



Product Selection Guide

3M Industrial Adhesives and Tapes.

3M Industrial Adhesives and Tapes

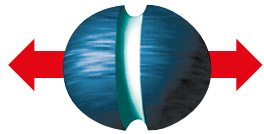
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3M Industrial Adhesives and Tapes

Types of Stress

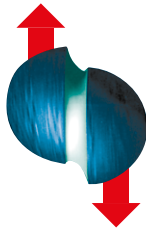
Preferred Design

With tensile and shear forces, entire bond area contributes to strength



Tensile

Stress acts perpendicular to bond plane

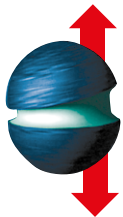


Shear

Stress acts parallel to bond plane

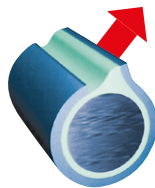
Not Preferred Design

With both cleavage and peel forces, the stresses are concentrated at the leading edge



Cleavage

Stress between two rigid substrates

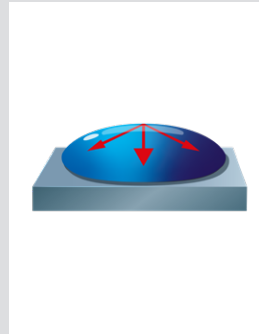


Peel

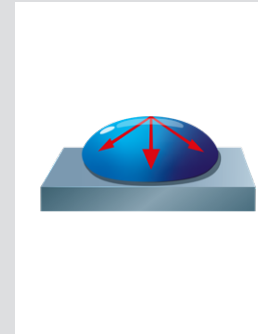
Stress with at least one flexible substrate

Surface Energy

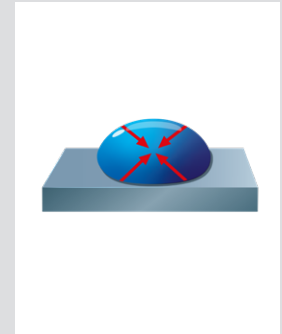
Choose the right tape for the substrate: Adhesives must flow onto the substrate surfaces in order to achieve intimate contact area



High Surface Energy
Metal, glass



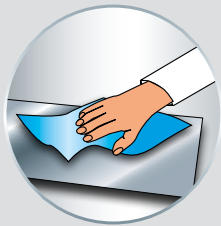
Medium Surface Energy
PET, ABS, PVC (rigid), polycarbonate, polyimide, polyurethane (rigid), acrylic (PMMA), most paints and coatings



Low Surface Energy
Polypropylene, polyethylene, TPO, PTFE, acetyl, PBT, polystyrene, EPDM rubber, some paints and coatings (PVDF)

Tape Surface Preparation and Application

1. Surface Cleaning



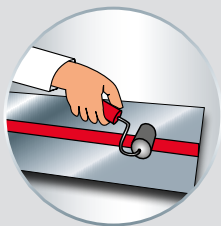
- To obtain optimum adhesion, the bonding surfaces must be well unified, clean and dry
- Wipe surface using an appropriate cleaning agent and a clean cloth
- For glass surfaces use the 3M Silane Glass Primer

2. Application



- Apply the tape to the surface. Do not overstretch the tape
- Avoid air pockets
- Do not touch the adhesive or adhesive surface
- Optimum application temperature is between 15°C and 25°C

3. Pressure



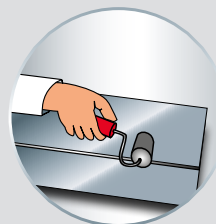
- Bond strength is dependent upon the amount of adhesive-to-surface contact developed
- Firm application pressure develops better adhesive contact and helps improve bond strength

4. Liner Release



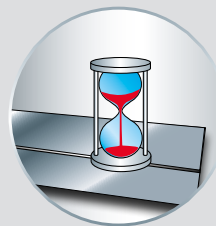
- Release the liner in one step (avoid stops)
- Do not touch the adhesive or adhesive surface

5. Joining and Contact Pressure




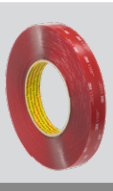
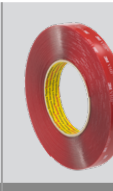
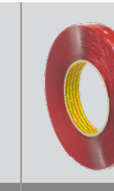
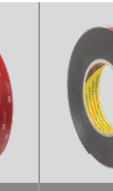



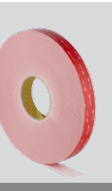


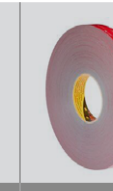
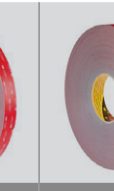
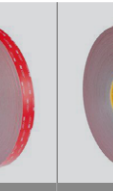

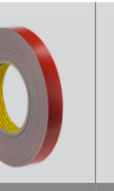
- Apply substrate to the tape
- Avoid air pockets
- Bonding pressure of about 2 kg/cm²

6. Wait for Final Adhesion





- After application, the bond strength will increase as the adhesive flows onto the surface
- At room temperature, approximately 50% of the ultimate strength will be achieved after 20 minutes, 90% after 24 hours and 100% after 72 hours
- In some cases, bond strength can be increased and ultimate bond strength can be achieved more quickly by exposure of the bond to elevated temperatures (e.g. 66°C for 1 hour)

3M™ VHB™ High-Strength Bonding Tapes

															
Product number	4905	4910	4915	5925	5952	5962	LSE-060WF	LSE-110WF	LSE-160WF	GPH-060GF	GPH-110GF	GPH-160GF	4936	4941	4991
Properties/suitable for	Trans-parent materials	Trans-parent materials	Trans-parent materials	Powder-coated paints	Powder-coated paints	Powder-coated paints	PP, TPO, TPE, composite materials	PP, TPO, TPE, composite materials	PP, TPO, TPE, composite materials	High tem-perature resistance	High tem-perature resistance	High tem-perature resistance	Plasticizer resistance	Plasticizer resistance	Plasticizer resistance
Key features (info box)															

