printing and graphics.
UA202	High tack and quick stick, excellent adhesion to glass and paper, good peel and cohesive strength.	0.05 (2)	Transparent	-	Kraft	23 (81)	-40°C to +121°C -40°F to +250°F	General purpose bonding. Nameplates and faceplate mounting. Printing and graphics.
U666	High performance transfer adhesive with good peel and cohesive strength. Adhesive contains UV blocker to protect materials underneath. Developed to bond registration stickers to car windshields.	0.038 (1.6)	Translucent	-	Polycoated	13.6 (48)	-40°C to +121°C -40°F to +250°F	Lamination to glass and paper, application of decorative parts.
U855	Acrylic transfer exhibiting high peel, shear with well balanced adhesive and cohesive properties. Good LSE performance.	0.127 (5.1)	Translucent	-	Polycoated	22.2 (79)	-40°C to +100°C -40°F to +212°F	Foam fabrication. Excellent anchorage to PE, EVA, ester and ether Polyurethanes. Bonding of porous surfaces including fabrics and wood.

# **ACRYLIC ADHESIVES**



# **MEDIUM SOFT LSE**

Product	Description	Total Thickness mm (mils)	Colour	Carrier	Liner	Peel Adhesion N/25mm (oz./in)	Operating Temperature	Applications
4403	High tack and adhesion on low and high surface energy substrates.	0.24 (9.4)	Translucent	PVC	Polycoated	30 (89)	-30°C to +70°C -22°F to +158°F	Mirror mounting, POS assembly and trim attachment.
U883	High adhesion to most surfaces including LSE plastics with fast high peel strength. Excellent UV and humidity resistance. Adhesive contains glass fibres for easier converting.	0.08 (3.1)	Transparent	-	Polycoated	33 (117)	-40°C to +95°C -40°F to +203°F	LSE plastic attachment, including to untreated polyolefin.
U884	High adhesion to most surfaces including LSE plastics with fast high peel strength. Excellent UV and humidity resistance. Adhesive contains glass fibres for easier converting.	0.127 (5.1)	Transparent	-	Polycoated	38.4 (136)	-40°C to +95°C -40°F to +203°F	LSE plastic attachment, including to untreated polyolefin.
U885	High tack and adhesion coated onto moisture stable polythene coated white paper liner. Adhesive contains glass fibres for easier converting. Excellent UV and humidity resistance.	0.127 (5.1)	Translucent	-	Polycoated	31 (106)	-40°C to +95°C (+125°C) -40°F to +203°F (+257°F)	Nameplates and faceplate bonding. Foam gasketing and sound attenuation.

## SOFT

Product	Description	Total Thickness mm (mils)	Colour	Carrier	Liner	Peel Adhesion to Steel (N/25mm)	Operating Temperature	Applications
4472	Thick acrylic transfer tape reinforced by a polyester grid.	0.2 (7.9)	Translucent	Polyester grid / acrylic	Glassine	24 (106)	-40°C to +120°C -40°F to +248°F	Fixing of all vapour barrier and sub roof membranes including Tyvek®.
D100 / S301	Exceptional tack and high adhesion to most surfaces. Good plasticiser resistance. Specially suitable for EPDM rubber bonding.	0.21 (8.5)	Translucent	PVC	Kraft	32.5 (134)	-40°C to +70°C -40°F to +158°F	Bonding rubber profiles and sound dampening materials. Foam gasketing.
D160 / S1112	Very high tack. Hand tearable. Good plasticiser resistance.	0.114 (4.5)	Transparent	Polyester	Kraft	31 (104)	-40°C to +95°C -40°F to +203°F	Bonding rubber profiles and sound dampening materials. Foam gasketing.
SP357E	Extremely high tack and peel adhesion. Product adheres very well to low surface energy substrate.	0.089 (3.5)	Translucent	Polyester	Kraft	26 (92)	-40°C to +93°C -40°F to +200°F	Foam gasketing, lamination to EPDM rubber. Acts as an assembly aid. The product is qualified to Boeing BMS5 173.

