#### **3M (EAST) AG** Industrial Adhesives and Tapes









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### **Double Coated Tapes**



#### $3M^{\scriptscriptstyle\rm TM}$ VHB^{\scriptscriptstyle\rm TM} Tapes and Acrylic Foam Tapes

VHB–tapes are acrylic foam tapes with a 100% closed cell structure that completely adjust to bonded surfaces. The VHB acrylic foam tape is suitable for practically any surface and can be used both in- and outdoors. Unlike regular foam tapes, the VHB tape permanently adapts to surface form and is not trying to restore its original shape. Acrylic foam tapes are special bonding tapes that have a proven strength to replace screws, rivets, welding, and other mechanical connecting methods. The need for investment in devices is decreased. The products have a better quality and appearance, they are stronger and resist corrosion and environmental impact. All VHB tapes are moisture resistant and adhere to materials with high/low surface energy.

Many VHB tapes are available with both paper and plastic liner. Additional information on tapes can be found in the following table.

Product	Colour	Thickness (mm)	Temperature resistance	Additional information					
Conformab	le Modified Acry	lic Foam Tapes							
5925	Black	0.6	-35 - +93	Bond muntin bars to windows. Bond and seal polycarbonate lens over LCD. Bond-prepainted					
5930	Black	0.8	-35 - +93	metals in truck assembly. Bond and seal plastic windows to pre-painted control panels/switch					
5952	Black	1.1	-35 - +93	gear. Mount vinyl wiring ducts and conduit channels.					
5962	Black	1.5	-35 - +93						
Conformab	le Acrylic Foam	Tapes							
4936	Gray	0.6	-35 - +93	Conformable acrylic foam is suitable for bonding various materials in difficult conditions. The					
4941	Gray	1.1	-35 - +93	tapes fill gaps, suppress vibration and resist chemicals, including softeners. Usage: metals, plastics with high/low surface energy, softened plastics, relief and uneven					
4956	Gray	1.5	-35 - +93	surfaces.					
4991	Gray	2.2	-35 - +93						
4943	Gray	1.1	-35 - +93	Tapes are well conformable. Bonding surfaces at low temperatures up to 0°C.					
4957	Gray	1.5	-35 - +93						
Acrylic Foa	m Tapes								
4646	Gray	0.6	-35 - +149	Tapes for bonding metal with metal. Pre-powder coat paint applications: hat channels and					
4611	Gray	1.1	-35 - +149	stiffeners.					
4655	Gray	2	-35 - +149						
Transparen	t Tapes								
9469	Clear	0.13	-35 - +150	The tapes are suitable for various transparent attachments, amongst others for fastening signs,					
9473	Clear	0.25	-35 - +150	light advertising and lightings. Clear adhesive transfer tape. High shear strength adhesive. UL 746C.					
4905	Clear	0.5	-35 - +93	7400.					
4910	Clear	1.0	-35 - +93						
4915	Clear	1.5	-35 - +93						
4918	Clear	2.0	-35 - +93						
Low Surfac	e Energy Materi	al Tapes							
4932	White	0.6	-35 - +71	White closed-cell acrylic foam carrier. Good adhesion to polypropylene and many powder paints.					
4952	White	1.1	-35 - +71						

#### Accessories used with VHB tape applications

In order to achieve optimum adherence, the surfaces to be bonded have to be clean, dry and smooth. 3M recommends using special accessories for installing VHB tapes. The surfaces should be cleaned with VHB cleaner in advance. The 3M Cleaner spray easily removes impurities, grease and oils from surfaces. If needed, the surfaces can be roughened by using a Scotch–Brite abrasive sheet and re-cleaned with the VHB cleaner. With VHB installation roller or plastic spatula, the maximum adherence of the tape is ensured and air from the connection is removed.



Scotch-Brite<sup>™</sup> abrasive sheets



3M<sup>™</sup> Scotch-Weld<sup>™</sup> Cleaner spray



VHB surface cleaning cloths



VHB surface cleaner



VHB installation roll



Spatula

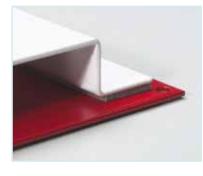


3M<sup>™</sup> Adhesion Promoter 111



Primer 94

\* For special equipment requirements please contact your local 3M sales representative.



#### 3M<sup>™</sup> VHB<sup>™</sup> 5952 acrylic foam tape

3M<sup>™</sup> VHB<sup>™</sup> Tape 5952 is a very conformable, double-sided, pressure-sensitive, closed-cell acrylic foam tape. Bonds most painted metal and plastic without surface priming or abrading. Specially formulated synthetic adhesive bonds most paints and powder coats, as well as window materials such as glass, acrylic, and polycarbonate. Best selection for connecting materials with a low surface energy.





#### 3M<sup>™</sup> VHB<sup>™</sup> 4941 acrylic foam tape

The Most Valuable Player. All acrylic adhesive and conformable acrylic foam have made 3M<sup>™</sup> VHB<sup>™</sup> 4941 a proven performer in harsh environments, as well as a top performer for: - Glass

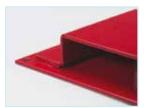
- Many medium surface energy plastics such as rigid PVC, many plasticized vinyls, acrylic and polycarbonate
- Outdoor and harsh environmental applications
- Painted/sealed porous surfaces such as wood and concrete





#### 3M<sup>™</sup> VHB<sup>™</sup> 4611 acrylic foam tape

4611 is a dark grey acrylic foam tape with a high temperature resistance. This tape is indicated for connecting metal with metal. Thanks to temperature resistance, the tape can be used for bonding components before powder coating.





#### 3M<sup>™</sup> VHB<sup>™</sup> 9473 adhesive transfer tape

10.0 mil 100MP high performance acrylic with 4.2 mil 58 lb polycoated kraft paper liner - printed.

- 10.0 mil high performance industrial joining and metal fabrication
- Excellent long-term holding power with higher adhesion strength than typical PSAs
- Transparent and ideal for use in many interior and exterior industrial applications to replace rivets, spot welds, liquid adhesives and other permanent fasteners



#### 3M<sup>™</sup> VHB<sup>™</sup> Tape 4910

 $3M^{\text{TM}}$  VHB<sup>™</sup> Tape 4910 is a clear double-sided, pressuresensitive, acrylic tape with PE film liner. 40 mil thick. This family of clear tapes is excellent for applications where clear or colorless is desired. The general purpose adhesive on both sides is suitable for high surface energy substrates.

- High strength
- Durable
- Clean appearance



#### **Double Coated Foam Tapes**



3M<sup>™</sup> Double Coated Foam Tape is a foam coated on two sides designed for temporary mounting, sealing, gasketing, and sound and vibration damping applications. The highly conformable foam coupled with a differential adhesive system creates a reliable yet removable bond on a wide variety of high and low surface energy surfaces, providing optimum performance and durability. 3M polyethylene foam tapes are suitable for fastening light components indoors.

The structure of polyethylene tapes allows using them on uneven surfaces. They are used in many areas such as car and furniture industry and manufacturing of home appliances. The tapes are useful for e.g. fastening mirrors, and damping of vibration or sound.

Double Coated Urethane Foam Tapes are conformable foams that offer high shear strength and are available with either a high temperature holding acrylic adhesive system or a rubber adhesive system for bonding to various types of surfaces for mounting, joining and holding.

Product	Colour	Tape structure (carrier/adhesive)	Thickness (mm)	Temperature resistance (°C)	Additional information				
Double Coated foam tapes									
4026	White	Polyurethane foam tape with open structure, with acrylic adhesive	1.6	+105	Thanks to open cell structure, gas and moisture can pass the tape. Recommended for indoor use.				
4032	White	Polyurethane foam tape with open structure, with acrylic adhesive	0.8	+105	Thanks to open cell structure, gas and moisture can pass the tape. Recommended for indoor use.				
4658	Transparent	acrylic foam / acrylic adhesive (remov- able adhesive)	0.8	+80	Transparent foam with closed cell structure. Suitable for bonding plastics, can be removed without traces.				
4430	White	Synthetic foam / acrylic adhesive	0.8	+50	Good general characteristics, resistant to softeners.				
9546 8610W	White	Polyethylene foam / acrylic adhesive	1.2	-40 - +80	Very strong polyethylene foam that is suitable for many surfaces both metallic and polyethylene.				
9528W	White	Polyethylene foam with closed structure, with rubber adhesive	0.8	+50	Good adherence on demanding materials such as polypro- pylene and polyethylene.				
9529W	White	Polyethylene foam with closed structure, with rubber adhesive	1.5	+50	Good adherence on demanding materials such as polypro- pylene and polyethylene.				
9536W	White	Polyethylene foam with closed structure, with rubber adhesive	0.8	+60	Bonds materials with average strength and both high and low surface energy. Can be used on low temperatures at up to $-40^{\circ}$ C.				
9508	Black	Polyethylene foam / acrylic adhesive	0.8	+60	For universal use. For bonding various surfaces.				
9508BF	Black	Polyethylene foam / acrylic adhesive	0.8	+60	B = black				
9508W	White	Polyethylene foam / acrylic adhesive	0.8	+60	W = white				
9515B	Black	Polyethylene foam / acrylic adhesive	1.5	+60	F = film liner				
9515BF	Black	Polyethylene foam / acrylic adhesive	1.5	+60					
9515W	White	Polyethylene foam / acrylic adhesive	1.5	+60					
9520B	Black	Polyethylene foam / acrylic adhesive	0.8	+60					



#### **Double Coated Thin Tapes**

3M<sup>™</sup> Double Coated Tapes provides a high level of adhesive peel and shear performance. The product range contains tapes for both permanent and temporary applications.

Double Coated Tapes with and without carrier

The 9080 series consists of four various tape types based on the same adhesive. All tapes can be used for bonding materials with both high and low surface surface and are UV and softener resistant. Bond painted and unpainted surfaces, stainless steel, glass, polycarbonate, polypropylene, ABS, wood, fabric, leather, foam, and more.

The 9084 is a mounting tape with a tissue carrier that can be easily torn with hand. Suitable for light and temporary fastenings.

9086 is a general mounting tape that can be torn by hand.

9087 is a white mounting tape with a soft carrier that is suitable for both smooth and rough substrates.

9088 is a transparent mounting tape that can be used on colourless, transparent and shiny surfaces.

9088FL tape has a red foil liner that is more suitable if the liner has to have tensile strength, adaptability and moisture proofness.

467MP is a high performance acrylic adhesive on 4.2 mil polycoated kraft liner. Excellent shear strength, temperature resistance and chemical resistance. Ideal for graphic and nameplate attachment. Easy to die-cut and process. Excellent moisture and solvent resistance. Excellent high temperature resistance and shear strength. UV resistant.

Product	Colour	Tape structure (carrier/adhesive)	Thickness (mm)	Temperature resistance (°C)	Additional information	
Double Coate	ed tapes with carrier					
9088FL	Transparent	Polyester / acrylic adhesive	0.21	+93	Good temperature resistance, with red film liner.	
9088	Transparent	Polyester / acrylic adhesive	0.21	+93	Good temperature resistance.	
9087	White	PVC / acrylic adhesive	0.27	+70	Adheres to uneven surfaces.	
9086	Transparent/grey	Synthetic fibre / acrylic adhesive	0.19	+85	Easy to use, breaks when torn by hand.	
9084	Light brown	Paper / acrylic adhesive	0.10	+65	Suitable for temporary fastenings.	
Double Coate	ed tapes without car	rier				
467MP	Transparent	- / 200MP	0.05	+149°C	Great adherence on metals and plastics with a high surface	
468MP	Transparent	- / 200MP	0.13	+149°C	energy. Very resistant, good UV radiation and chemical resistance. Sheet/rolls measurements 615 x 610 mm.	
7952MPL	Transparent	- / 200MP	0.05	+121°C		
7955MPL	Transparent	- / 200MP	0.13	+121°C		
9471	Transparent	- / 300LSE	0.05	+66°C	The product is available in rolls.	
8132LE	Transparent	- / 300LSE	0.05	+93°C	Very good adherence on plastics with low surface energy, and oily	
8153LE	Transparent	- / 300LSE	0.09	+93°C	metals. The product is available in sheets.	
9626	Transparent	- / 360	0.05	+93°C	Great initial adherence, achieves maximum strength in a couple	
9627	Transparent	- / 360	0.13	+93°C	of minutes. The product is available in rolls.	





#### Double-sided tapes without carrier

Double-sided tapes without a carrier only consist of adhesive and the protective paper layer. Thanks to the protective paper, the adhesive can be easily and precisely installed.









#### 3M<sup>™</sup> 900 series dispenser Scotch<sup>®</sup> ATG-700

The gun-shaped ATG–700 is an easy and fast tape dispenser. The device covers the surface to be mounted with a thin adhesive layer and collects the protective paper automatically. The dispenser ATG–700 can be used with the following tape types:

924 is the reverse-wound version of the 465 double-sided tape that can be used with the ATG- dispenser. Like 465, the 924 can be used for bonding paper, foil and aluminium foil. The tape is UV resistant.

926 adheres strongly to many plastics, amongst others to plastics with a low surface energy. 926 can also be used for fastening fabrics or strips to roll curtains as well as for fastening insulation materials. It also resists UV radiance.

969 is a 300 acrylic, reverse wound, pressure sensitive adhesive on a densified kraft paper liner. High tack adhesive transfer tape.