Physical and Performance Characteristics, Key Features


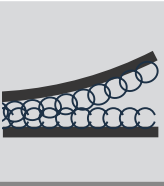
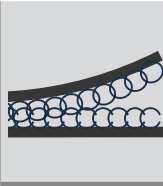
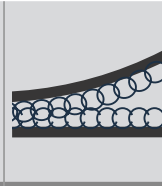
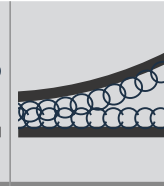
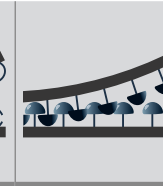
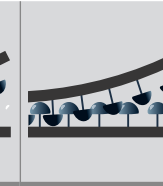
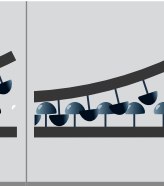
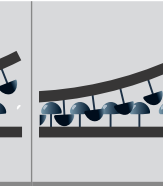
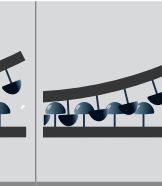
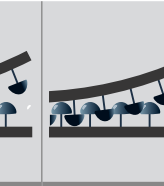
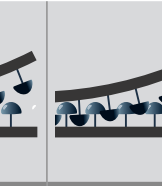
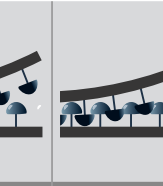
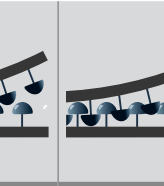
Product number	4905	4910	4915	5925	5952	5962	LSE-060WF	LSE-110WF	LSE-160WF	GPH-060GF	GPH-110GF	GPH-160GF	4936	4941	4991
Total thickness [mm]	0.5	1.0	1.5	0.6	1.1	1.6	0.6	1.1	1.6	0.6	1.1	1.6	0.6	1.1	2.3
Adhesive type	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Mod. Acrylic	Mod. Acrylic	Mod. Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic
Colour	Clear	Clear	Clear	Black	Black	Black	White	White	White	Grey	Grey	Grey	Grey	Grey	Grey
Foam density [kg/m³]	960	960	960	590	590	590	715	715	715	710	710	710	720	720	720
Peel strength [Newton/cm] ASTM D-3330	21	26	26	30	39	39	30	44	54	25	37	34	30	35	35
Tensile strength (T-block) [kPa] ASTM D-897	690	690	690	620	620	620	566	479	450	636	681	729	620	590	410
Dynamic overlap shear [kPa] ASTM D-1002	480	480	480	620	550	550	814	592	538	848	738	581	550	480	450
Temperature resistance (min, h)	90°C – 150°C	90°C – 150°C	90°C – 150°C	120°C – 150°C	120°C – 150°C	120°C – 150°C	100°C – 150°C	100°C – 150°C	100°C – 150°C	150°C / 230°C	150°C / 230°C	150°C / 230°C	90°C – 150°C	90°C – 150°C	90°C – 150°C
Surface energy															
High	++	++	++	++	++	++	+	+	+	++	++	++	++	++	++
Medium 	+	+	+	++	++	++	++	++	++	+	+	+	+	+	+
Low 	-	-	-	-	-	-	++	++	++	-	-	-	-	-	-
Material expansion/contraction (dilata-tion max.)	1.0 mm	2.0 mm	3.0 mm	1.8 mm	3.3 mm	4.8 mm	1.8 mm	3.3 mm	4.8 mm	1.8 mm	3.3 mm	4.8 mm	1.8 mm	3.3 mm	6.9 mm
Joint gap tolerances (max.)	0.125 mm	0.250 mm	0.375 mm	0.300 mm	0.550 mm	0.800 mm	0.300 mm	0.550 mm	0.800 mm	0.300 mm	0.550 mm	0.800 mm	0.300 mm	0.550 mm	1.150 mm
Indoor and outdoor use	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
UV-, solvent- and aging resistance	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

Suggested Applications

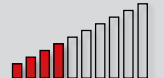
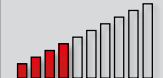
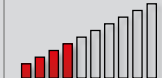
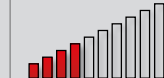
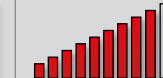
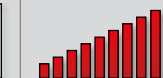
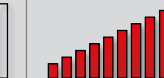



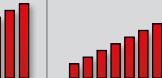

















Product number	4905	4910	4915	5925	5952	5962	LSE-060WF	LSE-110WF	LSE-160WF	GPH-060GF	GPH-110GF	GPH-160GF	4936	4941	4991
Bond panel to frame				●	●	●	●	●	●	●	●	●	●	●	●
Bond stiffener to panel				●	●	●	●	●	●	●	●	●	●	●	●
Bond of decorative material, trim, attachments	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Bond of nameplates, logos and signs	●	●	●	●	●	●	●	●	●				●	●	●
Bond electronic displays				●	●	●	●	●	●				●	●	●
Bond lens window to housing	●	●	●	●	●	●	●	●	●				●	●	●
Joining transparent material	●	●	●												
Mount backlit translucent signs	●	●	●												
Assembly of components before heat curing paint processing like powder coating or liquid painting										●	●	●			
Product number	4905	4910	4915	5925	5952	5962	LSE-060WF	LSE-110WF	LSE-160WF	GPH-060GF	GPH-110GF	GPH-160GF	4936	4941	4991

Product Use
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3M™ Reclosable Fastening Solutions

													
Product number	SJ3526	SJ3527	SJ3571	SJ3572	SJ3540	SJ3541	SJ3542	SJ3550	SJ3551	SJ3552	SJ3560	SJ3870	SJ4570
Properties/suitable for	Flexible & bendable	Flexible & bendable	Flexible & bendable	Flexible & bendable	Polypropylene & polyethylene	Polypropylene & polyethylene	Polypropylene & polyethylene	Metals & plastics	Metals & plastics	Metals & plastics	Translucent materials	Powder-coated paints	Thin – Low-profile attachment
Key features (info box)													

Physical and Performance Characteristics, Key Features

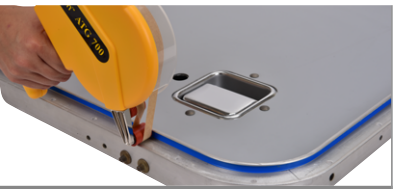

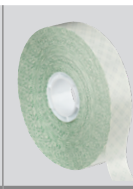
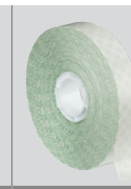