# SOFT (CONT.)

Product	Description	Total Thickness mm (mils)	Colour	Carrier	Liner	Peel Adhesion to Steel N/25mm (oz./in)	Operating Temperature	Applications
SP454E	Exceptionally high tack and peel adhesion. Product bonds well to LSE substrates incl. ether and ester. Excellent resistance to environmental extremes.	0.114 (4.3)	Translucent	Polyester	Polycoated	Open Side: 29 (104) Liner Side: 25 (90)	-40°C to +93°C -40°F to +200°F	Foam fabrication. Challenging splicing applications. Bonding to EPDM rubber. Acts as an assembly aid.
SP457E	Extremely high tack and peel adhesion. Product adheres very well to low surface energy substrates.	0.114 (4.3)	Translucent	Polyester	Kraft	31.1 (110)	-40°C to +93°C -40°F to +200°F	Foam gasketing, lamination to EPDM rubber. Acts as an assembly aid.
U798	High performance transfer adhesive with excellent adhesion especially to urethane foams. Adhesive contains glass fibres for easier converting.	0.102 (3.9)	Translucent	-	Polycoated	34 (120)	-40°C to +95°C (+127°C) -40°F to +203°F (+257°F)	EPDM lamination, foam fabrication, splicing.
UP1540	Very high tack. Adhesive contains glass fibres for easier converting. Excellent UV and humidity resistance.	0.038 (1.5)	Translucent	-	Polycoated	26 (94)	-40°C to +95°C (+125°C) -40°F to +203°F (+257°F)	Lamination to foam for sound attenuation and vibration dampening. Mounting of rubber extrusions.
UP2040	Very high tack. Adhesive contains glass fibres for easier converting. Excellent UV and humidity resistance.	0.05 (2)	Translucent	-	Polycoated	24 (86)	-40°C to +95°C (+125°C) -40°F to +203°F (+257°F)	Foam gasketing and sound attenuation.
UP3040	Good chemical and plasticiser resistance and withstands environmental extremes.	0.076 (3.1)	Translucent	-	Polycoated	36 (127)	-40°C to +95°C -40°F to +203°F	Lamination of foam for gasketing and sound attentuation. Decorative parts assembly.
UP5040	Thicker version of UP2040. Product contains glass fibres for easier die cutting. Especially designed for rougher surfaces.	0.127 (5.1)	Translucent	-	Polycoated	41 (145)	-40°C to +95°C (+125°C) -40°F to +203°F (+257°F)	Foam gasketing and sound attenuation.
UP5040RW*	Thicker version of UP2040. Product contains glass fibres for easier die cutting. Especially designed for rougher surfaces.	0.127 (5.1)	Translucent	-	Polycoated	41 (145)	-40°C to +95°C (+125°C) -40°F to +203°F (+257°F)	Foam gasketing and sound attenuation.

\* For use with dispenser

# **SPECIAL**

Product	Description	Total Thickness mm (mils)	Colour	Carrier / Adhesive	Liner	Peel Adhesion to Steel N/25mm (oz./in)	Operating Temperature	Applications
4929	High performance, differentially coated flame retardant acrylic adhesives, light weight. Adhesive dark grey on open side, black on liner side.	0.14 (5.5)	Black - Dark Grey	Polyester / acrylic	Glassine	Open Side: 8.75 (32) Liner Side: 35 (128)	-40°C to +120°C -40°F to +250°F	Carpet and galley mat fixing in aircraft. Passes flammability requirements of FAR/JAR/CS 25.853 (a) APP. F Pt 1(a)(1)(ii).
S268	Double sided bonding tape with removable acrylic adhesive on the liner side and a high performance, permanent acrylic on the open side.	0.07 (2.8)	Translucent	Polyester / perma- nent (open side), removable (liner side), acrylics	Kraft	Open Side: 12 (43) Liner Side: 7.8 (28)	-40°C to +121°C -40°F to +250°F	Temporary labels and decals, mounting of artwork, laminates to foam or felt.
S305	Double sided bonding tape with removable acrylic adhesive on the liner side and a high performance rubber on the open side.	0.066 (2.6)	Translucent	Polyester / rubber permanent (open side), acrylic removable (liner side)	Kraft	Open Side: 32.5 (115) Liner Side: 7 (25)	40°C to +121°C -40°F to +250°F	Laminates to foams and felts for protective pads. Temporary mounting of artwork, labels and decals.
S1076	13 micron PET carrier with removable acrylic adhesive on liner side and high tack, high peel acrylic on the open side.	0.102 (4)	Translucent	Polyester / perma- nent (open side), removable (liner side), acrylics	Polycoated	Open Side: 28 (99) Liner Side: 8 (28)	-40°C to +93°C -40°F to +200°F	Temporary mounting of labels, protective packaging, foam and felt lamination.
U891	Electrically conductive through its thickness. Excellent Z direction conductivity.	0.05 (2)	Grey	- / Electrically conductive acrylic	Polycoated	8.8 (32)	-40°C to +150°C (+180°C) -40°F to +300°F (+356°F)	EMI / RFI shielding.