Product	Colour	Tape structure (carrier/adhesive)	Total thickness (mm)	Maximum temperature resistance (°C)	Additional information
Double Coated	tapes without carrie	r		•	
465	clear	- / acrylic (400)	0.05	+82	A great tape for fastening paper, a general-purpose tape in office, for decoration and in industry. The tape has an ATG version, 924.
924	clear	- / acrylic (400)	0.05	+82	A great tape for fastening paper, a general-purpose tape in office, for decoration and in industry. The tape has an ATG version, 924.
9485PC	clear	- / acrylic (350)	0.13	+149	Strong adherence, good temperature and load resistance, great adherence on materials with low surface energy and uneven surfaces. The tape has an ATG version, 936.
926	clear	- / acrylic (350)	0.13	+149	Strong adherence, good temperature and load resistance, great adherence on materials with low surface energy and uneven surfaces. The tape has an ATG version, 936.
928	white	tissue / acrylic (400/1000)	0.05	+80	2.0 mm, 400/1000 high tack/low tack acrylic, reverse wound, pressure sensitive adhesive double coated tape with a white tissue carrier on a polycoated kraft paper liner. For use with Scotch ATG Adhesive Applicators.
950	clear	- / acrylic (300)	0.13	+80	Good adherence on materials with low surface energy, well suitable for fastening packings. The tape has an ATG version, 969.
969	clear	- / acrylic (300)	0.13	+80	Good adherence on materials with low surface energy, well suitable for fastening packings. The tape has an ATG version, 969.





### **Fasteners**



Reclosable fastener system allow fast and simple connection of surfaces without screws, bolts, nails and other conventional fasteners. With  $3M^{\mathbb{M}}$  Dual Lock<sup> $\mathbb{M}$ </sup> fasteners and  $3M^{\mathbb{M}}$  Hook and Loop tapes, repairing, care and replacement of surfaces is easy and fast, offering more options for easy bonding of surfaces.

#### 3M<sup>™</sup> Scotchmate<sup>™</sup> Hook and Loop Reclosable Fasteners

Mushroom-shaped stems on one side of the fastener interlock with identically shaped stems on the other side for 5X greater closure strength than hook and loop; peel apart for opening

- Pressure sensitive adhesive-backed versions\* bond on contact to a variety of flexible and rigid materials; choice of specialized adhesive properties (see charts on pages 5-8)
- Choice of stems per square inch:170, 250, 400 (higher the combined number, greater the closure strength-see chart at right)
- Larger the fastener area, greater the strength for holding weight and resisting shear and peel
- Low profile option for a snug fit with about half the thickness of the standard products

3M<sup>™</sup> Dual Lock<sup>™</sup> Reclosable Fasteners

- Stiff hooks on one side of the fastener mesh with pliable loops on the other side for secure closure; peel one side away for opening
- Pressure sensitive adhesive-backed versions\* bond on contact to a variety of flexible and rigid materials; variety of adhesive properties
- The larger the fastener area, the greater the strength for holding weight and resisting shear and peel
- Low profile option for applications where thickness is more critical than number of closures; 75% thinner than standard product with fewer openings and closings

Product	Colour	Adhesive	Type/cm <sup>2</sup>	Temperature resistance (°C)	Additional information
3M <sup>™</sup> Scotchma	ate <sup>™</sup> Hook and Loop Rec	losable Fastener			
SJ-3526	White, black, beige	Rubber adhesive	With hooks	-29- +49	Hook and loop fastener backed with a high performance rubber based
SJ-3527	White, black, beige	Rubber adhesive	With loops	-29- +49	adhesive designed for indoor applications requiring medium temperature resistance. Aerospace, Electronics, Construction, Specialty Vehicle, Military, Medical, Furniture, General Industrial Securing Fabric to Furniture Cushions, Air- plane Seating, Carpet Panel Attachments, Uniforms, Gloves and Clothing.
SJ-3572	White, black, beige	Rubber adhesive	With hooks	-29- +70	Good moisture and temperature resistance. Suitable for outdoor
SJ-3571	White, black, beige	Rubber adhesive	With loops	-29- +70	use.
3M <sup>™</sup> Dual Loc	K <sup>™</sup> Reclosable Fastener				
SJ-3540	Black	Rubber adhesive	38	-29- +49	Dual Loak fastasing system with subhas adhasing. Cuitable far
SJ-3541	Black	Rubber adhesive	62	-29- +49	Dual Lock fastening system with rubber adhesive. Suitable for indoor use.
SJ-3542	Black	Rubber adhesive	26	-29- +49	
SJ-3550	Black	Acrylic adhesive	38	-29- +70	
SJ-3551	Black	Acrylic adhesive	62	-29- +70	Dual Lock fastening system on VHB tape base, UV and softener resistant. Can be used outdoors.
SJ-3552	Black	Acrylic adhesive	26	-29- +70	
SJ-3560	Clear	Acrylic adhesive	38	-29- +70	SJ–3560 has a transparent VHB–tape base that is especially suitable for transparent materials.
SJ-3870	Black	Acrylic adhesive	38	-29- +70	The fastening is based on an especially well moulding acrylic foam simplifying taping and adhesion to substrate. Suitable for all materials with high surface energy, especially for powder coatings, relief and uneven surfaces. Can be used outdoors.
3M <sup>™</sup> Dual Loc	k™ Reclosable Fasteners	- Low Profile/Thin			
SJ-4570	Clear	Acrylic adhesive	-	-29- +50	Low to medium temperature performance. Bonds well to metals,
SJ-4575	Black	Acrylic adhesive	-	-29- +50	glass, many plastics (polypropylene, polyethylene, polycarbonate, ABS) powder coated paints and medium to low surface energy materials. Half standard thickness. Indoor and limited outdoor use.
SJ-4580	Clear	Acrylic adhesive	-	-29- +70	High temperature performance. Bonds well to CARC and enamel paint, bare metal, glass, wood (painted or sealed) and many plastics (acrylic, polystyrene, polycarbonate, ABS). Half standard thickness. Indoor and outdoor use.



# 3M<sup>™</sup> Scotchmate<sup>™</sup> SJ-3526 and SJ-3527 tape

3M<sup>™</sup>SJ-3526 is a tape with hooks and SJ–3527 a tape with loops that together form a strong connection. The backside of each ribbon has rubber adhesive that adheres well to various materials and is moisture resistant.





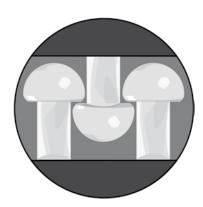
#### 3M<sup>™</sup> Dual Lock<sup>™</sup> SJ-3550

SJ-3550 is a Dual Lock fastening system with VHB acrylic adhesive base that is UV and softener resistant. SJ–3550 adheres well to many materials with high surface energy, and uneven surfaces. SJ-3550 can be used outdoors.

#### 3M<sup>™</sup> Dual Lock<sup>™</sup> SJ-3560

The base of SJ-3560 is a transparent VHB acrylic foam tape. It is well suited for invisible fastening of transparent materials. SJ-3560 resists UV radiation and therefore can be used outdoors.





#### 3M<sup>™</sup> Dual Lock<sup>™</sup> SJ-4570

3M<sup>™</sup> Dual Lock<sup>™</sup> Low Profile Reclosable Fasteners SJ4570 can replace conventional fasteners, such as screws, clips, rivets, snaps, hook and loop and bolts in many applications where access or repositioning is needed.

The Dual Lock low profile reclosable fastener SJ4570 is a clear fastener offering transparent properties to allow color and patterns to visibly show through giving the fastener an almost invisible appearance.



# **Single Coated Tapes**



Vinyl, polyethylene and polypropylene tapes

Vinyl (PVC), Polyethylene (PE), Polypropylene (PP) are a recommended alternative for applications where adaptation, colour coding, wearing and chemical resistance are decisive selection criteria.

Product	Colour	Tape structure (carrier/ adhesive)	Total thickness (mm)	Bond strength on steel (N/100mm)	Tensile strength (N/100mm)	Temperature resistance (°C)	Additional information
VINYL TAPE	ES						
One-coloure	ed marking tapes	1					
471	Black, green, blue, brown, orange, red, white, yellow and transparent	PVC / rubber adhesive	0,13	27	263	+4 - +75	Usable under demanding conditions. Protec- tion, marking of paths, colour coding, mark- ings, connecting, sealing and strengthening.
764i	Black, green, blue, brown, orange, red, white, yellow, trans- parent and grey.	PVC / rubber adhesive	0,12	21	228	+15 - +27	For regular use. Colour coding, marking, bonding and strapping in bunches. Not recommended for marking on floor.
472	Black	PVC / rubber adhesive	0,26	25	560	up to 105°C	Wear resistance.
Double-cold	oured marking tapes		1				
5700	Black-white	PVC / rubber adhesive	0,14	21	260	+4 - +75	For use under demanding conditions, print- ing on adhesive side.
5702	Black-yellow	PVC / rubber adhesive	0,14	21	260	+4 - +75	For use under demanding conditions, print- ing on adhesive side.
766i	Black-yellow	PVC / rubber adhesive	0,12	21	228	+15 - +27	Not recommended for marking on floor.
767i	Red-white	PVC / rubber adhesive	0.12	21	228	+15 - +27	General-purpose tape.
For galvanis	sing and anodising						
470	Yellowish brown	PVC / rubber adhesive	0.18	28	350	up to +77°C	Chemical resistance.
POLYETHYL	ENE AND POLYPROPYL	ENE TAPES	-				
480	Transparent	PE / acrylic adhesive	0.13	24	180	-5 - +75	Joints and repairs on PE surfaces. Suitable for use under outdoor conditions for protecting and sealing works for up to three months.
481	Black	PE / rubber adhesive	0.25	33	298	-7 - +75	Suitable for use under outdoor conditions for protecting and sealing works for up to two years. Can be removed without adhesive traces.
483	Black, red, blue, green, white, yel- low, transparent	PE / rubber adhesive	0.13	13	193	up to +77°C	Suitable for use under outdoor conditions for protecting and sealing works for up to two years. Can be removed without adhesive traces.
3336	Silver, black	PP / acrylic adhesive	0.08	46	392	up to +127°C	Sealing and protecting tape for air pipes and insulation materials. Resistant to moisture and cold. Suitable for outdoor use.
4811	White	PE / rubber adhesive	0.25	36	263	-7 - +75	Sealing tape for storage.



#### 3M<sup>™</sup> 471 vinyl tape

471 is a PVC tape with rubber adhesive that can be used under demanding conditions and is suitable for sealing, surface protection and marking, thanks to its elasticity. 471 has a very good wear resistance wherefore it is used for long-term floor marking. The tape adheres strongly on the floor, however, it can be removed without traces even after a long time. Available in many colours.









### 3M<sup>™</sup> 5702 vinyl tape

5702 is a warning tape with a black and yellow striped laminated protective surface for use under demanding conditions. Thanks to the good resistance, the tape is used in places where high wearing resistance is required, e.g. for marking floors.





#### Polyester tapes

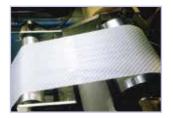
Tapes with a polyester carrier (PET) are thin, however their tensile strength is very good. Due to the characteristics of the carrier, the tape can be used in places where the temperature does not exceed 175°C for an hour. Additionally, acrylic based polyester tapes are suitable for long-term fastening and decorating.

Product	Colour	Tape structure (carrier/adhesive)	Total thickness (mm)	Adhesion strength on steel (N/100mm)	Tensile strength (N/100mm)	Temperature resistance (°C)	Additional information				
General p	General purpose tapes										
396	Transparent	PET / rubber adhesive	0.10	190	440	+4 - +93	Transparent, LSE, highest adhesion polyester tape, quick grab, high tack, thin, high tear resistance, good temperature resistance, long-term aging, high strength backing.				
850	Transparent	PET / acrylic adhesive	0.05	37	490	-50 - +150	High clarity, visible and detectable visible splice, tabbing, identifying thin, high tear resistance, good				
850	Black, white, red	PET / acrylic adhesive	0.05	33	490	-50 - +150	temperature resistance, long-term aging, high strength backing.				
850	Silver	Metallic polyester / acrylic	0.05	46	490	-50 - +150					
Powder co	pating process m	asking tapes									
8901	Blue	PET/silicone	0.06	35	490	-50 - +204	Made with strong polyester backing and silicone adhesive, allowing them to be used in applications				
8902	Blue	PET/silicone	0.09	44	1016	-50 - +204	requiring high temperatures or adhesion to silicone treated surfaces. This tape family offers a range of backing thickness to accommodate application needs				
8905	Blue	PET/silicone	0.17	47	2625	-50 - +204	from thin tape for splicing to a thicker, stronger tape from pulling through flashing or multiple layers.				
Manufacti	uring of print boa	ards									
851	Transparent green	PET / S/K-mixture	0.09	27	368	+4 - +77	High-quality protective tape.				
1280	Red	PET / S/K-mixture	0.09	34	525	+4 - +75	High-quality protective tape.				
5413	Golden brown	Polyimite/silicone	0.07	22	578	-73 - +260	High-quality protective tape.				
5419	Golden brown	Polyimite/silicone	0.07	22	578	-73 - +260	High-quality protective tape. Weak electrostatic characteristics.				



#### 3M<sup>™</sup> 850 polyester tape, silver

3M<sup>™</sup> Polyester Film Tape 850 can generally be used for splicing and applications where chemical resistance and/or clean removal is necessary. The silver backing is a transparent polyester with a thin layer of aluminum.