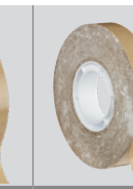




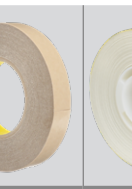



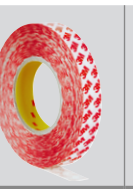

Product number	SJ3526	SJ3527	SJ3571	SJ3572	SJ3540	SJ3541	SJ3542	SJ3550	SJ3551	SJ3552	SJ3560	SJ3870	SJ4570
Engaged thickness	3.6 mm ± 15%	3.6 mm ± 15%	3.6 mm ± 15%	3.6 mm ± 15%	5.7 mm ± 15%	5.7 mm ± 15%	5.7 mm ± 15%	5.7 mm ± 15%	5.7 mm ± 15%	5.7 mm ± 15%	5.7 mm ± 15%	6.1 mm ± 15%	2.31 mm ± 15%
Adhesive type	Rubber	Rubber	Acrylic	Acrylic	Rubber	Rubber	Rubber	White acrylic	White acrylic	White acrylic	Clear acrylic	Modified acrylic	Modified acrylic
Colour	Black, white	Black, white	Black, white	Black, white	Black	Black	Black	Black	Black	Black	Translucent	Black	Translucent
Stem density (per cm²)					40	62	26	40	62	26	40	40	109
Holding power													
Temperature resistance	49 °C	49 °C	93 °C	93 °C	49 °C	49 °C	49 °C	93 °C	93 °C	93 °C	104 °C	82 °C	70 °C
Surface energy													
High	++	++	++	++	++	++	++	++	++	++	++	++	++
Medium 	++	++	++	++	++	++	++	+	+	+	+	++	++
Low 	++	++	-	-	++	++	++	-	-	-	-	-	+
Closure cycle life	5.000 x	5.000 x	5.000 x	5.000 x	1.000 x	1.000 x	1.000 x	1.000 x	1.000 x	1.000 x	1.000 x	1.000 x	150 x
Indoor and outdoor use													

Suggested Applications
















Product number	SJ3526	SJ3527	SJ3571	SJ3572	SJ3540	SJ3541	SJ3542	SJ3550	SJ3551	SJ3552	SJ3560	SJ3870	SJ4570
Panel and cover plate attachment			●	●	●	●	●	●	●	●	●	●	
Interior signage			●	●	●	●	●	●	●	●	●	●	
Office partitions			●	●	●	●	●	●	●	●	●	●	
Graphic attachment			●	●	●	●	●	●	●	●	●	●	
Access panels			●	●	●	●	●	●	●	●	●	●	
Specialty vehicles (interior attachments)			●	●	●	●	●	●	●	●	●	●	
L-bracket edging, repositionable shelving					●	●	●	●	●	●	●	●	
Hang signage			●	●	●	●	●	●	●	●	●	●	
Decorative appliance trim attachment			●	●									●
Light-weight access panels			●	●									●
Point of purchase display and signage	●	●	●	●									●
Securing fabric to furniture cushions	●	●											
Construct composite assemblies	●	●	●	●									
Attach cushioning panels	●	●	●	●									
Hang graphics and banners that change frequently	●	●	●	●									
Attach removable seat cushions	●	●	●	●									
Product number	SJ3526	SJ3527	SJ3571	SJ3572	SJ3540	SJ3541	SJ3542	SJ3550	SJ3551	SJ3552	SJ3560	SJ3870	SJ4570

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3M™ Double Coated Tapes

															
Product number	ATG 904	ATG 924	465	ATG 976	927	ATG 969	950	ATG 926	9485PC	ATG 928	9415PC	9088-200	GPT-020F	9473PC	ATG700
Properties/suitable for	General purpose	General purpose	General purpose	High tack, polypropylene & polyethylene	High tack, polypropylene & polyethylene	High tack, polypropylene & polyethylene	High tack, polypropylene & polyethylene	High performance and temperature resistance	High performance and temperature resistance	Repositionable	Repositionable	High performance	High performance	Very high performance and temperature resistance	Adhesive Applicator
Key features (info box)															

Physical and Performance Characteristics, Key Features












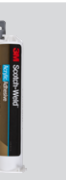


Product number	ATG 904	ATG 924	465	ATG 976	927	ATG 969	950	ATG 926	9485PC	ATG 928	9415PC	9088-200	GPT-020F	9473PC	ATG700
Total thickness [mm]	0.05	0.05	0.05	0.05	0.05	0.13	0.13	0.13	0.13	0.05	0.05	0.20	0.20	0.26	
Adhesive type	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Modified acrylic	Modified acrylic	Acrylic	
Colour	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear	White	White	Clear	Clear	Clear	
Backing material	Transfer tape	Transfer tape	Transfer tape	Transfer tape	Transfer tape	Transfer tape	Transfer tape	Transfer tape	Transfer tape	Tissue	Tissue	Polyester	Polyester	Transfer tape	
Peel strength [Newton/cm]	5.0	2.7	2.7	6.6	6.6	8.0	8.0	16.3	16.3	0.3 / 1.3	0.3 / 1.3	11.5	11.3	14.2	
Temperature resistance (min, h)	70°C	80°C – 120°C	80°C – 120°C	80°C – 120°C	80°C – 120°C	80°C – 120°C	80°C – 120 °C	150°C – 230 °C	150°C – 230 °C	50°C / 80°C	50°C / 80°C	90°C	90°C	150°C – 260°C	
Bond light-duty applications	●	●	●	●	●										
Bond heavy-duty applications						●	●	●	●			●	●	●	
Exceptional holding power														●	
Very high adhesion & good shear holding power				●	●	●	●					●	●	●	
Excellent resistance to solvents and high temperatures								●	●					●	
Bond temporarily										●	●				
Indoor and outdoor use															