# **RUBBER BASED ADHESIVES**



With pressure sensitive adhesive, based on natural or synthetic rubber, Scapa's range of rubber based adhesive products offer great adhesion to a variety of materials. These products offer balanced adhesion, coupled with residue free removal.

#### COMMON FEATURES ASSOCIATED WITH THESE PRODUCTS ARE:

- > Very aggressive initial bond
- > Good adhesion to materials with both high and low surface energy
- > Variety of release liners available
- > Cost effective

Product	Description	Total Thickness mm (mils)	Colour	Carrier / Adhesive	Liner	Peel Adhesion to Steel N/25mm (oz./in)	Operating Temperature	Applications
4415	Clean removability from most surfaces. Low and high surface energy bonding. Not suitable for UV exposure.	0.1 (3.9)	Translucent	Polyester (PET) / cross linked rubber	Kraft	12 (43)	-10°C to +70°C 14°F to +158°F	Mounting display items, dummy packs, sample cards.
D210	23 micron PET carrier with extreme plasticiser resistant adhesive. Clean removal and high shear.	0.07 (3.1)	Transparent	Polyester / rubber	Kraft	Open Side: 7.8 (28) Liner Side: 14 (50)	-10°C to +70°C 14°F to +158°F	Temporary bonding of highly plasticised PVC mats onto wooden varnished flooring and sports floor coverings.
102	A hand tearable cloth tape, suitable for more uneven surfaces.	0.21 (9.1)	White	Cloth / rubber resin	Kraft	>35 (139)	-10°C to +50°C (+65°C) 14°F to +122°F (+149°F)	Carpet and floor covering fixing. Core starting and end tabbing.
808	General purpose tape with high conform- ability and tack. Not UV light resistant.	0.1 (3.9)	White	Polypropylene / hot melt rubber	Glassine	12.5 (42)	-10°C to +50°C (+65°C) 14°F to +122°F (+149°F)	Carpet fixing and floor covering. Exhibition booth assembly.

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	4415	D210	102	808	0485	174	274	S3401	S662X	S1135
Tack										
Adhesion					0					
Shear									0	
Temperature										

Key characteristics

O Notable characteristics

Permanent side

Removable side

Product	Description	Total Thickness mm (mils)	Colour	Carrier / Adhesive	Liner	Peel Adhesion to Steel N/25mm (oz./in)	Operating Temperature	Applications
0485	Very aggressive, pressure sensitive ad- hesive mass. Forms a watertight bond. Not suitable for UV light exposure.	0.4 (15.7) 1 (39.4) 2 (78.7)	Amber	- / rubber resin	Glassine	NA	0°C to +40°C 32°F to +104°F	Third hand fix in building insulation to walls. Plastic sheet jointing, mounting signs and tiles. Fixing roofing bars on commercial vehicles. Carpet fixing.
174	A hand tearable, aggressive adhesive tape. Peels cleanly after shorter term use.	0.33 (13)	White	Cloth / rubber resin	Kraft	15 (50)	-15°C to +70°C 5°F to +160°F	Carpet installation where a very aggressive adhesive is required. Print plate mounting.
274	A white cloth tape, double coated with a flame-retardant rubber pressure sensitive adhesive. The product has a white polyethylene liner.	0.31 (12.2)	White	Cloth	Polyethylene	Open Side: 11 (39) Liner Side: 14 (50)	0°C to+71°C 32°F to +160°F	Carpet installation and repair in aircraft.
\$3401	A white cloth tape, double coated with a flame-retardant rubber pressure sensitive adhesive.	0.33 (13)	White	Cloth	White	14 (50)	0°C to+71°C 32°F to +160°F	Installation of aircraft carpeting. Fire retardant to FAR 25.853(a).
S662X	High tack and high peel. Bonds well to various substrates including low surface energy surfaces.	0.08 (3.5)	Translucent	Polyester / rubber	Kraft	Open Side: 37 (131) Liner Side: 42 (149)	-40°C to +43°C -40°F to +110°F	Attachment of decorative trims, cork, felt, foam fabrication. Bonding abrasive discs.
S1135	Polyester film carrier, coated with a black rubber adhesive with aggressive adhesion on the liner side, and a white rubber adhesive with moderately aggressive adhesion on the exposed side.	0.145 (5.7)	Black / White	Polyester / rubber	Polycoated	Open Side: 14 (50) Liner Side: 24 (88)	-	Carpet and flooring fixation in theaerospace industry. The product is qualified to Boeing BMS5-133 & passes flam- mability requirements of FAR 25.853 (a).