#### 3M<sup>™</sup> 850 polyester tape, transparent

The 850 polyester tape is resistant, thin and has a long service life. The tape is transparent and does not leave any traces upon removal. Suitable for use in graphic industry.



#### 3M<sup>™</sup> 8902 powder coating masking tape

The blue 8902 tape is designed for use in places with high temperature. In addition to heat, the tape also resists chemical and mechanical load. The 8900 series tapes can be used for powder coating, amongst others. Application Ideas:

- Splicing of silicone treated webs.
- Masking parts for powder coat painting
- Holding parts or sealing vacuum bags during processing
- Masking edges of overlap seams in metal bonding process where excess adhesive flows onto tape. Minimizes clean-up on tape removal.
- Composite bonding sticks well to molds treated with release agent, works as a flash breaker tape on removal of part from mold, seals vacuum bags if vacuum bag treatment is part of the process.
- Provides a good barrier for separation of dissimilar metals.
- Holding silicone or silicone treated parts.



#### 3M<sup>™</sup> 5419 low-static polyimide tape

When unwinding the 5419 tape, less static load is produced, so that circuits are not damaged. The tape is used for protecting gold-plated surfaces and connections of printed boards during wave soldering. The tape has a high chemical and temperature resistance.



#### Extreme Sealing and All Weather Flashing Tape

3M<sup>™</sup> Extreme Sealing Tape is an acrylic tape that creates water tight seals over numerous substrates. It easily conforms over contours, edges, rivets, and screw heads resulting in a paintable surface with good outdoor durability.

All Weather Flashing Tape 8067 is a self-adhered, waterproof flashing membrane designed for sealing around openings and penetrations in exterior walls. This product has a unique acrylic pressure sensitive adhesive that aggressively sticks and stays stuck both at lower and higher application temperatures than traditional flashing tapes.

Product	Colour	Tape structure (carrier/adhesive)	Total thickness (mm)	Adhesion strength on steel (N/100mm)	Temperature resistance (°C)	Additional information
Extreme S	ealing Tape					
4411G	Grey	Acrylic ethylene / acrylic	1.0	273*	-40 - +93	Family of single coated, pressure sensitive adhesive tapes designed for difficult sealing applications. The backing on this tape is an ionomer film
4411N	Transparent white	Acrylic ethylene / acrylic	1.0	264*	-40 - +93	that is very tough yet flexible and abrasion resistant. The very soft and thick acrylic adhesive has excellent sealing properties and good outdoor durability. This single coated tape is designed to seal over an existing
4412G	Grey	Acrylic ethylene / acrylic	2.0	307*	-40 - +93	joint, seam, or penetration. The adhesive is designed to sear over an existing to the ionomer film so that overlapping tape joints can be made while
4412N	Transparent white	Acrylic ethylene / acrylic	2.0	315*	-40 - +93	maintaining a strong seal.
All Weathe	r Flashing Tape					
8067	Tan	Acrylic	0.25	66	-40 - +80	Split liner for easier, faster installation.

\* With 3M AP111 primer



#### 3M<sup>™</sup> Extreme Sealing Tape 4412N

A tape series based on the technology known from the 3M VHB acrylic foam tapes has a very good adherence and can replace adhesive sealing masses and other regular hermetics. A thick adhesive layer adheres quickly to metallic and plastic surfaces and will perfectly adapt to surface. To achieve a finished final result, the special friction proof surface foil of the tape 4412 can be painted. The tapes are well resistant to various weather conditions. Usage in sealing connections in vehicles, ventilation devices and channels as well as in sealing passages in construction industry.



#### Metal Foil tapes

Metal foil tapes can be used in places where extreme strength of the tape is required. Metal foil tapes resist moisture, UV radiation, chemical load and temperature fluctuations. The tapes can also be used in places where fire resistance or thermal conductivity is of utmost importance.

Aluminium tapes can be used for protecting against moisture and chemicals. Thanks to good thermal conductivity, the aluminium tapes help maximising the efficiency of cooling or heating. Thanks to light and heat reflecting properties of the aluminium tape, it can be used for protecting light-sensitive places or improving light reflection.

Aluminium tapes reinforced with glass fabric are elastic and adapt to the substrate to the bonded. The tape protects elastic cables without reducing their elasticity. Besides that, the tapes are wear, tear and puncture resistant.

Lead tapes are conductive tapes that help avoiding depositions on metal surfaces. Due to their acid proofness, the lead tapes can be used for etching and surfacing works. The high density of lead allows using tapes as mass adding and balancing means, thanks to its impermeability to X-rays, the tape can be used for marking and positioning in X-ray examinations. The soft lead tape can be easily formed by tools.

Product	Tape structure (carrier/adhesive)	Total thick- ness (mm)	Adhesion strength on steel (N/100mm)	Tensile strength (N/100mm)	Temperature resistance (°C)	Additional information
Aluminium ta	apes					
425	Aluminium / acrylic adhesive	0.12	54	525	-54 - +149	Universal aluminium tape with a good thermal reflectivity and conductivity. Suitable for sealing, amongst others.
427	Aluminium / acrylic adhesive	0.12	47	473	-54 - +149	425 version with protective paper.
431	Aluminium / acrylic adhesive	0.08	45	333	-54 - +149	Aluminum foil backing with acrylic adhe- sive. Light weight foil tape for aerospace, appliance, automotive.
433	Aluminium/silicone	0.09	40	403	-54 - +316	High temperature resistance.
1404	Aluminium / acrylic adhesive	0.06	40	270	-50 - +150	Universal tape.
1436	Aluminium / Rubber adhesive	0.075	12	18	-25 - +70	Rubber adhesive bonds to many surfaces. Low water vapor transmission rate offers excellent sealing and patching perfor- mance. Best results obtained when ap- plied to clean dry surfaces above 0°C.
2552	Aluminium / viscoelastic acrylic	0.38	72	1400	+5 - +60	Aluminum foil constraining layer coated with a pressure-sensitive viscoelastic polymer on a poly-coated paper easy- release liner.
3334	Aluminium, pe fibre / acrylic	0.17	36	445	>+80	For bonding insulation materials.
3369	Aluminium / acrylic adhesive	0.03 (kalvo)	90	326	> +120	Under moist and cold conditions.
Aluminium ta	ape reinforced with glass fibres					
363	Aluminium, glass fibre / silicone	0.19	59	1944	-54 - +316	High temperature resistance.
Lead foil tap	es					
420	Lead / rubber adhesive	0.17	49	350	-54 - +106	Dark silver lead foil tape, lead foil backing with a green rubber adhesive and a clear, easy-release film liner.
421	Lead / rubber adhesive	0.16	34	263	-54 - +106	Dark silver lead foil backing with a green rubber adhesive.



#### 3M<sup>™</sup> 425 aluminium tape

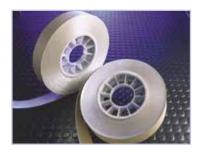
425 is a universal aluminium tape that adheres well to substrate. The tape can be used for protecting wires and cables from heat and fire, fastening cooling pipes in cooling devices, and sealing layered plastic plate structures from dust and moisture. Repair tears on truck trailers and aircraft, splicing of thin gauge foils, general purpose holding, patching, sealing applications – indoors and out.





#### 3M<sup>™</sup> 2552 damping tape

2552 is a damping tape based on 3M VHB-technology. The tape reduces noise, vibration and shaking load in both plastic and metal structures. The dampening characteristics of the tape are best at temperature range + 5°C till 60°C. General use, trucks, buses, trains, appliances, HVAC, aircraft, aerospace, die-cut aluminum foil parts.

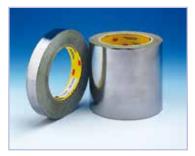




#### 3M<sup>™</sup> 420 Lead foil tape

420 is a foil tape with protective liner. The tape is well moulding and easily adapts to uneven substrates. Application Ideas

- Electroplating
- Radiation barrier
- Moisture barrier
- Chemical milling
- X-ray plate masking
- Maskant during paint stripping
- Add weight (balance) to equipment parts (golf clubs, tennis rackets, etc.)





#### PTFE- and UHMW-PE-tapes

3M<sup>™</sup> PTFE (polytetrafluorethylene) and UHMW-PE (ultra-high molecular weight polyethylene) tapes are suitable for demanding conditions. The PTFE series products are especially heat resistant and have a very low friction factor. The friction factor of UHMW-PE tapes is almost as low as in PTFE tapes, however, they are designed for resisting very high friction.

PTFE tapes have a low surface energy that reduces their friction factor, thereby improving the processing characteristics of many roll materials. PTFE tapes are chemical and heat resistant, so they can be hot rolled.



The UHMW-PE tapes have great wear resistance and can therefore be used for protecting plastic or metal channels, guide rails and containers. In addition to good wear resistance, the products have a low friction factor and can be used for solving many noise and vibration problems. UHMW-PE tapes allow creating a clean surface for covering or connecting works where printing inks, adhesive or connecting materials are used.

Product	Colour	Tape structure (carrier/adhesive)	Total thick- ness (mm)	Adhesion strength on steel (N/100mm)	Tensile strength (N/100mm)	Temperature resistance (°C)	Additional information			
PTFE TAF	PTFE TAPES									
Reinforce	d with glass fal	bric								
5451	Brown	PTFE glass fabric / silicone	0.14	38	1225	-73 - +205	Hot rolling tape.			
5453	Brown	PTFE glass fabric / silicone	0.22	38	1575	-73 - +205	Hot rolling tape.			
Peeling for	bil			-			_			
5480	Grey	PTFE/silicone	0.10	22	473	-54 - +204	Protective tape for rolls.			
5481	Grey	PTFE/silicone	0.18	27	875	-54 - +204	High-load protective tape for rolls.			
Extruded	film tape									
5490	Grey	PTFE/silicone	0.09	30	385	-54 - +204	Not bending.			
5491	Grey	PTFE/silicone	0.17	38	700	-54 - +204	Not bending.			
UHMW-P	E tapes									
5421	Transparent	UHMW-PE/ rubber adhesive	0.17	28	526	-34 - +107	Universal tape.			
5423	Transparent	UHMW-PE/ rubber adhesive	0.30	28	963	-34 - +107	Thick version of the 5421 tape, for limiting polishing marks.			
5425	Transparent	UHMW-PE/ acrylic adhesive	0.11	33	788	-34 - +107	Solvent resistance.			



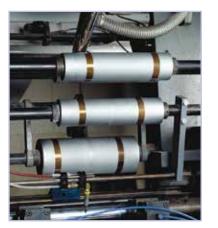
#### 3M<sup>™</sup> 5451 PTFE glass fibre tape

5451 is a PTFE tape with a low friction factor that has been strengthened by glass fibres. Has a silicone adhesive which provides a high temperature release surface for protection and insulation.

Application Ideas

- Easy-release surface on packaging and heat sealing machines, ironing and pressing equipment.
- Release surface on bonding tools.
- Lining conveying chutes, troughs and ducts.
- Covering rollers, drums, turnbars and formers on stitchers, binders and other process machinery.





#### 3M<sup>™</sup> 5480 PTFE tape

5480 is a PTFE skived foil tape is suitable for curved surfaces. The tape can be used for reducing friction in rollers, for instance. Application Ideas

- Wrapping rubber laminating rollers on hot polyethylene extruders to create a release surface to help minimize clean-up.
- Easy-release surface provided by wrapping rollers, plates, belts, etc. where build- up of sticky materials and inks can occur.
- Chemical resistant surface for sealing and masking





#### 3M<sup>™</sup> 5490 PTFE tape

PTFE extruded film tapes have a film backing with a silicone adhesive. Extruded, calendered film tapes that resist curling during unwind and provide an exceptionally smooth surface when applied. The tape is resistant to chemicals and high temperature. Application Ideas

- Easy-release surface on rollers, plates, belts, etc. where build-up of sticky materials and inks can occur.
- Low coefficient of friction surface on rollers, formers, etc. to facilitate web movement.
- Chemical resistant surface for sealing and masking.
- Wrapping rubber nip rollers on hot polyethylene extrusion machines.





#### 3M<sup>™</sup> 5421 UHMW polyethylene tape

5421 is a universal transparent UHMW-PE tape for extended service life as protective surface against extreme wear. Thanks to the low friction factor of the tape, it can be used for surfacing channels, and dampening creaking and clattering. A thicker and stronger tape, 5423, is also available. Application Ideas

- Application lucas
- Conveyor flat guide rails
- Spray booth liners
- Discharge chutes
- Tank and bin liners
- Doctor blades
- Drawer and cabinet slides





Note! Masking tapes are usually not used for a long term, therefore, all maximum temperatures in tables apply to short-term use (up to one hour).

#### Duct and masking tape

Ventilation and fabric tapes are basic products used in all manufacturing industries, More often, the usage areas are strapping in bunches, fastening, marking, sealing, and temporary repair of small places. Duct and fabric tapes are strong, adhere to various substrates and resist moisture.

Masking tapes are mostly used for bordering surfaces, however, they can also be used for strapping in bunches, marking, sealing, and small temporary repair works. The tape allows creating a clean paint line, and prevents paint absorption. Masking tapes can be easily used and they do not leave marks after removal.

Fine Line bordering tapes are thin and resistant, leaving clear borders on painted surfaces. These tapes are moisture and solvent resistant, thanks to which the paint does not infiltrate the tape. Upon removal, the tape does not break.