Suggested Applications





Product number	ATG 904	ATG 924	465	ATG 976	927	ATG 969	950	ATG 926	9485PC	ATG 928	9415PC	9088-200	GPT-020F	9473PC	ATG700
Bond mat board in picture frames and dust covers	●	●													
Commercial print assembly	●	●													
Point of purchase, promotional displays and inserts	●	●	●	●	●	●	●	●	●	●	●	●	●		
Bond invitations, table tents, cards	●	●													
Splice paper, films, and foils			●		●	●	●								
Mounting promotional items and posters			●			●									
Laminating metal or plastic nameplates			●		●										
Bond trim strips to furniture or luggage				●											
Attach gaskets or foams				●		●	●		●	●	●	●	●		
Bonding plastic and wood trim for cabinets						●	●	●	●						
Bonding high and low surface energy plastics textured plastics, foams, fabrics, and coated papers						●	●								
General purpose bindery attachment						●	●						●		
Foam and gasket attachment						●	●	●	●				●		
Holding and fixturing in product assembly								●	●						
Bond thin metal panels						●	●	●	●			●	●	●	
Bonding high and low surface energy materials and powder coated paints								●	●				●		
Bonding foams to low surface energy materials (LSE) while offering elevated temperature performance								●	●						
Holding paperwork and folders										●	●				
Attaching temporary bulletins and work instructions to production and assembly processes										●	●				
Reclosable bags or envelopes										●	●				
Attachment of removable labels										●					
Bonding and mounting of sales displays and billboards												●	●		
Fixing and mounting of decorative trims and emblems						●	●	●	●			●	●		
Sealing profiles and cable ducts						●	●	●	●			●	●		
Use for industrial joining and metal fabrication						●	●	●	●			●	●	●	
Bonding decorative metal trim														●	
Bonding flexible printed circuits (FPC) to aluminium stiffener or heat sinks														●	
Replacing rivets, spot welds, liquid adhesives and other permanent fasteners														●	
Product number	ATG 904	ATG 924	465	ATG 976	927	ATG 969	950	ATG 926	9485PC	ATG 928	9415PC	9088-200	GPT-020F	9473PC	ATG700

Product Use
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3M™ Scotch-Weld™ Structural Adhesives

													
Product number	DP100 Plus	DP110	DP125	DP190	DP410	DP460	DP490	DP609	DP8005	DP8010	DP8405NS	DP8410NS	7240FR
Properties/suitable for	Multi-purpose adhesive	General purpose flexible bonds	General purpose flexible bonds	High flexibility and elongation	Vibration and impact	Vibration and impact	Vibration and impact	Especially for plastics and wood	Bonds PP and PE	Bonds PP and PE	High-impact adhesion to most plastics	High-impact adhesion to most plastics	For thicker adhesive layers
Key features (info box)													

Physical and Performance Characteristics, Key Features









Product number	DP100 Plus	DP110	DP125	DP190	DP410	DP460	DP490	DP609	DP8005	DP8010	DP8405NS	DP8410NS	7240FR
Base	Flexible Epoxy	Flexible Epoxy	Flexible Epoxy	Flexible Epoxy	Toughened Epoxy	Toughened Epoxy	Toughened Epoxy	Flexible Polyurethane	Low Surface Energie Acrylic	Low Surface Energie Acrylic	MMA Acrylic	MMA Acrylic	Toughened Epoxy
Colour	Clear	Translucent, grey	Grey	Grey	Beige	Beige	Black	Beige	Black, translucent	Blue	Green	Green	Grey
Approx. work life [min]	4	8	25	90	12	60	90	7	3	10	5	10	45
Approx. time to handling strength [min]	20	20	150	480 - 720	30	240 - 360	240 - 360	60	30	60	14 - 16	16 - 20	360
Viscosity	Fluid	Controlled flow	Controlled flow	Controlled flow	Low flow	Controlled flow	Thixotropic	Low flow	Thixotropic low	Thixotropic	Thixotropic	Thixotropic	Thixotropic
Overlap shear strength [MPa]	24	17	24	17.6	38	31	31	14	7	13.5	30	25.6	28
Surface energy													
High	++	++	++	++	++	++	++	++	++	++	++	++	++
Medium 	+	+	+	+	+	+	+	+	++	++	++	++	-
Low 	-	-	-	-	-	-	-	-	++	++	-	-	-
Static and dynamic loads (vibration and impact)					●	●	●				●	●	
Bonding of electronic components						●							
Bonding of materials with different dilatation (thermal expansion)													
Medium thermal expansion (e.g. plastic to plastic) 		●											
Higher thermal expansion (e.g. metal to plastic) 	●			●									
Bonding of polypropylene, polyethylene, TPE									●	●			
Flame retardant bonding													●

Suggested Applications

Product number	DP100 Plus	DP110	DP125	DP190	DP410	DP460	DP490	DP609	DP8005	DP8010	DP8405NS	DP8410NS	7240FR
General attachment applications in a variety of industries	●	●	●										
Fast potting agent good for applications with thermal cycling	●												
Bond metal, ceramic, wood and many plastic		●	●										
Semi-flexible potting compound				●									
Transportation applications, such as rail and automotive					●	●	●						
Use when toughness and high strength are needed					●	●	●						
Bonding of electronic components						●							
Aerospace applications							●						
Bond plastic, wood and painted or primed metal								●					
Bond low surface energy plastics such as polypropylene, polyethylene and thermoplastic elastomers (TPEs)									●	●			
Joining plastics to metals, such as in the manufacture or repair of appliances									●	●			
Impact resistance composite bonding									●	●			
Metalworking such as HVAC, appliance, and specialty vehicles											●	●	
Sign manufacturing such as panel to frame bonding, trim attachment, letter bonding, and frame assembly											●	●	
Bonding plastics, composites and powder coats to metal											●	●	
Typically used where fast assembly of smaller parts is required											●	●	
Adhesive certified for use on trains													●
Product number	DP100 Plus	DP110	DP125	DP190	DP410	DP460	DP490	DP609	DP8005	DP8010	DP8405NS	DP8410NS	7240FR

Product Use
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3M™ Spray Adhesives and Cleaners


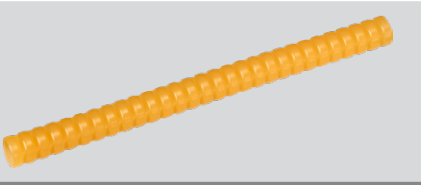
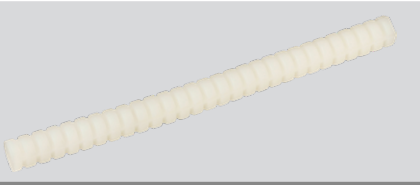
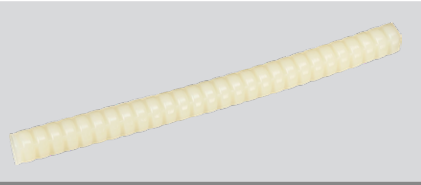
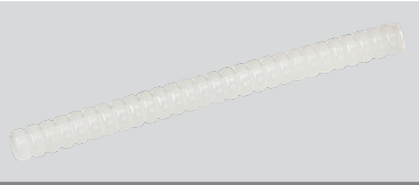