#### **BONDING PRODUCTS**

These charts are designed to provide a general recommendation based on the two substrates to be bonded.

To use: Select the two surfaces to be bonded; where they intersect on the chart, this represents possible Scapa products to use.

Surfaces	Metals & Glass Aluminium, Steel, etc.	Fabric Bonding Cloth, Cotton, Rayon, Leather	Paper & Cardboard	Plasticised PVC	Low Surface Energy Plastics Polyethylene, Polypropylene	Foam & Rubber Bonding Polyurethane, Neoprene, PE, etc.	High Surface Energy Plastics ABS, Acrylic, Epoxy, Paint, Rigid PVC, PC, etc.
High Surface Energy Plastics ABS, Acrylic, Epoxy, Paint, Rigid PVC, PC, etc.	U263-1 UP2040 S234 SP357E	UP3040 S301	U263-1 UP2040 S234 SP357E	UP2040 SP357E	U883 UP2040 S662X SP357E	UP5040 U855 SP457E S301	U263-1 UP2040 S234 SP357E
Foam & Rubber Bonding Polyurethane, Neoprene, PE, etc.	UP3040 U855 SP357E S301	UP5040 U855 SP457E S301	UP5040 U855 SP457E S301	UP3040 SP457E S301	U883 UP3040 S662X SP357E	UP5040 U855 SP457E S301	
Low Surface Energy Plastics Polyethylene, Polypropylene	U883 UP2040 S662X SP357E	U883 UP3040, S662X SP457E	U883 UP3040 S662X SP457E	UP2040 SP357E	U883 UP2040 S662X SP357E		
Plasticised PVC	UP2040 SP357E	UP3040 SP457E	UP2040 SP357E	UP2040 SP357E			
Paper & Cardboard	U263-1 UP2040, S234 SP357E	UP3040 S234 SP457E	U263-1 UP2040 S234 SP357E				
Fabric Bonding Cloth, Cotton, Rayon, Leather	UP3040 S301	UP3040 S301					
Metals & Glass Aluminium, Steel, etc.	UP2040 UA202 SP357E SA307F						

Cá	arrier Type					POLYESTER					UNPLAS P\	TICISED VC	CL	отн	TISSUE	POLYIM- IDE
R	leference	SA307E	S662X		V705	S234	SP357E	S1112 / D160	60LV	4415	S301 / D100	4403	102	174	4440	V706
To	otal thickness (microns)	76	81	8	0	86	89	114	130	100	216	240	230	330	90	100
Са	rrier thickness (microns)	13	13	2	3	10	13	9	50	38	38	60				25
Adhesive type		Acrylic	Rubber	Acrylic (paper liner side)	Silicone (PET liner side)	Acrylic	Acrylic	Acrylic	Silicone	Rubber	Acrylic	Acrylic	Rubber	Rubber	Acrylic	Silicone
E	HSE substrates eg. Glass / Metal	4	6	5	4	4	6	6	4	3	6	6	6	5	4	4
esion level on	MSE substrates eg. PVC / PC / PET / ABS / Acylic	5	6	5	4	4	6	6	5	3	6	6	5	5	4	4
Ad	LSE substrates eg. PE / PP	1	5	2	3	2	3	3	3	2	3	4	4	4	1	3
1	lack Level	м	м	н	L	н	н	н	м	м	H	н	H	н	м	L
sistance	At room temperature	6	6	5	6	6	3	3	6	6	3	6	2	1	6	6
Shear resis	At high temperature	4	2	3	6	5	3	3	3	3	3	3	2	1	6	6