Product	Colour	Tape structure (carrier/adhesive)	Total thickness (mm)	Adhesion strength on steel (N/100mm)	Tensile strength (N/100mm)	Temperature resistance (°C)	Additional information			
Duct tapes										
1900	Black, silver	Polyethylene coated fabric / rubber adhesive	0.17	60	280	+60	For regular use.			
3900	Silver, blue, black, white	Polyethylene coated dense fabric / rubber adhesive	0.19	62	385	+93	For regular use and for more demanding places.			
2902	Silver, black, yellow and white	Polyethylene coated fabric / synthetic	0.26	90	800	+65	Hanging, fastening and bonding.			
3939	Silver	Polyethylene coated fabric / rubber adhesive	0.23	60	438	+93	For use under demanding conditions.			
8979	Blue, olive black	Polyethylene coated fabric / rubber adhesive	0.31	53	630	+93	For indoor and outdoor applica- tions. This tape is removable with little or no adhesive residue from most opaque surfaces up to six months after application.			
Masking ta	Des									
2214	Beige	Paper / rubber adhesive	0.135	26	350	+60	Medium temperature resistance.			
2321	Beige	Paper / rubber adhesive	0.135	26	352	+80	Medium temperature resistance, allows curved tape lines.			
2364	Beige	Paper / rubber adhesive	0.16	44	400	+100	Medium temperature resistance.			
2836	Beige	Paper / rubber adhesive	0.17	44	400	+100	High temperature resistance.			
Fine Line m	asking tapes									
218	Beige	Polypropylene plastic film/rubber adhesive	0.13	40	228	+121	Easy tear, pressure sensitive.			
470	Tan	Pigmented vinyl/rubber adhesive	0.18	40.4	350	+121	Excellent resistance to most chemicals, used in typical electroplating processes.			
471	Yellow, white, red, black, brown, green, orange, purple, blue, transparent	PVC / rubber adhesive	0.13	27	263	+75	Low temperature resistance.			
472	Black	Vinyl/rubber adhesive	0.26	25	560	+107	Extra thick, durable backing, protection from blasting, abrasion resistance, outdoor weathering applications.			
4712	Yellow, white, red, black, brown, green, orange, purple, blue, transparent	PVC / rubber adhesive	0.14	25	270	+77	Can be printed using thermal printing process.			





#### 3M<sup>™</sup> 3900 multi-purpose duct tape

Multi-Purpose Duct Tape 3900 is a general purpose, conformable cloth duct tape made with polyethylene film over cloth scrim and rubber adhesive. A good choice for general maintenance, wrapping, sealing, protecting and color coding.

#### 3M<sup>™</sup> 8979 performance plus duct tape

Performance Plus Duct Tape 8979 has a unique tape construction that allows for both permanent and temporary applications indoor and outdoor. It is removable with little or no adhesive residue from most opaque surfaces up to 6 months after application. The backing is also UV resistant for up to one year of outdoor exposure.

#### Application Ideas

- Ideal for demanding duct tape applications in the construction, electrical, industrial, marine and military markets.
- Applications for sealing, holding, identification and protection.
- Maintenance Repair and Other (MRO) applications for patching, bundling, reinforcing, tabbing and temporary repair.
- Taping and splicing insulation, capping pipe and conduit ends, marking and labeling.
- Hanging polyethylene drapes, industrial masking and light sandblast overspray protection.



#### Scotch® 2214 masking tape

Paper Tape 2214 is a general purpose paper masking tape for holding, bundling, sealing and non-critical masking. It is thin, has a good adherence and resistance, and it can be used at up to 60°C.



#### Scotch® 2321 masking tape

Paper masking tape 2321 is a chamois coloured crepe paper coated with a cross linked rubber resin adhesive.

The elastic carrier allows bordering surfaces with curved edges. The tape is solvent proof and does not absorb paint when used for masking.

Designed for indoor use only.





#### Packaging tapes

3M offers packaging tapes for both heavy and light packages. From 3M tapes, you can find an alternative for other packing materials, such as for recycled fibre material. Besides that, the tape is printable.

#### Tartan<sup>™</sup> 369 box sealing tape

Tartan<sup>™</sup> 369 box sealing tape is a clear polypropylene box sealing tape with a rubber adhesive used for noncritical box sealing applications. This product has a conformable backing and a pressure sensitive hot melt adhesive system. This construction provides a good closure for lightweight boxes exposed to minimal distribution hazards.

#### Scotch<sup>®</sup> 371 packaging tape The 371 packaging tape has a rubl not contain solvents. The tape adh board and seals boxes in a reliable

The 371 packaging tape has a rubber resign based Hot Melt adhesive that does not contain solvents. The tape adheres well to both regular and recycled cardboard and seals boxes in a reliable manner. Resistant to moisture and wearing. Scotch<sup>®</sup> Box Sealing Tape 371 is a valued performance polypropylene film box sealing tape. Scotch<sup>®</sup> Box Sealing Tape 371 is an industrial packaging tape used for box sealing, splicing, recouperage and other packaging applications. This product has a conformable backing and a consistent pressure sensitive hot melt synthetic rubber adhesive system.



#### Scotch<sup>®</sup> 373 packaging tape

The 373 packaging tape is a polypropylene carton sealing tape, with a strong backing and high performance adhesive that provides a secure and durable closure. Tape can be custom printed to provide security and/or branding.

Product	Colour	Tape structure (carrier/adhesive)	Total thickness (mm)	Additional information
Packaging tap	ies			
6890	Transparent, brown	PVC/ rubber adhesive	0.050	For sealing boxes and strapping products in bunches. Noiseless.
Packaging tap	es - with rubber adhes	sive		
3701	Transparent, brown	PP/ rubber adhesive	0.046	Resists splitting when subjected to rough handling and absorbs impact shock. Abrasion and moisture resistant. No dwell time necessary, adheres immediately.
3739	Transparent, brown	PP/ rubber adhesive	0.056	Box sealing tape with a bi-axially orientated polypropylene film backing and hot melt solvent free (synthetic rubber/resin) adhesive. The polypropylene backing resists splitting when subjected to rough handling and absorbs impact shock.
371	Transparent, brown	PP/Hot-Melt	0.048	For sealing light boxes, also usable with boxes made from recycled fibres. General tape for sealing, available with EAN code.
373	Blue, clear, green, orange, red, tan,white, yellow	PP/Hot-Melt	0.064	For box sealing, splicing, recouperage and other demanding packaging applications.
375E	Transparent, brown	PP/Hot-Melt	0.075	For closing heavy boxes, resists rough handling. Very strong tape.
Packaging tap	es - with rubber adhes	sive		
3703	Transparent, brown	PP / rubber adhesive	0.053	3703, 3705, 3707 are performance box sealing tapes with a bi-axially orientated
3705	Transparent, brown	PP / rubber adhesive	0.073	polypropylene film backing and solvent (natural rubber/resin) adhesive. The Scotch- Pro <sup>™</sup> polypropylene backing resists splitting when subjected to rough handling and absorbs impact shock. The adhesive is specifically formulated to provide high initial
3707	Transparent, brown	PP / rubber adhesive	0.055	tack and shear adhesion to fibreboard – including recycled fibreboards.





#### Tape dispensers

For simplifying the application of tapes, 3M offers various manual dispensers for both packaging and strapping tapes.





Scotch<sup>®</sup> H-180 and Scotch<sup>®</sup> H-150 manual dispensers for packaging tapes

Manual dispensers H-180 and H-150 have been designed for wrapping and cutting off packaging tapes with a width of 50 mm. H-150 is designed to reduce the noise of tape unwind during application. The dispenser TI-1756 has an adjustable friction brake.

H-150



C-22

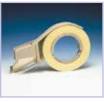




TI-1756







H-130

Product	Product characteristics
Packaging tapes	
TI-1756	Dispenser with handle for packaging tapes with a width of up to 50 mm. Equipped with adjustable friction brake.
H-180	Dispenser with handle for packaging tapes with a width of up to 50 mm. Equipped with friction brake.
H-183	Dispenser with handle for packaging tapes with a width of up to 75 mm. Equipped with friction brake.
H-150	Dispenser with handle for packaging tapes with a width of up to 50 mm. Equipped with noise dampening mechanism.
C-22	Sturdy table mounted dispenser for two rolls with a width of up to 50 mm.
C-23	Sturdy table mounted dispenser for a tape with a width of up to 25 mm.
P-52	Table or wall mounted model for a tape with a width of up to 50 mm. Fastening with double sided tape or screws.
P-56	Same as P-52, but for packing tape with a width of up to 150 mm.
Pocket tapes	
M-777	Table mounted model for pocket tapes 8241/8242. Portable - equipped with weights.
Strapping tape with glass fibre	
H-12	Plastic hand dispenser for strapping tape with a width of up to 25 mm. Equipped with rolling/tension adjustment brake.
H-130	Plastic hand dispenser for strapping tape with a width of up to 19 mm. Equipped with rolling/tension adjustment brake.

# **Special Materials**

#### 3M<sup>™</sup> Label materials

Whenever you need marking your components, number your batches, write customer data, produce user instructions or labels for printing by thermal or laser printers or that have to resist high or low temperatures, moisture, etc., as well as when a label is just the final touch on your product, 3M has a solution.

The labels should adhere to any surfaces and be easily removable. 3M has carried out thorough research, and solutions have been found for all needs.

#### Label materials for thermal printers

With this system, labels can be printed quickly and quietly for various solutions. The toner is transferred from toner band to label by heat.

- High resolution
- Good resistance
- Bar code compliant
- Colour print
- Various adhesives for many substrates available
- Flexible printing process

#### Label materials for laser marking

Information is engraved by a laser beam in a special foil manufactured at 3M, so that resistant labels with precise resolution for safety related use can be produced.

- Great wearing resistance
- Great resistance to chemicals
- Great temperature resistance
- · Great readability of bar codes
- Adheres well to many substrates
- Material is breakable and can be easily torn, it is difficult to remove the labels in one piece

#### Protective laminate foils

Label materials for laser printers

Printing with available office equipment

No additional investment required

Immediate printing out, if required

printers can be used. No other devices are required.

· Various adhesives for many substrates available

For some applications, a very good resistance is required. To this end, a printed label can be covered with transparent protective label.

Better resistance

Deep colours

- For in- and outdoor use
- The appearance of labels is improved
- High-quality impression
- Protects print mark
- Protects the image of your product

#### Special materials

Different industry branches have different requirements to labels. Maybe you need labels that need be reliably fastened for a long time, and then be easily removed without leaving any traces. Maybe the label has to be scannable or easily visible from a distance. And when the label is attached to a product that the manufacturer has to recycle after end of usage, the label has to be recycleble together with the product. Some labels have to resist high temperature, some labels are part of security system. The special materials of 3M<sup>™</sup> labels satisfy all such needs.







On label materials for laser printers, both monochrome and colour



#### 3M<sup>™</sup> Laminating tapes

Double-sided tapes where reliable adherence on almost any substrate is achieved by various adhesive types. The products are manufactured under strict quality supervision as rolls or sheets. Adhesives suitable for demanding applications are high temperature, moisture and chemical resistant, and reliably adhere on problematic substrates.

Double-sided 3M laminated tapes are used for attaching:

- product labels on machines and devices
- printed control panels on electronic and electric
- devices used under demanding conditions
   styrofoam and sealing materials for the most
  - difficult applications in vehicle industry

Sheet tape is used when it has to be cut into a precise shape – double-sided high-quality cover paper with plastic surfaces also ensures a fast and smooth fastening.

Spacers for membrane switches

3M<sup>™</sup> spacers are single- or double sided tapes with support foil for manufacturing membrane switches and keypads. 3M has designed a product range for various membrane switch applications. The tapes reliably resist loads occurring during usage and ensure operation of devices under toughest conditions during the whole service life of a membrane switch.

Upon pressing a switch, the 3M spacers separate the printed boards included in the membrane switch from each other. Tape adhesive has a very high internal strength and tapes are designed for withstanding extreme temperature, moisture, UV radiance and chemicals. A full reliability and functionality is ensured by the 3M laminating tape selected as fastening tape for switches. This way, a faultless operation of the controlled device is ensured. The reliability achieved by 3M materials is a characteristic that leading device manufacturers in the health industry, for instance, have trusted for decades.





### **Structural Adhesives**



#### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> EPX<sup>™</sup> structural adhesives

Structural adhesives are very strong adhesives that allow making connections that resist high loads (7MPa). The strength of the adhesive connection is often as high as the internal strength of connected materials or even higher.  $3M^{\text{TM}}$  Scotch-Weld<sup>TM</sup> EPX structural adhesives range is widely used in product assembly where high bonding performance is required, and also for sealing and potting in electrical / electronic applications.

The EPX is system of controlled dosing two component adhesive.