							
Product number	Spray 74	Spray 75	Spray 76	Spray 77	Spray 80	Spray 90	Industrial Cleaner
Properties/suitable for	Foam & fabric	Repositionable & removable	Hi-tack	Multi purpose	Rubber bonding	Heavy duty & hi-strength	Maintenance & cleaning
Key features (info box)							

Physical and Performance Characteristics, Key Features							
Product number	Spray 74	Spray 75	Spray 76	Spray 77	Spray 80	Spray 90	Industrial Cleaner
Base	Synthetic elastomer	Synthetic elastomer	Synthetic elastomer	Synthetic elastomer	Polychloroprene	Synthetic elastomer	
Colour	Orange	White	Cream	Cream	Bright yellow	Clear	Clear
Density [g/ml]	0.71	0.71	0.70	0.70	0.71	0.71	
Volatile organic compounds [VOC] %	< 55	636	< 55	523	506	636	
Flash point	- 42°C	- 46°C	- 42°C	- 42°C	- 45°C	- 55°C	
Spray adhesive application	Both sides	One side	Both sides	One side or both sides	Both sides	Both sides	Spraying, brushing
Spray pattern	Variable lace	Particle	Variable lace	Mist	Variable lace	Variable lace	
Bonding range	Up to 10 min	Permanently tacky	Up to 60 min	Up to 15 min	Up to 15 min	Up to 15 min	
Dry time	15 to 30 sec	Up to 5 min	Up to 10 min	Up to 10 sec	1 to 3 min	Up to 30 sec	

Suggested Applications							
Product number	Spray 74	Spray 75	Spray 76	Spray 77	Spray 80	Spray 90	Industrial Cleaner
General upholstery and flexible foams bonding (e.g. PU or latex)	●						
Foam lamination. Attaching foam and fabric to wood and other substrates	●						
Bond fabrics to interiors, speakers, etc.	●						
Installing acoustic panels	●						
For repositionable and removable applications		●					
Use for holding and positioning lightweight materials temporarily		●					
Bonds paper, cardboard, acetate, foil, fabrics, plastic sheeting, etc.		●					
Bond carpet, door skins and fabric in conversions			●				
Attaching nameplates, pool table fabrics, pipe insulation etc.			●				
Bonding insulation in aircraft interiors and specialty cabinets			●				
Bond insulating material such as polystyrene, rock wool, glass wool				●			
Attaching fibreglass insulation and drywall corner beads				●			
Bond thin decorative film, foils, and fabrics				●			
For variety of display and furniture jobs				●			
Picture framing and mounting displays				●			
Bond all types of rubber except EPDM					●		
Bond most supported vinyl and leather					●		
Adhere many plastics, laminates and wood products					●		
Adhere polyethylene, polypropylene to wood, metal and more						●	
Bond decorative laminate to tables, cabinets and shelving						●	
Attaching fibreglass insulation and drywall corner beads						●	
Bond kick plates to office desks						●	
Attach plastic sign lettering to wood						●	
Use for dissolving and removing dirt, grease and tar							●
Removes and various non-curing adhesives							●
Product number	Spray 74	Spray 75	Spray 76	Spray 77	Spray 80	Spray 90	Industrial Cleaner

Product Use
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3M™ Hot Melt Adhesives



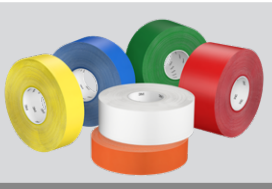
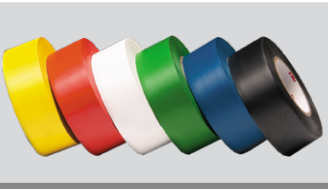
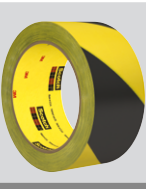
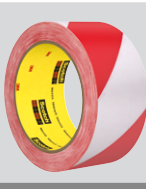
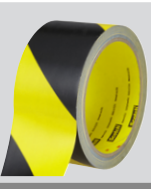
					
Product number	3738	3748	3762	3764	3792
Properties/suitable for	Wood	Electronics	Cardboard	Plastics	Universal
Key features (info box)					

Physical and Performance Characteristics, Key Features					
Product number	3738	3748	3762	3764	3792
Base	Thermoplastic adhesive	Thermoplastic adhesive	Thermoplastic adhesive	Thermoplastic adhesive	Thermoplastic adhesive
Colour	Tan	White	Tan	Clear	Clear
Open time [seconds]	50	45	35	40	50
Ball and ring melt point	86 °C	144 °C	94 °C	88 °C	83 °C
Peel strength [Newton/cm]	23	32	12	25	23
Shear strength [MPa]	2.6	2.2	3.8	2.7	1.7
Wood	●				
Electronics		●			
Cardboard			●		
Plastics		●		●	
Universal					●

Suggested Applications					
Product number	3738	3748	3762	3764	3792
Woodworking and furniture manufacturing	●				●
Upholstery	●				●
Cabinetry	●				
Point-of-purchase displays	●		●		●
Electronic applications such as potting and wire tacking, and bonding		●			
Transportation interiors		●			
Seating attachment		●			
Manual and corrugated carton sealing			●		
General packaging applications			●		
Repacking chipboard			●		
Trade exhibits			●		
Mounting and trim attachment				●	
Assembly, attaching, repairing, potting, panel bonding, wire tacking, bundling, sealing, encapsulating				●	
Panel bonding					●
Product number	3738	3748	3762	3764	3792

Product Use
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3M™ Floor and Safety Marking Tapes


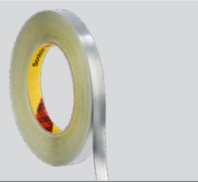
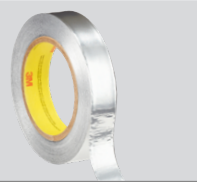
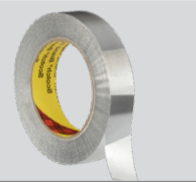
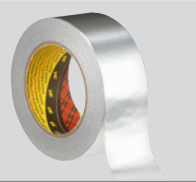

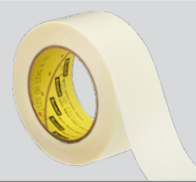
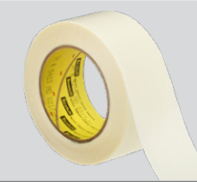
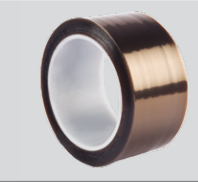
						