#### **DOUBLE SIDED PERMANENT**

Best choices for a given thickness and a given surface

Coding	180° Peel Adhesion (300mm/min), after 24h	Manual Evaluation	Static Shear (25x25mm - 1kg - 23°C) after 24h
Level 6	Adhesion > 10N/cm	llink Teels	RT Shear > 10000min
Level 5	6N/cm < Adhesion < 10N/cm	підії Таск	5000min < RT Shear < 10000min
Level 4	4N/cm < Adhesion < 6N/cm	Medium Teel	2500min < RT Shear < 5000min
Level 3	2N/cm < Adhesion < 4N/cm	Medium Tack	1000min < RT Shear < 2500min
Level 2	1N/cm < Adhesion < 2N/cm	Leve Tools	500min < RT Shear < 1000min
Level 1	Adhesion < 1N/cm	LUW TACK	RT Shear < 500min

# **QUICK PRODUCT SELECTION CHARTS**

#### DOUBLE SIDED (REMOVABLE)

These charts are designed to provide a general recommendation based on the two substrates to be bonded.

	Product Type	Carrier: PET (12µm) Liner side: acrylic - removable Open side: rubber - permanent	Carrier: PET (12µm) Liner side: acrylic - removable Open side: acrylic - permanent
	Product Reference	\$305	S1076
	Total thickness (microns)	66	102
	Colour	Clear	Clear
		Removable side	
	PVC unplasticised		5
	PE	1	1
	Polycarbonate /Makrolon / Lexan	3	5
	PMMA / Plexiglas / Perspex	3	4
	Polyimide / Nylon	3	2
	PET / Mylar	3	4
	ABS	4	4
faces	Stainless steel	4	3
Sur	Glass - standard	2	2
	Glass - self-cleaning	3	2
	Anodised aluminium	3	3
	Non-anodised aluminium	3	3
	Glass reinforced epoxy laminate (FR4)	4	5
	Powder coated surface	4	3
	Painted surface (automotive grade)	3	2
		Permanent side	
aces	Stainless steel	5	5
Surf	PE	5	2

Suitable (no adhesive residue upon removal)

Not suitable (adhesive residue upon removal or surface affected)

Border line (no residue but high adhesion)

Adhesion level of the products after ageing

(50°C during 1 month, means about 6 months at 25°C)

1 = adhesion < 1.5 N/cm

2 = 1.5 N/cm < adhesion < 3 N/cm

3 = 3 N/cm < adhesion < 4.5 N/cm

4 = 4.5 N/cm < adhesion < 6 N/cm

5 = adhesion > 6 N/cm

#### TRANSFER TAPES

Re	eference	4450 4456 T001 T002	U263-1	UP2040	U883	U261	UJ504	U855	UP5040	U884	U885	4472	AS1100	0485
Tot	al thickness (microns)	40	50	50	75	127	127	127	127	127	127	200	250	400
Ac	lhesive type	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Rubber
	HSE substrates eg. Glass / Metal	3	4	6	6	4	5	5	6	6	4	5	5	6
Adhesion level on	MSE substrates eg. PVC / PC / PET / ABS / Acylic	3	4	6	6	5	5	6	6	6	4	5	4	6
	LSE substrates eg. PE / PP	1	1	2	4	1	2	3	3	5	3	5	1	6
1	Fack Level	м	м	н	Н	м	м	м	н	Н	н	Н	L	н
stance	At room temperature	6	6	6	4	6	6	6	5	4	1	1	6	6
Shear resi	At high temperature	6	4	3	3	4	3	3	3	3	1	1	6	2

Best choices for a given thickness and a given surface

Coding	180° Peel Adhesion (300mm/min) after 24h	Manual Evaluation	Static Shear (25x25mm - 1kg - 23°C) after 24h	SAFT (25x25mm - 1kg - 0.5°C/min) after 24h
Level 6	Adhesion > 10N/cm	Listh Toole	RT Shear > 10000min	HT Shear > 195°C
Level 5	6N/cm < Adhesion < 10N/cm	підп таск	5000min < RT Shear < 10000min	150°C < HT Shear < 195°C
Level 4	4N/cm < Adhesion < 6N/cm		2500min < RT Shear < 5000min	115°C < HT Shear < 150°C
Level 3	2N/cm < Adhesion < 4N/cm	IVIEGIUM TACK	1000min < RT Shear < 2500min	75°C < HT Shear < 115°C
Level 2	1N/cm < Adhesion < 2N/cm		500min < RT Shear < 1000min	50°C < HT Shear < 75°C
Level 1	Adhesion < 1N/cm	LOW IACK	RT Shear < 500min	HT Shear < 50°C

# THERMAL CONDUCTIVE TAPES

Scapa's range of high-performance thermal conductive acrylic foam tapes have a balanced performance acrylic adhesion on both sides. They are designed to provide a preferential heat transfer path between heat generating components and heat sinks or other cooling devices.