Product	Colour	Mixing ratio (B:A)	Working time (in minutes)	Time to handling	Viscosity	Shear st	rength (Al, N	I/mm²)	Peeling strength	Tempera- ture resist-
		strength			-55°C	+23°C	+80°C	(AI, N/cm)	ance (°C)	
EPOXIDE ADHE	SIVES	1			<b></b>					
DP-100	Transparent	1:1	3-5	15 min	liquid	6	9	2	4	-50- +80
DP-105	Transparent	1:1	4-5	20 min	liquid	24	14	2	62	-50- +80
DP-110	Transparent or grey	1:1	8-10	20 min	semi-liquid	14	18	1	35	-50- +80
DP-125	Grey	1:1	25	2-3 h	semi-liquid	24	24	3	62	-50- +80
DP-190	Grey	1:1	90	4-6 h	semi-liquid	11	18	3	21	-50- +80
DP-270	Transparent or black	1:1	60-70	4-6 h	very thin liquid	8	17	2	<4	-50- +80
DP-410NS	Yellowish white	2:1	8-10	30 min	non-sagging	29	34	8	100	-50- +80
DP-460	Yellowish white	2:1	60	4-6 h	semi-liquid	31	31	5	107	-50- +80
DP-490	Black	2:1	180	4 h	non-sagging	24	30	12	92	-50- +120
DP-760	White	2:1	45-60	4-6 h	non-sagging	20	29	24	60	-50- +230
POLYURETHAN	E ADHESIVES	-								_
DP-609	Yellowish white	1:1	7	45 min	non-sagging	17	14	2	70	-50- +80
DP-610	Transparent	1:1	10	2 h	liquid	34	23	3	78	-50- +80
ACRYLIC ADHE	SIVES									
DP-801	Green	1:1	1-2	7 min	non-flowing	19	13	2	24	-50- +80
DP-804	Transparent	1:1	3	4	very thin liquid	-	8	9		0- +100
DP-807	Yellow	1:1	5	10 min	non-flowing	14	29	6	46	-50- +80
DP-810	Green	1:1	8	10-15 min	non-flowing	8	30	3	52	-50- +80
DP-812	Yellow	1:1	10	20 min	non-flowing	15	33	7	52	-50- +80
DP-825	Yellow	1:1	25	35 min	non-flowing	18	31	7	49	-50- +80
DP-8005	Yellowish white	10:1	2-3	90 min	non-sagging	12*	6*	2*	28**	-50- +80
DP-8010	Yellowish white	10:1	10	120 min	non-sagging	6*	10*	2*	28**	-50- +80
DP-8405NS	Green	10:1	2-4	14-16 min	mixed 75000	na	28.5	na	8.8	-50- +80
DP-8810NS	Blue-Green	10:1	8-12	16-20 min	mixed 90000	na	23.6	na	5.3	-50- +80

\*\* HDPE

#### Selection table for EPX adhesives by substrates

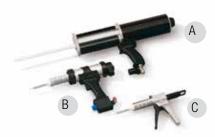
	Wood	Metal	Rubber	Glass	Plastic <sup>1</sup>	Nylon	Strong foams <sup>2</sup>	LSE materials <sup>3</sup>
Wood	DP-100 DP-125 DP-190 DP-609 DP-8405NS DP-8810NS	DP-125 DP-190 DP-460 DP-810 DP-8405NS DP-8810NS	DP-125 DP-190	DP-125 DP-190 DP-620NS DP-8405NS DP-8810NS	DP-125 DP-190 DP-620NS DP-8405NS DP-8810NS	DP-125 DP-190 DP-460 DP-609 DP-8405NS DP-8810NS	DP-125 DP-190 DP-620NS	DP-8005 DP-8010
Metal	DP-125 DP-190 DP-460 DP-810 DP-8405NS DP-8810NS	DP-110 DP-125 DP-190 DP-410NS DP-460 DP-810 DP-8405NS DP-8810NS	DP-125 DP-190	DP-125 DP-190 DP-804 DP-8405NS DP-8810NS	DP-110 DP-125 DP-190 DP-410NS DP-460 DP-609 DP-804 DP-804 DP-8405NS DP-8810NS	DP-125 DP-190 DP-8405NS DP-8810NS	DP-125 DP-190	DP-8005
Rubber	DP-125 DP-190	DP-125 DP-190	DP-125 DP-190	DP-125 DP-190	DP-125 DP-190	DP-125 DP-190	DP-125 DP-190	DP-8010
Glass	DP-125 DP-190 DP-620NS DP-8405NS DP-8810NS	DP-125 DP-190 DP-804 DP-8405NS DP-8810NS	DP-125 DP-190	DP-125 DP-190 DP-620NS DP-8405NS DP-8810NS	DP-125 DP-190 DP-620NS DP-8405NS DP-8810NS	DP-125 DP-190 DP-8405NS DP-8810NS	DP-125 DP-190 DP-620NS	DP-8010
Plastic <sup>1</sup>	DP-125 DP-190 DP-620NS DP-8405NS DP-8810NS	DP-110 DP-125 DP-190 DP-410NS DP-460 DP-609 DP-804 DP-804 DP-8405NS DP-8810NS	DP-125 DP-190	DP-125 DP-190 DP-620NS DP-8405NS DP-8810NS	DP-110 DP-125 DP-190 DP-410NS DP-460 DP-804 DP-8405NS DP-8810NS	DP-125 DP-190 DP-460 DP-8405NS DP-8810NS	DP-125 DP-190	DP-8005 DP-8010
Nylon	DP-125 DP-190 DP-460 DP-609 DP-8405NS DP-8810NS	DP-125 DP-190 DP-8405NS DP-8810NS	DP-125 DP-190	DP-125 DP-190 DP-8405NS DP-8810NS	DP-125 DP-190 DP-460 DP-8405NS DP-8810NS	DP-125 DP-190 DP-460 DP-8405NS DP-8810NS	DP-125 DP-190 DP-460	-
Strong foams <sup>2</sup>	DP-125 DP-190 DP-620NS	DP-125 DP-190	DP-125 DP-190	DP-125 DP-190 DP-620NS	DP-125 DP-190	DP-125 DP-190 DP-460	DP-125 DP-190 DP-620NS	DP-8005 DP-8010
LSE materials <sup>3</sup>	DP-8005 DP-8010	DP-8005	DP-8010	DP-8010	DP-8005 DP-8010	-	DP-8005 DP-8010	DP-8005 DP-8010

1) Plastics include ABS, PVC, acrylic, etc. (polyolephines are not included)

2) Rigid foams include styrene and urethane

3) LSE (low surface energy) materials include polyolefines, e.g. polypropylene and polyethylene.

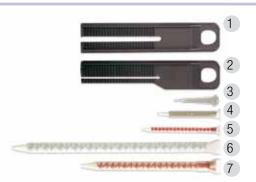
#### EPX adhesive applicators and accessories



EPX adhesive applicator with pressure air for 1:1 and 2:1 400 ml cartridges EPX adhesive applicator with pressure air for DP8005, DP8010 and 265 ml cartridges (not shown in the picture)

EPX adhesive applicator with pressure air for 1:1 and 2:1 50 ml cartridges
 Manual EPX adhesive applicator set with a 1:1/2:1 piston - suitable for
 B 50 ml cartridges

C Note! For 38 ml 10:1 cartridges (DP8005, DP8010), a 10:1 plunger is required.



- 1 EPX plunger for 50 ml cartridges with a mixture ratio of 1:1/2:1
- (2) EPX plunger for 38 ml DP8005/DP8010 cartridges with a mixture ratio of 10:1
- 3 Nozzle for 50 ml DP800 series adhesives
- 4 EPX<sup>™</sup> Square Orange Mixing Nozzle for 45 ml
- 5 Nozzle for 38 ml DP8005/DP8010 cartridges
- 6 Nozzle for all 400 ml cartridges
- 7 Nozzle for 265 ml DP8005/DP8010 cartridges

A



# 3M<sup>™</sup> Scotch-Weld Structural Adhesives in Duo-Pack Cartridges and Bulk

3M 7200 series adhesives are high performance, twopart toughened adhesive. Offers high shear and peel adhesion and outstanding levels of durability.

Product/colour	Main substance	Flowability	Mixing ratio (B:A)	Curing time	Shear strength (23°C, MPa) t	Additional information
7240 B/A FR	Modified Epoxy	thick	2:1	5 h	20-25	Fire proof (F.A.R. 25).
7260 B/A	Modified Epoxy	liquid	2:1	18 h	30-35	Also available in liquid version S/W 7260 B/A FC NS.
7260 B/A FC	Modified Epoxy	liquid	2:1	7 h	30-35	Also available in liquid version S/W 7260 B/A NS.
7231 B/A	Ероху	liquid	10:7, By weight	6-8 h	-	Easily applied floor adhesive.
1838 green	Ероху	liquid	4:5	60 min	-	Excellent for bonding many metals, woods, rubbers and some plastics.
2214 regular gray	Modified Epoxy	paste	-	60 min	-	High temperature strength, low tem- perature curing
2216 gray	Modified Epoxy	liquid	2:3	10 h	-	High performance, rigid bonds
3532	Urethane	-	1:1	90 min	25	Multi purpose, semi-rigid bonds.
3549	Urethane	thick	1:1	8 h	30-35	Tough Flexible bonds.
7260NS	Modified Epoxy	half-thick	2:1	5 days	-	
7271	Epoxy acrylate	thick	1:1	-	-	Extremely non-sag.
9323	Ероху	half-thick	2:1	7 days	-	High impact resistance. High environ- mental resistance.

\* Products are available in duo pack and bulk packaging.



#### Special structural adhesives

In addition to a fast curing, the 3M Scotch-Weld structural adhesives have very good tensile, cutting and peeling strength that ensure a great result. Structural adhesives are used where both static and dynamic loads apply. By using them, various materials can be connected and welded joints, screws, rivets and other regular mechanical fastening methods. Structural adhesives distribute the load in one area of the connection evenly to the whole structure, thereby reducing point load and giving the connection impact and vibration resistance.

Product	Colour	Filling a clearance (mm)	Viscosity (cPs)	Temperature resistance	Time to handling strength	Full cure	Additional information
SA30	Yellowish white	1 mm	22.000	-50°C - +130°C	90 s	24 hours	SA30 is a two component, toughened acrylic adhe- sive system, which must be cured with Scotch-Weld AC38 Liquid Activator. Scotch-Weld SA30 does not require mixing prior to use and cures to give a tough, impact resistant bond with good peel strength.
SA40	Green	0.3 mm	Osa A: 900-1400 ja Osa B: 1000-1500 1000-1500	-50°C - +120°C	30 s	24 hours	SA40 is a two component acrylic adhesive system, which cures rapidly when used in equal portions at room temperature. SA40 is formulated to bond metal to metal and ferrite to metal surfaces. Unlike epoxy adhesives you don't need to pre-mix the parts. A rapid cure is acheived when the two components come into contact during the assembly process.
EP20	Grey	not determined	Set	-50°C - +120°C	20 min	24 hours	EP20 is a two-colour, co-extruded epoxy putty stick for repairing metals, ceramics, wood, concrete and some plastics. The products are easily kneaded by hand and moulded into the required shape. Once fully cured EP20 sets hard and can be drilled, tapped, filed, sanded and painted.
SC6151	Red-orange	6 mm	Paste	-50℃ - +260℃	-	2mm / 24 hours	SC6151 is a one component, acetoxy-curing, high temperature RTV (room temperature vulcanised) silicone designed for gasketing and sealing applications.













#### 3M<sup>™</sup> Scotch-Weld Instant Adhesives

The 3M Scotch-Weld cyano acrylates are carefully designed single-component fast adhesives that can be easily used, do not contain solvents, and ensure a good tensile and cutting strength. Cyano acrylates connects many materials, thereby leaving a transparent adhesive surface within just seconds. The wide product range of 3M Scotch-Weld cyano acrylates bonds metal, plastic, wood, ceramics, rubber and composites.



Product	Colour	Filling a clearance (mm)	Viscosity (cPs)	Temperature resistance	Working time (seconds)	Full cure	Additional information
Ethylcyanoad	crylate	1				1	
EC5	Transparent	0.05	5	-50°C - +80°C	5-15	24 hours	Liquid adhesive for general use.
EC40	Transparent	0.10	40	-50°C - +80°C	10-30	24 hours	Fast adhesive for general use.
EC100	Transparent	0.15	100	-50°C - +80°C	10-40	24 hours	Adhesive with medium viscosity for general use.
EC1500	Transparent	0.20	1500	-50°C - +80°C	20-60	24 hours	Viscous adhesive for porous materials.
EC2500	Transparent	0.20	2500	-50°C - +80°C	20-60	24 hours	Non-flowing adhesive for general use.
To be used a	it high temperatu	res					
HT100	Transparent	0.15	100	-50°C - +105°C	15-40	24 hours	To be used at high temperatures.
Low odour							
L0100	Transparent	0.15	100	-50°C - +70°C	10-60	24 hours	Viscosity low odour cyanoacrylate, for general purpose, low odour bonding.
L01000	Transparent	0.20	1000	-50°C - +70°C	20-70	24 hours	Odour-free, low flowability.
For bonding	metals						
MC100	Transparent	0.15	100	-50°C - +80°C	5-20	24 hours	Liquid adhesive for metals.
MC1500	Transparent	0.20	1500	-50°C - +80°C	5-60	24 hours	Thick adhesive for metals.
For plastic a	nd rubber						
PR20	Transparent	0.10	20	-50°C - +80°C	2-20	24 hours	Liquid adhesive for various foils and rubber.
PR40	Transparent	0.10	40	-50°C - +80°C	3-20	24 hours	Liquid adhesive for LSE foils and rubber.
PR100	Transparent	0.15	100	-50°C - +80°C	10-30	24 hours	Fast adhesive for EPDM-rubber.
PR600	Transparent	0.15	600	-50°C - +80°C	4-25	24 hours	Fast curing.
PR1500	Transparent	0.20	1500	-50°C - +80°C	20-100	24 hours	Fast curing adhesive for EPDM-rubbers.
Reinforced v	vith rubber partic	les					
RT300B	Black	0.20	600	-50°C - +105°C	5-50	24 hours	Heat-proof.
RT5000B	Black	0.20	5000-15000	-50°C - +80°C	26-30	24 hours	Fastened with respective adhesive.
All materials							
SI100	Transparent	0.15	100	-50°C - +80°C	3-30	24 hours	Liquid adhesive for all surfaces.
SI1500	Transparent	0.20	1500	-50°C - +80°C	3-30	24 hours	Thick adhesive for all surfaces.
SIGel	Transparent	0.50	50-90.000	-50°C - +80°C	3-30	24 hours	Gel adhesive for most surfaces.
Fast instant	adhesive						
SF5	Transparent	0.05	3	-50°C - +80°C	1-20	24 hours	Very fast adhesive for difficult surfaces.
SF20	Transparent	0.10	20	-50°C - +80°C	3-30	24 hours	Liquid adhesive for most materials.
SF100	Transparent	0.15	90	-50°C - +80°C	3-30	24 hours	Instant adhesive for most materials.