Product number	471	971	764	766	767	5702
Properties/suitable for	Long-term high visibility	Superior durability	Economical lane and colour marking	Economical safety marking	Economical safety marking	Long-term high visibility
Key features (info box)						

Physical and Performance Characteristics, Key Features						
Product number	471	971	764	766	767	5702
Total thickness [mm]	0.140	0.800	0.125	0.125	0.129	0.140
Adhesive type	Rubber	Rubber	Rubber	Rubber	Rubber	Rubber
Colour	Black, white, red, yellow, blue, green, orange, brown	White, red, yellow, blue, orange, green	Black, grey, white, red, yellow, blue, clear, green, orange	Yellow / black stripes	Red / white stripes	Yellow / black stripes
Backing material	Polyvinyl Chloride (PVC)	Poly Lactic Acid (PLA)	Polyvinyl Chloride (PVC)	Polyvinyl Chloride (PVC)	Polyvinyl Chloride (PVC)	Polyvinyl Chloride (PVC)
Peel strength [Newton/25 mm]	6.3	13	5.3	5.3	5.3	5.3
Tensile strength [Newton/25 mm]	61	429	57	57	57	65
Elongation at break	130%	290%	180%	180%	180%	170%
Temperature use range	4°C – 77°C	4°C – 49°C	16°C – 29°C	16°C – 29°C	16°C – 29°C	4°C – 77°C
Colour marking						
Floor, wall, or loading dock marking						
Hazard area marking						
Clean removal						
Traffic areas						

Suggested Applications						
Product number	471	971	764	766	767	5702
Lane and safety marking applications	•	•		•	•	•
Marking of equipment pitch points or gears for warning purposes	•		•			
Colour code piping, tools, instruments, etc.	•		•			
For taping, wrapping or sealing many curved or convex surfaces	•					
Floor marking in high traffic areas (pallets and heavy equipment)		•				
Marking applications in light traffic areas, walls and pipes			•	•	•	
General purpose holding and bundling			•			
Temporary protection of parts, equipment or products from abrasion	•		•			
Helps identify hazard areas				•	•	•
Create spaces for customer and employee distancing – Social Distancing	•		•	•	•	•
Masking for anodization, electroplating, painting	•					
Product number	471	971	764	766	767	5702

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3M™ Specialty Single Coated Tapes

								
Product number	420	431	425	1436	361	5421	5423	5490
Properties/suitable for	Lead foil tape	Performance aluminium foil tape	Performance aluminium foil tape	General purpose aluminium foil tape	Glass cloth tape high temperature resistant	UHMW-PE tape low friction	UHMW-PE tape low friction	PTFE tape anti-stick
Key features (info box)								

Physical and Performance Characteristics, Key Features




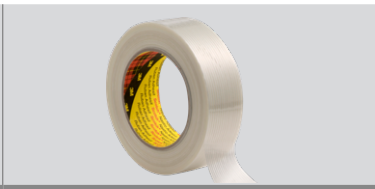

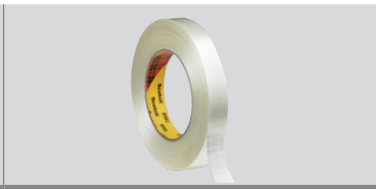
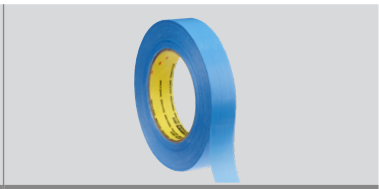
Product number	420	431	425	1436	361	5421	5423	5490
Total thickness [mm]	0.19	0.08	0.12	0.075	0.16	0.17	0.30	0.09
Adhesive type	Rubber	Acrylic	Acrylic	Rubber	Silicone	Rubber	Rubber	Silicone
Colour	Silver	Silver	Silver	Silver	White	Translucent	Translucent	Brown
Backing material	Lead foil	Aluminium foil	Aluminium foil	Dead soft aluminium	Glass cloth	UHMW-PE film	UHMW-PE film	PTFE – polytetra-fluorethylene
Peel strength [Newton/25 mm]	12.2	11.3	12.8	30.0	10.5	9.3	9.8	7.5
Tensile strength [Newton/25 mm]	87.5	85	123	45	639	199	375	76
Elongation at break	12%	5%	6%	3%	9%	470%	530%	170%
Temperature use range	-51°C to 107°C	-54°C to 149°C	-54°C to 149°C	-25°C to 70°C	-54°C to 232°C	-34°C to 107°C	-34°C to 107°C	-54°C to 260°C
Water vapour transmission rate	1.55 g/m²/24 h	0.77 g/m²/24 h	0.77 g/m²/24 h	< 1.0 g/m²/24 h				
Lead foil tape	●							
Performance aluminium foil tape		●	●					
General purpose aluminium foil tape				●				
Sealing of high-temperature ducts or chambers					●			
Noise reduction between dissimilar parts						●	●	
Protection of grinding areas						●	●	
Low friction & non-stick surface applications						●	●	●

Suggested Applications

Product number	420	431	425	1436	361	5421	5423	5490
Masking in electroplating	●							
Masking parts during anodization	●		●					
Radiation barrier	●							
Chemical milling	●							
Moisture barrier	●	●	●	●				
Plastic protection against heat and UV exposure		●						
Heat shielding and heat reflecting of delicate parts		●	●		●			
Light reflecting for light enhancement		●	●					
Seaming and sealing		●	●					
Refrigerator and freezer coil attachment		●	●					
Splicing of thin gauge foils			●					
Internal and external ducting work				●				
Air conditioning sealing operations				●				
Permanent sealing of high temperature ducts or chambers					●			
Use for fabric splicing, seaming and sealing panels					●			
Aerospace panel sealing					●			
Wire harness protection					●			
Masking parts during plasma spray					●			
Reducing squeaks and rattles in automotive and transportation assemblies						●	●	
Lining of conveyors, chutes, blades, slides and guide rails						●	●	
Separating dissimilar parts to reduce noise and friction						●	●	
Protecting aluminium sheets on stretch forming presses						●	●	
Flat conveyor guide rails and chutes						●	●	
Use for heated machinery and equipment								●
High temperature wire bundling and harnessing								●
Shielding and protecting against chemicals								●
Wrapping web rollers to reduce friction								●
Noise reduction of parts where surfaces rub together								●
Providing excellent mould release in composite bonding								●
Product number	420	431	425	1436	361	5421	5423	5490