#### COMMON FEATURES ASSOCIATED WITH THESE PRODUCTS ARE:

- > Halogen-free tape
- > Very good bonding performance to a multitude of substrates
- > High bond strength with heat dissipation functionality
- > Pressure sensitive acrylic adhesives with thermal conductive properties

AFT Type	Total Thickness mm (mils)	Peel Adhesion to Steel N/25mm (oz./in)	Thermal conductivity (W/m K)	Static shear at 25°C (g)	Static shear at 93°C (g)	Flame Retardant UL®94	Operating Temperature	Features
AS1B00	0.25 (9.8)	8 (28)	1	1000	1000	-	-20°C to 120°C (long-term) Up to 150°C (short-term) -4°F to +250°F (+300°F)	Higher thermal conductivity with medium adhesion and bond strength.
AS72525	0.25 (9.8)	25 (90)	0.5	1000	500	V-2	-30°C to 100°C (long-term) Up to 120°C (short-term) -22°F to +212°F (+250°F)	Good adhesion to various substrates. Acrylic foam film tape (AFFT) with PET core. Easy to die cut. Flame retardant. LED array and heat sink bonding.



Key characteristics

O Notable characteristics

# **AFT (ACRYLIC FOAM TAPES)**

Product	Description	Total thickness mm (in)	Colours	Carrier / adhesive	Peel adhesion N/25mm (oz./in)	Operating temperature (ST = Short term)	Applications	Approvals
AS11x0 - Clear Series	Transparent acrylic adhesive; water clear for invisible bond line. High tack & ultimate adhesion.	0.25 (0.01) 0.64 (0.025) 1.0 (0.04) 1.5 (0.062) 2.0 (0.08)	TP	Acrylic foam tape	35 - 70 (124 - 248)	-30°C to + 120°C (+150°C) -22°F to +250°F (+300°F)	Clear glass & plastics bonding; decorative design panel bonding; Signage manufacturing; Georgian bar / trim bonding; Metal stiffener bonding.	_
AS11x0 Translucent Series	Translucent acrylic adhesive; substrate colour matching. High tack & ultimate adhesion.	0.64 (0.025) 1.14 (0.045)	TL	Acrylic foam tape	35 - 70 (124 - 248)	-30°C to + 120°C (+150°C) -22°F to +250°F (+300°F)	Clear glass & plastics bonding; decorative design panel bonding; Signage manufacturing; Georgian bar / trim bonding; Metal stiffener bonding.	_
AS12x0 Series	Hard acrylic foam tape with excellent short and long term temperature resistance; high strength bonding to HSE substrates.	0.64 (0.025) 0.8 (0.032) 1.14 (0.045) 2.0 (0.08) 3.0 (0.12)	GY, W	Acrylic foam tape	50 - 80 (177 - 283)	-30°C to + 180°C (+210°C) -22°F to +356°F (+410°F)	Metal bonding pre-powder coat paint process; PV Solar panel frame bonding; Signage manufacturing; Metal stiffener bonding.	_
AS14x0-B Series	Soft black acrylic foam tape with multi-purpose adhesive. Suitable for MSE and some LSE substrate bonding. High temperature resistance and excellent holding power.	0.4 (0.015) 0.8 (0.032)	ВК	Acrylic foam tape	75-80 (260 - 280)	-30°C to +150°C. (+230°C) -22°F to +300°F (+446°F)	Automotive emblem bonding; LED lighting systems; electronic smart device component and appliance assembly bonding.	_
AS16x0 Series	Medium hardness acrylic foam tape; bonds to variety of MSE substrates; flexible for curved surface bonding.	1.14 (0.045)	GY	Acrylic foam tape	40 - 70 (142 - 248)	-30°C to + 150°C (+180°C) -22°F to +300°F (+356°F)	Signage manufacturing; Georgian bar / trim bonding; Metal stiffener bonding.	_
AS12xK AS19xK Series	Modified acrylic adhesive coated foam; excellent performance to LSE plastics; high tack & initial adhesion.	0.64 (0.025) 1.14 (0.045)	W, GY, BK	Acrylic foam tape	40 - 70 (Steel) (142 - 248) 50 - 85 (ABS) (180 - 305)	-40°C to + 90°C (+110°C) -40°F to +194°F (+230°F)	Engineered plastics bonding; signage manufacturing; georgian bar / trim bonding.	_