#### 3M<sup>™</sup> Scotch Weld Anaerobic Adhesives

The 3M Scotch-Weld anaerobic adhesives are strong, fast and reliable. They are single-component and cure in an air-free environment in contact with metal ions. Anaerobic adhesives are used for manufacturing and maintenance of many original equipments as well as in various areas for preventive and overhaul maintenance of applications. Adhesives are available with various strengths and viscosities. Anaerobic adhesives are used for locking screws and threads as well as for sealing thread, pipe, hydraulic and flat connections. The selection includes various fastening and sealing products for various cylindrical components. Adhesives are often used in automotive industry.



Product	Colour	Filling a clearance (mm)	Viscosity (cPs)	Temperature resistance	Working time (seconds)	Full cure	Additional information
Sealing m	nasses			·			
GM10	Reddish orange	0.50	425.000	-50°C - +200°C	20 min	24 hours	For rigid similar metal surfaces. Creates a fast low pressure sealing.
GM18	Red	0.50	500.000	-50°C - +150°C	35 min	24 hours	Suitable for rigid and different metal surfaces, non- sagging.
GM74	Orange	0.35	80.000	-50°C - +150°C	≥ 15 min	24 hours	Universal sealing mass both for bonding similar and different metal surfaces.
Hydraulic	sealings			·			
HP42	Orange	0.20	500	-50°C - +150°C	15 min	24 hours	Pipe seal in hydraulics for threads with high and medium density. Pipe diameter not exceeding 15 mm.
Pipe seali	ings						
PS65	White	0.50	300.000	-50°C - +150°C	≤ 120 min	24 hours	Non-sagging pipe sealing with high viscosity, suit- able for locking and sealing threads of pipes with a diameter of 15-18 mm.
PS77	Yellow	0.25	48.000	-50°C - +150°C	15 min	24 hours	Non-sagging pipe sealing with high viscosity, suit- able for locking and sealing threads of pipes with a diameter of 15-18 mm.
Bonding a	adhesives						
RT20G	Yellowish green	0.40	20.000	-50°C - +230°C	15 min	24 hours	Filling and temperature resistant bonding adhesive for cylindrical parts.
RT2233	Red	0.25	2.000	-50°C - +150°C	15 min	24 hours	Bonding adhesive with medium strength for cylindrical components.
RT38	Green	0.25	2.500	-50°C - +150°C	≤ 15 min	24 hours	Bonding adhesive with high strength for cylindrical components.
RT381	Green	0.30	25.000	-50°C - +150°C	≤ 10 min	24 hours	High viscosity bonding adhesive.
RT41	Yellowish brown	0.20	500	-50°C - +150°C	15 min	24 hours	Medium viscosity bonding adhesive.
RT48	Green	0.20	600	-50°C - +150°C	10 min	24 hours	High strength fastener for press mounting of cylin- drical components.
Thread lo	ocks						
TL22	Purple	0.25	5.000	-50°C - +150°C	≤ 15 min	24 hours	Low-strength thread lock.
TL42	Blue	0.25	5.000	-50°C - +150°C	≤ 15 min	24 hours	Non-sagging thread lock.
TL43	Blue	0.30	14.000	-50°C - +150°C	≤ 15 min	24 hours	Universal thread lock.
TL62	Red	0.62	7.000	-50°C - +150°C	≤ 15 min	24 hours	High-strength thread lock.
TL70	Green	0.20	500	-50°C - +150°C	≤ 15 min	24 hours	High-strength, locks forever. For big components.
TL71	Red	0.20	500	-50°C - +150°C	≤ 15 min	24 hours	High-strength, locks forever. For stud bolts.
TL72	Red	0.30	23.000	-50°C - +230°C	≤ 15 min	24 hours	High-strength, heat resistant.
TL77	Red	0.20	7.000	-50°C - +150°C	≤ 15 min	24 hours	High-strength, non-sagging.
TL90	Light green	0.15	10	-50°C - +150°C	≤ 15 min	24 hours	Flowing, can be applied between components after their connection.



#### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> cyanoacrylate adhesive

Scotch-Weld<sup>™</sup> Cyanoacrylate Adhesives are high specification - single component adhesives. Fast and easy to use - these adhesives are solvent free and exhibit high tensile and shear strengths. Scotch-Weld Cyanoacrylate Adhesives bond a wide variety of substrates and can be easily used with both manual and automated dispensing equipment.



#### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> pipe sealant PS77

The pipe sealant has been designed for sealing in order to avoid leakages of gaseous and liquid substances. Replaces regular pipe tape and allows save costs.



#### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> cylindrical component bond RT38

Bonding adhesives are especially strong, have a long service time and a high temperature resistance. They can be used for reliable bonding gear wheels to shaft, or bearings. RT38 creates a strong and reliable connection where disassembly is not required for maintenance. Fastening bushes, sleeves to shaft.



#### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> bonding adhesive RT41

RT41 is formulated for bonding cylindrical parts, to give medium strength retaining. Typical applications include mounting bearings in place on shafts and in housings. The controlled medium strength allows disassembly for servicing and bearing re-use. RT41 is designed to augment the strength of press fit assemblies. Once applied, parts slip together easily, lubricated by the adhesive. RT41 prevents corrosion of assembled parts.



### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> medium-strength oil proof thread adhesive TL43

Fast curing, medium strength screw lock. Prevents screws, nuts, and other threaded metal parts from loosening as a result of vibration. Besides that, seals and protects from corrosion, can be opened by hand tools. Suitable for slightly oiled surfaces.

#### 3M<sup>™</sup> Scotch Weld UV-curing Adhesives

The 3M Scotch-Weld UV-curing adhesives are efficient single-component products that polymerise when exposed to UV radiation. They create transparent and strong bonds. UV-adhesives are suitable for bonding glass, metal and plastics in case UV radiance passes at least one of the materials being connected. Adhesives curing under exposure to UV radiance can be used for bonding, protective lamination, encapsulating, insulation and sealing of cast masses.



Prod- uct	Colour of cured adhesive	Viscosity (cPs)	Time to handling strength (efficiency: 10 mW/cm <sup>2</sup> @365 nm)	Curing depth (curing 30s, 10 mW/cm <sup>2</sup> @365 nm)	Temperature resistance	Additional information
UV011	Transparent	90	< 10 s	2 mm	-50 - +120°C	Flowing adhesive for connecting metals and plastics.
UV02	Transparent, slightly yellowish	3200	< 2 s	4 mm	-50 - +120°C	Filling adhesive for sealing, insulation and encapsulating of cast masses.
UV301	Transparent	250	< 5 s	2 mm	-50 - +120°C	For strong PVS and polycarbonate materials.
UV50	Transparent	6500	< 3 s	3 mm	-50 - +120°C	Multi-purpose adhesive.
UV51	Transparent	55	< 5 s	2 mm	-50 - +120°C	Very strong adhesive with a good flowability for glass materials.
UV57	Transparent	580	< 5 s	3 mm	-50 - +120°C	Transparent adhesive for connecting glass with glass.
UV60	Transparent	1500	< 15 s	2 mm	-50 - +120°C	Very string adhesive for glass and metal bonds.
UV75	Transparent	1800	< 3 s	5 mm	-50 - +120°C	Medium thickness adhesive, becomes transparent and flexible after curing.
UV843	Transparent	2500	< 5 s	2 mm	-50 - +120°C	Fast drying, strong and viscous adhesive for connecting glass with metal.

#### Primers and activators

3M Scotch-Weld activators and primers expand the application areas of adhesive range. These products accelerate curing of cyanoacrylate adhesive or increase the surface energy of materials, allowing making connections with polyethylene polypropylene and even PTFE-surfaces. Activators can also be used after applying adhesive to the surface, in order to accelerate curing of the thick adhesive layer. Anaerobic adhesive activators have been designed for accelerating the curing of screw connections, lockings, sealings and flat sealings when connecting metals. Correct surface preparation ensures a strong connection on non-active substrates such as anodized metal, stainless steel and galvanized components.



Product	Colour	Compatibility with product	Additional information				
Activator							
AC11	Transparent	Cyanoacrylate adhesive	Accelerates curing of adhesive, thick adhesive layer and hollows.				
AC12	Transparent	Cyanoacrylate adhesive	Accelerates curing of adhesive, thick adhesive layer and hollows. Designed for us with especially sensitive plastics.				
AC38	Dark brown		Used with SA30 construction adhesives.				
AC64	Transparent, light green	Anaerobic adhesives	Accelerates curing of adhesive and allows using adhesive on inactive surfaces.				
Primer adhesive							
AC77	Transparent	Cyanoacrylate adhesive	Allow using the adhesive on difficult surfaces such as polyethylene and polypropylene.				
Adhesive remover							
AC68	Transparent	Cyanoacrylate adhesive	Removes cured or non-cured adhesive from surfaces and skin.				
Cleaning agent							
AC70	Transparent	Cyanoacrylate adhesives. Anaerobic adhesives.	Efficient and fast surface cleaning agent as spray.				

#### **Reactive PUR-adhesives**

3M<sup>™</sup> Scotch-Weld<sup>™</sup> reactive polyurethane adhesives cure due to moisture present in the adhesive, thus allowing very strong surface connections. The unique chemical composition of PUR adhesives makes it possible to connect various materials, including wood, plastics and rubber. Besides that, PUR adhesives do not cause harmful reactions with plastics. As an option, a pre-heater for PUR adhesives is available and can be held ready for use with four cartridges.

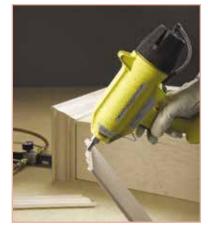
3M<sup>™</sup> Scotch-Weld<sup>™</sup> (PUR) Easy 250 - yellow adhesive system











Product	Product viscosity 121°C (cPs)	Usage time (min)	Working time (s)	Shore D	Viscosity (%)	Additional information
TE-030	16 000	1	30	60	725	Extrudable grade with fast set time ideal for bonding wood. Also bonds selected plastics.
TE-100	7 000	2	60	60	675	Extrudable grade with medium set time and low viscosity ideal for bonding wood. Bonds selected plastics. Yields thin glue lines.
TE-200	3 000	4	120	60	625	Extrudable grade with fast set time, long open time ideal for bonding wood. Yields thin glue lines.
TE-031	13 000	2	30	50	725	Fast adhesion. Compatible for connection with plastics, such as PMMA, PS and PU.
TS-230	9 000	4	150	45	700	The most versatile adhesive in this series. Long working time , suit- able for various plastics, amongst others PMMA and PS. Also glues aluminium, glass, wood. Can be sprayed.
EZ2 50150	9 000	4	150	45	700	Long open and set time ideal for bonding a wide variety of substrates including wood, plastics and also bonds aluminium glass to plastics and wood.
EZ2 50015	7 000	1.5	15	65	750	Fast setting adhesive ideal for bonding wood and select plastics.
EZ2 50060	7 000	2	60	60	675	Medium setting, low viscosity ideal for wood and select plastics.
EZ2 50120	3 000	4	120	60	625	Medium setting, low viscosity ideal for bonding wood and pruducing thin glue lines.
EZ2 50200	-	-	>61	30		Long open time with a thin bond line for many material combinations.
EZ2 50030	13 000	2	30	50	725	Fast setting adhesive ideal for bonding many plastics including polysty- rene and polyacrylic.

# **Non Structural Adhesives**

The 3M<sup>™</sup> Scotch-Weld<sup>™</sup> hot melt system is a universal and simple way for manufacturing most often used materials in industry. A great selection contains suitable products for packing, connecting plastics as well as for furniture and electronics industry.

Hot melts do not contain solvents and are made from thermal plastics that become liquid upon heating. After cooling off, they form a strong bond. Hot melts can be used with many different materials such as wood, plastics, foamed materials: foamed materials, fabric, polystyrene and cardboard. Hot melt is not recommended for metals.