Product Use
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3M™ Filament High Strength Tapes

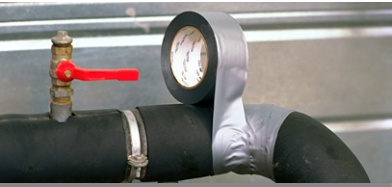



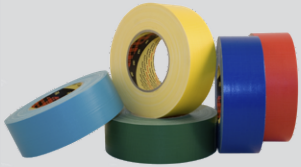

						
Product number	8953	8954	8956	8959	8981	8915
Properties/suitable for	Fibreglass longitudinally reinforced	Bi-directional fibreglass reinforced	Fibreglass longitudinally reinforced	Bi-directional fibreglass reinforced	High performance	Removable
Key features (info box)						







Physical and Performance Characteristics, Key Features						
Product number	8953	8954	8956	8959	8981	8915
Total thickness [mm]	0.100	0.125	0.120	0.130	0.168	0.152
Adhesive type	Synthetic rubber resin	Synthetic rubber resin	Synthetic rubber resin	Synthetic rubber resin	Synthetic rubber resin	Synthetic rubber resin
Colour	Translucent	Translucent	Translucent	Translucent	Translucent	Translucent, light blue
Backing material	Polypropylene film, fibreglass reinforced	Polypropylene film, bi-directional fibreglass reinforced	Polypropylene film, fibreglass reinforced	Polypropylene film, bi-directional fibreglass reinforced	Polypropylene film, fibreglass reinforced	Polypropylene film, fibreglass reinforced
Peel strength [Newton/25 mm]	13.8	17.5	20	22.5	19.3	17.8
Tensile strength [Newton/25 mm]	625	338	650	700	1665	745
Elongation at break	10%	10%	6%	6%	3%	3%
Light weight bundling & reinforcing	●		●			
Medium weight bundling & reinforcing		●		●		●
Heavy weight bundling & reinforcing					●	
Clean removal						●

Suggested Applications						
Product number	8953	8954	8956	8959	8981	8915
Light-duty strapping, bundling, and reinforcing applications	●		●			
Box closing and reinforcing	●	●	●			
Bundling of light to medium weight products		●				
Heavy box closure				●		
Cross web splicing				●		
Bundling of medium weight products				●		●
Bundling of heavy weight products					●	
Metal coil tabbing and bundling					●	
L-clip and U-clip closures					●	
Pallet unitising, bundling for shipping and handling					●	●
Temporary holding and attachment						●
Product number	8953	8954	8956	8959	8981	8915

Product Use
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3M™ Cloth and Duct Tapes







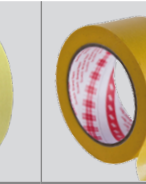
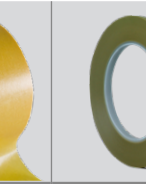
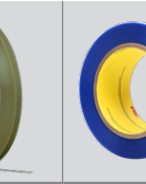
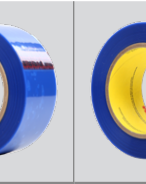
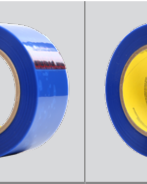
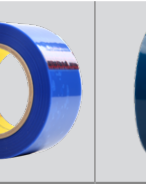
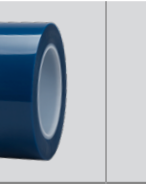
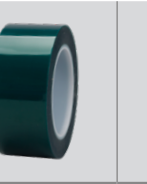
					
Product number	1900	2903	2904	389	8979
Properties/suitable for	Value duct tape	General purpose	Heavy duty	Extra heavy duty	Clean removal
Key features (info box)					

Physical and Performance Characteristics, Key Features					
Product number	1900	2903	2904	389	8979
Total thickness [mm]	0.17	0.15	0.19	0.26	0.29
Adhesive type	Synthetic rubber resin	Synthetic rubber resin	Synthetic rubber resin	Crosslinked rubber resin	Rubber
Colour	Silver, black	Silver, black	Silver, black	Silver, black, white, yellow, red, blue, green, olive	Slate blue
Backing material	PE over coated cloth scrim	PE coated cloth scrim	PE coated cloth scrim	PE coated cloth scrim	PE coated cloth scrim
Peel strength [Newton/25 mm]	15	20	27.5	22.5	15.5
Tensile strength [Newton/25 mm]	70	100	110	200	160
Elongation at break	20%	30%	30%	6%	17%
Temperature resistance (min, h)	60 °C	60 °C	60 °C	70 °C	93 °C
Indoor and outdoor use					
Clean removal					



























Suggested Applications					
Product number	1900	2903	2904	389	8979
Lighter duty applications such as bundling, sealing, holding, labelling and identifying in non-critical applications	•				
Temporary repairing, bundling, reinforcing	•	•			
Fixing, closing, packaging		•			
General maintenance, repair and protection		•	•		
Pipe wrapping and duct seaming		•	•		
Marking and labeling		•	•		
Bundling, sealing, semi permanent repair operations			•		
Building and construction market applications			•		
Colour coding, marking and labeling				•	
Joining and sealing of sheetings, wallboards, metal and plastic ducting				•	•
Splicing of insulation, pipes and panels (hinge effect)				•	•
Cauling and protection with film splicing for treatment or decontamination				•	•
Wrapping of containers and pipes				•	•
Container sealing and tarp repair				•	•
Outdoor duct tape applications and temporary weather sealing					•
Product number	1900	2903	2904	389	8979

Product Use
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3M™ Masking Tapes

													
Product number	101E	201E	301E	401E	501E	244	218	8901	8902	8905	8991	8992	8995
Properties/suitable for	Value masking tape	General use masking tape	Performance masking tape	High performance masking tape	Specialty high temperature masking	Washi masking tape	Fine line masking tape	Performance powder coat painting	Performance powder coat painting	Performance powder coat painting	Masking in extreme environments	Masking in extreme environments	Masking in extreme environments
Key features (info box)													