#### NOTE:

For AFT products the x denotes the product thickness in millimeters -0 = 0.25; 1 = 0.4; 2 = 0.5; 3 = 0.64; 5 = 0.8; 6 = 1.0; 7 = 1.14; 8 = 1.2; 9 = 1.6; B = 1.5; T = 2.0; V = 2.3; Y = 3.0

#### NOTE:

ST (Short term) operating temperatures typically refers to a 1 hour (60 minute) maximum duration. For specific detail, please consult the technical data sheet of the product.

#### Product Colour Key

- AM = Amber BE = Beige BF = Buff BK = Black BK-W Striped = Black-White Striped BK-EM = Black Embossed BK-SM = Black Smooth BL = Blue
- BN = Brown
- B-Nat = Bleached Natural CL = Clear

  - CR = Cream
  - GR = Green
- D-GR = Dark Green
- GY = Grey J-GR = Jade Green

L-GR = Light Green NAT = Natural 0 = Orange O-GR = Olive Green P = Purple PK = Pink PR-W = Printed White R = Red

R-W Striped = Red-White Striped SIL = Silver TP = Transparent TL = Translucent V = Violet W = White Y = Yellow Y-BK = Yellow/Black Y-GR = Yellow Green

# **SILICONE BASED ADHESIVES**



Based on elastomeric technology, Scapa's silicone adhesives offer flexibility and exceptionally high heat resistance, making them suitable for a wide range of applications in the electrical, electronic, automotive, aerospace and construction industries.

#### COMMON FEATURES ASSOCIATED WITH THESE PRODUCTS ARE:

- > Outstanding temperature and environmental resistance
- > The only adhesive to bond silicone surfaces
- > High shear resistance at elevated temperatures

Product	Description	Total Thickness mm (mils)	Colours	Carrier / Adhesive	Liner	Peel Adhesion to Steel N/25mm (oz./in)	Operating Temperature	Applications
V705	23 micron PET carrier with differential adhesive construction. High chemical and UV resistance.	0.11 (4.3)	Transparent	Polyester / silicone and acrylic	Double-linered: Kraft on the acrylic side / Fluoro siliconised PET liner on the silicone adhesive side	Closed Side (silicone): 5 (18) Open Side (acrylic): 11.25 (40)	-10°C to +160°C (190°C) 14°F to +320°F (+374°F)	Bonds silicone rubber profiles and weather strips onto HSE materials; splicing tape to join specially siliconised surfaces.
V706	25 micron high strength Polymide carrier specially formulated silicone adhesive. Very high operating temperature.	0.10 (3.9)	Amber	Polymide / silicone	Fluoro siliconised PET liner	5.25 (19)	-30°C to +200°C -22°F to +392°F	High-performance bonding and splicing to silicone and other difficult to adhere to substrates.
V709	50 micron PET carrier coated with specially formulated silicone adhesive.	0.125 (5.1)	Red	Polyester / silicone	Fluoro siliconised PET liner	6.25 (22)	-30°C to +160°C -22°F to +320°F	Splicing siliconised films, foils and papers. Bonding elastomer joints, foams, gaskets, rubber profiles.



Key characteristics

## NOTES


# GLOBAL **SOLUTIONS**



**SCAPA FRANCE** Tel: +33 (0) 475 44 80 00 SCAPA NORTH AMERICA Tel: +1 860 688 8000 SCAPA SOUTH AMERICA

Tel: +55 11 2589 6003

SCAPA INDIA

Tel: +91 44 4351 1003 SCAPA MALAYSIA Tel: +60 3 5569 2529

email: sales@scapaindustrial.com | www.scapaindustrial.com

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