#### Specifications of Hot Melts

Adhesive	Colour	Product range	Temperature resistance	Shear strength (N/mm <sup>2</sup> )	Peeling strength (N/cm)	Additional information					
LOW-MELT h	OW-MELT hot melts. Adhesives can be used already at 130°C as well as for fastening sensitive materials such as styrofoam.										
3762LM	Light brown	TCQ LT, EC	0 - +55	3.3	10	Great adherence on surface.					
3792LM	Transparent	TCQ LT, EC	0 - +60	2.4	22	Long usage time.					
3731	Off-white, Tan	B, Q	0 - +129			High temperature resistance, fast setting, low sur- face energy (LSE) substrate bonding thermoplastic adhesive.					
Hot Melt	Hot Melt										
3738	Brown	TCQ, EC, SW2	0 - +55	2.58	23	Long working time.					
3747	Light brown	TCQ, EC, SW2	0 - +65	2.96	35	General purpose. Compatible for plastics and wood.					
3748	Natural white	TCQ, EC, SW2	0 - +80	1.7	31	Good temperature resistance. For use in electronics.					
3748V-0	Light yellow	TCQ, EC	0 - +80	1.89	26	3748 is self-extinguishing.					
3762	Brown	TCQ, EC, SW2	0 - +55	3.75	12	Great adherence to substrate.					
3764	Transparent	TCQ, EC, SW2	0 - +60	2.69	25	Great adhesive for plastics.					
3779	Transparent, yellowish brown	TCQ, EC, SW2	0 - +150	4.82	32	High temperature resistance, for use in electronics.					
3789	Transparent, yellowish brown	TCQ, EC, SW2	0 - +105	3.9	28	Good softener and fuel resistance.					
3792	Transparent	TCQ, EC, SW2	0 - +60	1.7	23	Universal adhesive, long working time.					
3796	Brown	SW2	0 - +100	3.8	51	High temperature resistance, perfect for plastics.					



Scotch-Weld Quadrack cartridge measurements are 15 x 200 mm and weight 30 grams. They are used together with adhesive applicators TC Quadrack, TC Quadrack LT and EC. Cartridges are sold in 5 kg boxes containing about 165 cartridges.

Scotch-Weld PG cartridge measurements are 26 x 76 mm and weight 36 grams. They are used together with the adhesive applicator SW2. Cartridges are sold in 10 kg boxes containing about 270 cartridges.



### Hot Melt selection table

Substrate to be bonded		and	Hot Melt		
Plastic components:	Acrylic	Plastic, wood and cardboard	3764, 3792, 3792LM		
	Soft vinyl		3789		
	Hard vinyl		3764, 3789, 3792, 3792LM		
	Polyester		3764, 3792, 3792LM		
	PE/PP		3731, 3748, 3764, 3792, 3792LM		
	Abs/polycarbonate		3764, 3792, 3792LM		
	Strong polystyrene		3764, 3789		
	Polystyrene foam		3762LM, 3792LM		
	Polyurethane foam		3764, 3789, 3792, 3792LM		
Rubber		Plastic, rubber and wood	3747, 3748, 3789		
Metal		Metal	3738, 3747, 3796*		
		Rubber	3738, 3747, 3796*		
		Wood, paper, textile and fabric	3738, 3747		
		Glass and ceramics	3796*		
		Leather	3789, 3796*		
		Plastic	3747, 3796*		
Paper and cardboard		Paper and cardboard	3762, 3762LM		
		Metal, plastics or glass	3738, 3747, 3792, 3792LM		
Wood		Metal	3738, 3796*		
		Rubber	3717, 3789		
		Wood	3738, 3747, 3789, 3792, 3792LM		
		Paper, cardboard, textile or fabric	3738, 3747, 3789, 3792, 3792LM		
Textile, fabric		Plastics, wood or glass	3738, 3764, 3789, 3792, 3792LM		
Glass and ceramics		Glass, ceramics, textiles, fabric, cardboard or plastic	3764, 3789		
		Metal	3796*		
Leather		Leather, metal or wood	3789, 3796*		







<sup>\*</sup> available with a Scotch-Weld 2 adhesive applicator only.



#### 3M<sup>™</sup> Low Melt adhesives

Low Melt adhesives (LM) already melt at 130°C. 3762 LM has been designed for sealing packages. Thanks to immediate adhesion, the connection is produced quickly.

3792 LM multi-purpose adhesive for bonding polystyrene foam, polyolefines, ABS, polycarbonate and wood.



# 3M<sup>™</sup> Hot Melt 3748

3748 is a hot melt that easily adapts to temperature changes. The adhesive can replace silicones curing at room temperature as well as polyamide based hot melts. It adheres well to plastics with low surface energy.

#### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> EC hot melt applicator

EC is the newest and most universal adhesive applicator. Temperature adjuster allows dosing the melt at various temperatures between 130-232°C. Ergonomic grip and adjustable feed mechanism allow exact dosing. Feed capacity of adhesive: 50 g/min Weight: 860 g Capacity: 380 W Adhesive cartridges: S/W Quadrack and S/W Quadrack/LM





3M<sup>™</sup> Scotch-Weld<sup>™</sup> TC Quadrack hot met applicator

3M<sup>™</sup> Scotch-Weld<sup>™</sup> hot melt applicator TC Quadrack palm trigger causes less tiredness when long glue strips are required.

3M<sup>™</sup> Scotch-Weld<sup>™</sup> LT Quadrack adhesive gun

Weld adhesive applicator LT Quadrack is an adhesive applicator for Low Melt adhesives where adhesive temperature is about 130°C.

Feed capacity of adhesive: 36 g/min Weight: 370 g Power: 150 W Adhesive cartridges: S/W Quadrack

Feed capacity of adhesive: 36 g/min Weight: 370 g Power: 150 W Adhesive cartridges: S/W Quadrack/LM

#### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> Polygun 2 adhesive applicator

This pressure air adhesive applicator has the biggest feed capacity in the series. The adhesive applicator Scotch-Weld 2 is recommended when long adhesive strips or big adhesive amounts are required. A feed magazine is available for the adhesive applicator. Besides that, the adhesive applicator can be fastened to table, allowing to use the adhesive applicator with a semi-automatic pedal. Feed capacity of adhesive: 60 g/min Weight: 1500 g Capacity: 500W Adhesive cartridges: S/W PG





#### 3M<sup>™</sup>Scotch-Weld<sup>™</sup> hot melt accessories

Nozzle	Tip no.	Description	Adhesive applicator
А	9922	Nozzle for flowable adhesives. 1.6mm opening.	EC/TCQ/TCQ LT
В	9921	Standard nozzle. 2.3mm opening.	EC/TCQ/TCQ LT
С	9940	Nozzle for solid adhesives. 3.2mm opening.	EC/TCQ/TCQ LT
D	9725	Long nozzle. 1.8mm opening.	EC/TCQ/TCQ LT
Е	9785	Long conical aluminium nozzle. 1.8mm opening.	EC/TCQ/TCQ LT
F	9846	Long brass nozzle. 1.8mm opening.	SW 2
G	9726	T-nozzle + valve	EC/TCQ/TCQ LT
Н	9727	L-nozzle + valve	EC/TCQ/TCQ LT
I	9929	Nozzle + valve for solid adhesives recommended for 3779, 3789 and 3747 adhesives)	EC/TCQ/TCQ LT

# 3M<sup>™</sup> Scotch-Weld<sup>™</sup> Aerosol Adhesives





3M aerosol adhesives can be easily used and applied. Always ready for use products create a strong, elastic and consumption efficient bond. The range includes five aerosol adhesives for different purposes:

74: styrofoam and textile adhesive that is perfect for upholstering.

75: adhesive for temporary bonding of light materials.77: multi-purpose adhesive for permanent bonding of light materials.

80: contact adhesive for bonding various rubbers (e.g. EPDM). Also suitable for fastening vinyl and leather

90: fast adhesive for plastics. Bonds even polyethylene and polypropylene to wood, metal and many other materials.



By spraying, an even and thin adhesive layer can be achieved.



A special spray pattern allows achieving clear contours.

Product	S-W 74	S-W 75	S-W 77	S-W 80	S-W 90
Adhesion strength	Good	Removable	Moderate	Especially good	Good
180° peeling strength N/25mm	89	22	67	155	111
Weather proofness	Good	Moderate	Especially good	Good	Good
Water proofness	Good	Good	Especially good	Especially good	Good
UV radiance proof	Moderate	Good	Moderate	Good	Moderate
Softener proofness	Not good	Not good	Moderate	Especially good	Not good
Oil and fuel proofness	Not good	Not good	Not good	Good	Not good
Time resistance	Great	Great	Especially good	Great	Great
Temperature resistance°C	49	49	43	93	71
Open time: When covering a single surface	-	5 sec - hour	30 sec - 15 min	-	30 sec - 2 min
When covering both surfaces	15 min	5 sec - hour	30 sec - 30 min	4 min - 30 min	2 min - 10 min
Sprayer	Adjustable	Fixed	Adjustable	Fixed	Adjustable
Spray Pattern	Lace	Mist	Mist	Lace	Lace



### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> Cleaner spray

The cleaner spray is a universal cleansing agent that efficiently removes regular dirt such as grease, oil and mud. It can also remove residues of many adhesives. The cleaner spray does not contain solvents.





# Aerosol Adhesive Cylinders

The 3M<sup>™</sup> Sprayable Adhesives portfolio offers a complete continuum of products for bonding a variety of surfaces; water-based adhesives, solvent-based adhesives, aerosol, cylinder, and bulk dispensing options. GreenGuard<sup>™</sup> Certified and LEED -Compliant products, regulatory compliance solutions.

3M Cylinders are self-contained and pressurized. Available in a variety of sizes, they are portable and require minimal equipment investment and maintenance. Their optimized spray patterns cut waste and maximize adhesive coverage.

Product	Colour	Substrate
70	Clear	EPDM Rubber, Fabric, Felt, Cork & Fibrous Glass, Flexible Foam (Latex, Urethane), Glass & Ceramics, Leather, Metal, Paper & Cardboard, Plastics (ABS, PVC, Acrylic), Plastics (Flexible Vinyl), Plastics (High Performance Nylon), Plastics (Polyolefins and Thermoplastic Elastomers), Rigid Foam (Beadboard Styrene), Rigid Foam (Urethane), Rubber (Except EPDM), Wood & Hardboard
74	Clear, Orange	Rubber (Except EPDM), Metal, Paper & Cardboard, Leather, Wood & Hardboard, Plastics (ABS, PVC, Acrylic), Fabric, Felt, Cork & Fibrous Glass, Plastics (Flexible Vinyl), Flexible Foam (Latex, Urethane), Plastics (Polyolefins and Thermo- plastic Elastomers), Glass & Ceramics, Rigid Foam (Urethane), EPDM Rubber, Plastics (High Performance Nylon)
77	Translucent, Clear	Rubber (Except EPDM), Metal, Paper & Cardboard, Leather, Wood & Hardboard, Plastics (ABS, PVC, Acrylic), Fabric, Felt, Cork & Fibrous Glass, Plastics (Flexible Vinyl), Flexible Foam (Latex, Urethane), Plastics (Polyolefins and Thermo- plastic Elastomers), Glass & Ceramics, Rigid Foam (Urethane), EPDM Rubber, Plastics (High Performance Nylon)
78HT	Blue	Rubber (Except EPDM), Metal, Paper & Cardboard, Leather, Wood & Hardboard, Plastics (ABS, PVC, Acrylic), Fabric, Felt, Cork & Fibrous Glass, Plastics (Flexible Vinyl), Flexible Foam (Latex, Urethane), Plastics (Polyolefins and Ther- moplastic Elastomers), Rigid Foam (Beadboard Styrene), Glass & Ceramics, Rigid Foam (Urethane), EPDM Rubber, Plastics (High Performance Nylon)
94CA	Red, Clear	Rubber (Except EPDM), Metal, Paper & Cardboard, Leather, Wood & Hardboard, Plastics (ABS, PVC, Acrylic), Fabric, Felt, Cork & Fibrous Glass, Plastics (Flexible Vinyl), Flexible Foam (Latex, Urethane), Plastics (Polyolefins and Thermo- plastic Elastomers), Glass & Ceramics, Rigid Foam (Urethane), EPDM Rubber, Plastics (High Performance Nylon)
Adhesive Remover Cylinder	Pale Yellow, Clear	All substrates



## Aerosol Adhesive Cylinders Equipment

Product
Applicator W/QSS Tip
Output (incl 4001)
Output (incl 9501)
VE 12 Foot Hose
VE 4001 Spray Tip
VE 6501 Spray Tip
VE 9501 Spray Tip
VE QSS Spray Tip

# Solvent based adhesives

### Aerosol adhesives table

What is glued	With what	Recommended adhesive
Plastic (acrylic)	Metal, plastic, wood (plate), acrylic	77, 90
Plastic (vinyl)	Metal, plastic wood (plate)	90** 80, 90**
Plastic (polyester) and plastic foil	Metal, plastic, wood (plate)	80, 90 77, 80, 90 80, 90
Plastic (polyethylene and polypropylene)	Metal, plastic, wood (plate)	90
Plastic (ABS and polycarbonate)	ABS, polycarbonate, metal, wood (plate)	77, 80
Plastic (polystyrene)	Metal, plastic, wood (plate)	80, 90
Plastic (polystyrene foam)	Metal, plastic, wood (plate)	77
Plastic (PU foam)	Metal, plastic, wood (plate)	74, 75*, 77, 80, 90
Plastic (PVC)	Metal, plastic, wood (plate)	77, 80, 90
Plastic (vinyl, softened)	Metal, plastic, wood (plate)	80
Rubber	Metal, plastic Painted surfaces, rubber, wood (plate)	80 90 (vain SBR)
Metal	Fabric, felt, cork, glass fibre. Glass, ceramic, leather, metal. Paper and cardboard, rubber.	77, 90 80, 90 75, 77 80
Paper and cardboard	Metal, glass, ceramic, paper, cardboard, wood (plate)	75*, 77
Wood (plate)	Fabric, felt, cork, paper, cardboard, glass fibre. Metal, rubber, wood (plate)	75*, 77, 90 80, 90
Fabric	Metal, glass, ceramic, paper, cardboard, wood (plate)	
Felt and cork	Metal	77, 80, 90
Glass fibre	Glass, ceramic, paper, cardboard, wood (plate), painted surfaces.	74
Glass and ceramics	Fabric, felt, cork, glass plastic, paper and cardboard. Glass and ceramic, metal, plastic.	75*, 77 80, 90
Leather	Leather, metal, wood (plate)	80, 90

\* for temporary bonding \*\* plastic softeners can affect the strength/durability of bond

## Other solvent based adhesives

Product	Colour	Base	Viscosity	Density	Open time	Temperature resistance°C	Application method	Additional information
847	Brown	Nitrile	Medium liquid	33-39%	20 min	-40 - +120	Brush, spatula, air gun	Special adhesive for rubber, foil, steel, alu- minium and leather. Resistant to most oils.
1099	Light	Nitrile	Very thin	31-37%	15 min	-40 - +120	Brush, spatula, air gun	Compatible with foil, metal and rubber ma- terials and especially on hard and soft PVC.
4475	Transparent	Synthetic resin	Thick/ dense liquid	41-45%	10 min	-30 - +80	Brush, spatula, air gun	Great resistance to softeners. Compatible with plastics, glass, leather, fabrics and metals.
10	Yellow	Polycholorpren	Liquid	21-23%	30 min	-30 - +105	Brush, syringe	Contact adhesive for bonding laminates, rubber, fabrics and PVC.
1300L	Yellow	Polycholorpren	Liquid	28-35%	8 min	-21 - +149	Brush, syringe	Good temperature resistance.