Physical and Performance Characteristics, Key Features

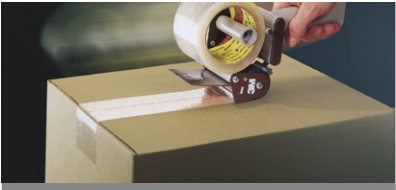
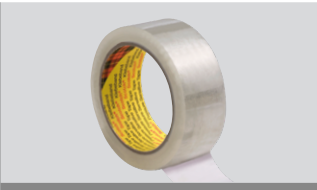


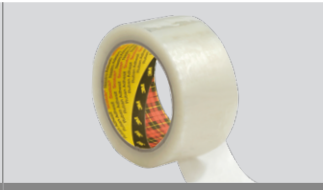

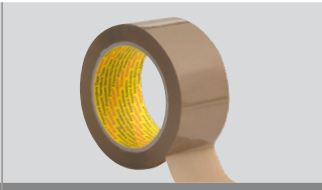
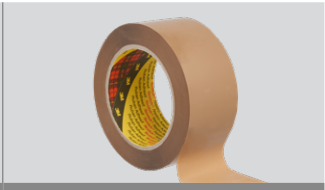
Product number	101E	201E	301E	401E	501E	244	218	8901	8902	8905	8991	8992	8995
Total thickness [mm]	0.115	0.135	0.150	0.160	0.150	0.085	0.130	0.060	0.080	0.160	0.061	0.082	0.06
Adhesive type	Rubber	Rubber	Rubber	Rubber	Rubber	Acrylic	Rubber	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone
Colour	Tan	Chamois	Chamois	Brown	Chamois	Gold	Green	Blue	Blue	Blue	Blue	Green	Blue
Backing material	Crepe paper	Crepe paper	Crepe paper	Crepe paper	Crepe paper	Flat paper backing	Polypropylene	Polyester film	Polyester film	Polyester film	Polyester film	Polyester film	Polyester film
Peel strength [Newton/25 mm]	5	6	9	10	11	2	11	7.8	10	7	8.5	12	7.5
Tensile strength [Newton/25 mm]	89	89	95	100	106	76	57	113	180	480	93.5	249.5	100
Elongation at break	8%	10%	10%	10%	10%	6%	490%	115%	110%	115%	49%	148%	90%
Temperature resistance (min, h)	60 °C	80 °C	100 °C	140 °C	160 °C	100 °C	120 °C	204 °C	204 °C	204 °C	204 °C	204 °C	204 °C
Period of use (days)													
Indoor and outdoor use													
Straight lines and areas masking applications	•	•	•	•	•	•		•	•	•	•	•	•
Sweeping curves masking applications							•						
Powder coating masking applications								•	•	•	•	•	•
Oven-drying systems, IR or heat lamps masking applications				•	•								
UV-curing & bake cycles masking applications					•								
Automotive masking applications				•	•	•	•						

Suggested Applications


Product number	101E	201E	301E	401E	501E	244	218	8901	8902	8905	8991	8992	8995
General purpose short-term room temperature paint applications	•												
General purpose short-term paint applications	•	•											
Masking for joint sealing applications	•	•				•							
Use for temporary fixing, attaching or holding	•	•											
Label marking	•	•											
General-purpose industrial paint masking	•	•	•										
Air drying and oven curing of paint and lacquer			•	•									
High-performance industrial and automotive paint masking				•	•		•						
Oven-drying systems, infrared or heat lamps				•	•								
Suitable for infrared/UV-curing and bake cycles					•								
Outdoor painting and varnishing work						•							
Paint masking applications in the building construction market	•	•				•							
Painting in the metal construction market, particularly on delicate surfaces						•	•						
Fine line paint masking							•						
Ideal for multi-colour and design paintwork							•						
Spherical shaped surfaces							•						
Specialty car body, vehicle, marine and aerospace paintjobs			•	•	•		•						
Masking parts for high temperature powder coat painting								•	•	•	•	•	•
Masking parts during anodization								•	•	•	•	•	•
Flash breaker in composite bonding								•	•	•	•	•	•
Hold/attach bagging composite materials during the composite process								•	•	•	•	•	•
Temporary surface protection for extreme temperatures								•	•	•	•	•	•
Splicing of silicone liners, films and papers								•	•	•	•	•	•
Provides a good barrier for the separation of dissimilar metals								•	•	•	•	•	•
Product number	101E	201E	301E	401E	501E	244	218	8901	8902	8905	8991	8992	8995

Product Use
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3M™ Box Sealing Tapes

							
Product number	309	313	369	371	6890	3739	375E
Properties/suitable for	Low noise and colder & damper	Low noise and colder & damper	Economical general purpose	Economical general purpose	Recycled cartons	Performance tape	High performance tape
Key features (info box)							

Physical and Performance Characteristics, Key Features

Product number	309	313	369	371	6890	3739	375E
Total thickness [mm]	0.050	0.065	0.041	0.045	0.051	0.054	0.073
Adhesive type	Acrylic	Acrylic	Hot melt rubber-resin	Hot melt rubber-resin	Solvent natural rubber resin	Hot melt rubber-resin	Hot melt rubber-resin
Colour	Tan, clear,white	Tan, clear	Tan, clear	Tan, clear	Tan, clear	Tan, clear	Tan, clear
Backing material	BOPP	BOPP	BOPP	BOPP	PVC	BOPP	BOPP
Peel strength [Newton/25 mm]	6.5	8.8	10.5	11.75	5.5	11	15
Tensile strength [Newton/25 mm]	125	153	118 *	132.5	143	118	200
Elongation at break	160%	125%	162%	165%	70%	165%	140%
Light weight packaging	●		●	●			
Medium weight packaging		●			●		
Medium to heavy weight packaging						●	●
Low noise	●	●			●		
Meets BRC requirements 	●	●	●*	●*		●	●

* Not all items are certified

Suggested Applications

Product number	309	313	369	371	6890	3739	375E
Lightweight box sealing	●			●			
Reduce noise level in the work area with a slow, low noise unwind	●	●			●		
Lightweight to medium-weight box sealing		●			●		
Non-critical lightweight box sealing	●		●				
Best performance application range for slotted boxes weighing up to 70 lbs / 30 kg				●			
Heat shrink sealing and bundling lightweight packages					●		
Single strip closure of fibreboard boxes						●	
Medium- to heavy-weight box sealing						●	●
Seal boxes with high recycled content							●
Product number	309	313	369	371	6890	3739	375E

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Industrial Adhesive and Tapes Advisor

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