# Water based contact adhesives



Water based contact adhesives are an environmental friendly alternative to solvent based adhesives as they do not contain volatile organic compounds. Water based adhesives allow bonding many materials such as wood, paper, cork, leather, fabric, plastics, glass and ceramics. The adhesives resist moisture and are durable.

	Contact adhesive				Foam rubber adhesive	Insulation materi- als adhesive	Pressure sensitive adhesive
Product	S/W 30	S/W 40	S/W 2000	FT 1000NF	S/W 100	S/W 49	S/W 4235
Product charac- teristics	Good mechanical properties for laminating. Long usage time. Adheres well on many various sur- faces. S/W 2000 is two-component.		3M <sup>™</sup> Fast Tack Water Based Adhesive 1000NF is a high performance waterbased one part ad- hesive formulated for fast bonding. This adhesive adheres to may types of flexible foam, latex foams, fabric, polyester, fibrefill, wood, plywood, particleboard and many types of plastic and metal surfaces.	Fast drying / tack phase achieved quickly. For porous materials.	Fast adherence. Possibility to apply on one surface only. For bonding light materials.	Lower adherence allows reposition- ing Working time several days, can be applied on one surface only.	
Adherence	Slow	Medium	Fast	Fast, repositionable whilst wet	Fast	Fast	Medium
Base	Polychloropren	Polychloropren	Polychloropren	Acrylic	Polychloropren	Acrylic	Acrylic
Adhesive colour (after drying)	Neutral or blue	White	Neutral or blue	Neutral, Purple	Neutral or blue	Transparent	Transparent
Viscosity (cPs)	400 (liquid)	8000 (non-sagging)	400 (liquid)	400-1100	15-40 (very thin)	450-650 (liquid)	4000 (medium liquid)
Dry-substance content	50%	49%	50%	46-51%	47%	47%	55%
Usage time	4 h	4 h	2 h	1-10 min	20 min	Over 30 days	Over 30 days
Temperature resistance°C	-40 - +110	-40 - +110	-40 - +110	+149	0 - +110	-40 - +90	-40 - +60
Coverage (m²/l)1	7-21	6-12	7-21	17.7	About 24	About 20	6-18
Application method	Sprayer, roll, brush	Sprayer, roll, brush, spatula	Sprayer	Brushed, rolled, spray	Sprayer	Sprayer, roll, brush	Sprayer, roll, brush
Application areas	Wood, cork, leather, felt, plastics (incl. PP), elastic and rigid foam, high-pressure laminate, steel <sup>2</sup> , aluminium, painted metal, glass plastic, insulation (glass and stone wool), polystyrene.			Bond foamed materials, plastic laminates, wood, plywood and canvas	Flexible PU foam, latex, fabric, poly- ester, wood, ply- wood, chipboard, many plastics and metals.	Glass and stone wool, insulation foil, paper and other materials.	Glass wool, canvas, paper, cardboard, plastic (incl. PP, PE), rub- ber (incl. EPDM), wood, glass, steel <sup>2</sup> , aluminium, painted metal and polystyrene.

<sup>1</sup> depends on application method and substrate porosity

<sup>2</sup> has to be protected from corrosion, cannot be applied on clean metal



# 3M<sup>™</sup> Scotch-Weld<sup>™</sup> 30 water based contact adhesive

Scotch-Weld 30 is polychloroprene based single-component multipurpose contact adhesive. Suitable for gluing high-pressure laminate in furniture industry. Does not ignite and has a great temperature resistance.



#### Fast Tack Water Based Adhesive 1000NF

3M<sup>™</sup> Fast Tack Water Based Adhesive 1000NF is a high performance water-based, one part adhesive formulated for fast bonding and long term heat resistant bonds. Adheres to many types of flexible foam, latex foams, fabric, polyester fiberfill, wood, plywood, particleboard and many plastic and metal surfaces.



#### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> 100 water based fast styrofoam adhesive

Scotch-Weld 100 is polychloroprene based styrofoam adhesive that is suitable for fast bonding of porous materials. The adhesive is compatible with various foam plastics, wood plates, many plastics and metals.



#### 3M<sup>™</sup> Scotch-Weld<sup>™</sup> 49 water based sealing adhesive

Scotch-Weld 49 is single-component, fast tacking sealing adhesive. The bond will have a sufficient strength for treatment almost directly after connecting the components. Unlike contact adhesives, this adhesive does not have to be applied on both connected components.v

#### Sealing adhesives and sealants

3M<sup>™</sup> Polyurethane and Hybrid Adhesives and Sealants are advanced, one-part formulations that require no mixing or special application tools. These products cure with atmospheric moisture to form durable, resilient, long-lasting bonds ideal for:

- Truck, trailer, bus and other vehicle panel mounting
- Marine OEM deck-to-hull joining, through-hull fastening, deck fitting and more
- Roof flashings, through-wall pipe and cable sealing and other construction applications
- Concrete sealing and expansion joint filling
- Marine and specialty vehicle window bonding and glazing
- Many other applications in a wide range of industries

Some industries still rely on rivets, screws, bolts and welds for the majority of their fastening. But mechanical fasteners are often limited to heavier materials of similar construction, and create stress points and areas where corrosion can form. In addition, low-tech adhesives simply aren't designed for tough industrial applications. 3M adhesives and sealants can actually out-perform mechanical fasteners — with fewer of the drawbacks you may have experienced with other adhesives.

3M<sup>™</sup> Polyurethane and Hybrid Adhesives and Sealants offer more versatile fastening and sealing solutions, greatly expanding your product or project design alternatives. Now you can:

- Match the bond strength to the job at hand
- Use thinner, lighter, even dissimilar materials as design and cost-saving solutions
- $\bullet$  Produce bond lines that can bend and flex
- Assemble large, lower tolerance parts as well as bond complex parts to close tolerances
- Reduce vibration and noise

Construction

• Seal out corrosive elements; eliminate or minimize leaks.

Product	Colour	Surface drying time 23°C/50% HR	Temperature resistance	UV radiance proof	Paintable	Additional information
320	Black, white, colourless	12 min	-50 - +150°C	Great	No	Elastic silicone hermetic.
540	Black, grey, white	60 - 90 min	-40 - +90°C	Good	Water based: yes Solvent based; test before use	Elastic polyurethane sealant.
550 FC	Black, grey, white	60 - 90 min	-40 - +90°C	Good	Water based: yes Solvent based; test before use	Elastic, fast curing polyurethane sealing adhesive.
560	Black, grey, white	50 - 60 min	-40 - +90°C	Good	Water based: yes Solvent based; test before use	Elastic polyurethane adhesive sealant.
590	Black	25 - 40 min	-40 - +90°C	Good	Yes	Fast drying and durable PU wind shield adhesive for fastening and sealing any vehicle glasses.
755	Black, white	40-70 min	-40°C - +90°C	Great	Yes	Single-component, isocyanate free hybrid polymer.
750	Black, white	30 - 60 min	-40 - +90°C	Good	Water based: yes Solvent based; test before use	Single-component, isocyanate free hybrid polymer.
755FC	Black, white	8-10 min	-40°C - +90°C	Great	Yes	Single-component, isocyanate free hybrid poly- mer. Short drying time.
760	White, grey, black	10 - 30 min	-40 - +100°C	Excellent	Water based: yes Solvent based; test before use	Bonds floors, exterior / interior panels, roofs for trucks, trains, trailers, vans, etc. Bonds well to most materials.
5005	Semi-trans- parent	10 - 15 min	-55 - +80°C	Good	No	Polyurethane based adhesive that cures in contact with air humidity.
DP600SL	Gray	4 min	-50 - +120°C	Good	Yes	Concrete repair adhesive, levelling in horizontal surfaces.





# Two Component Adhesive Sealant System

Product	Color	Appea- rance	Mix ratio by volume	Skin formation time (min) 23°C/50%HR	Open time (min) 20°C/50%HR:	Initial core curing time (min) at 20°C	Temperature resistance	UV light resistance	Paintable	Additional information
550FC	White, black, grey	Smooth paste	10:1	15±5	10	30	-30°C to +80°C	good	yes	To use with applicator
AC61 Booster Accelerator	White	Smooth paste	1:10	15±5	10	30	-30°C to +80°C	good	yes	Smooth paste with disposable Manifolds







# Adhesive Sealant Equipment

Product	Product characteristics
Booster Applicator 400A-2K	Suggested for smaller production, using 550FC Booster Adhesive, AC61 Booster Accelerator. Using supply air pressure of 98 psi to 145 psi.
Nozzles for Two-Component Adhesive Sealant Applicator 400A-2K	Bag of 36 pcs.

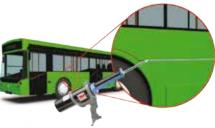
Marine



Rail







Trailer



Bond and seal aluminum, fiberglass, gel coat, wood and steel. \*May need to tailor surface prep to substrate.



# General construction

Product	Colour	Surface drying time 23°C/50 % HR	Temperature resistance	UV radiance proof	Paintable	Additional information
515	Black, grey, white	4 - 7 h	-30 - +80°C	Good	Water based: yes Solvent based; test before use	Elastic polyurethane sealant
525	Black, grey, white	90 - 150 min	-30 - +80°C	Good	Water based: yes Solvent based; test before use	Elastic polyurethane sealant
535	Black, grey, white	1h 30 min	-30 - +80°C	Good	Water based: yes Solvent based; test before use	Elastic polyurethane sealant

### 3M primers and activators for 590 PU wind shield and glass adhesive

Product	Colour	Surface drying time 23°C/50 % HR	Temperature resistance	UV radiance proof	Paintable	Additional information
P590	Black	-	-40 - +90°C	Good	Yes	590 PU primer for tinted glass
P591	Black	-	-40 - +90°C	Good	Yes	590 PU primer for plastic surfaces, especially polycarbonate and PMMA
P592	Transparent	-	-40 - +90°C	Good	Yes	590 PU primer for metal surfaces
P593	Black	-	-40 - +90°C	Good	Yes	590 PU low VOC primer
P594	Black	-	-40 - +90°C	Good	Yes	590 PU primer for wood surfaces
P595	Black	-	-40 - +90°C	Good	Yes	590 PU primer for glass
P596	Transparent	-	-40 - +90°C	Good	Yes	590 PU adhesive activator for glass



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150	9	5962	4	EC100	31	TE-200	35
69	9	6890	23	EC1500	31	TI-1756	24
000NF	42,43	7231 B/A	29	EC2500	31	TL22	32
099	41	7240 B/A FR	29	EC40	31	TL42	32
280	14	7260 B/A FC	29	EC5	31	TL43	32,33
300L	41	7260 B/A	29	EP20	30	TL62	32
404	17	7260NS	29	EPX Applicators	28	TL70	32
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216	29	8153LE	8	EZ2 50120	35	UV011	34
321	21,22	8610W	7	EZ2 50150	35	UV02	34
364	21	8901	14	EZ2 50200	35	UV301	34
552	17,18	8902	14,15	GM10	32	UV50	34
836	21	8905	14	GM18	32	UV51	34
902	21	8979	21,22	GM74	32	UV57	34
334	17	9084	8	H-12	24	UV57	34
336	12	9086	8	H-130	24	UV60	34
369	17	9087	8	H-150	24	UV75	34
532	29	9088	8	H-180	24	UV843	34
549	29	9088FL	8	H-183	24	VHB instalation roll	
701	23	9323	29	HP42	32	VHB surface cleaner	Ę
703	23	9469	4	HT100	31	VHB surface cleaning cloths	E
705	23	9471	8	L0100	31		
707	23	9473	4,6	L01000	31		
731	36,37	9485PC	9	M-777	24		
738	36,37	948560	7	MC100	31		
100	36,37	9508 9508BF	7	MC100 MC150	31		
739							

Distributor:		



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