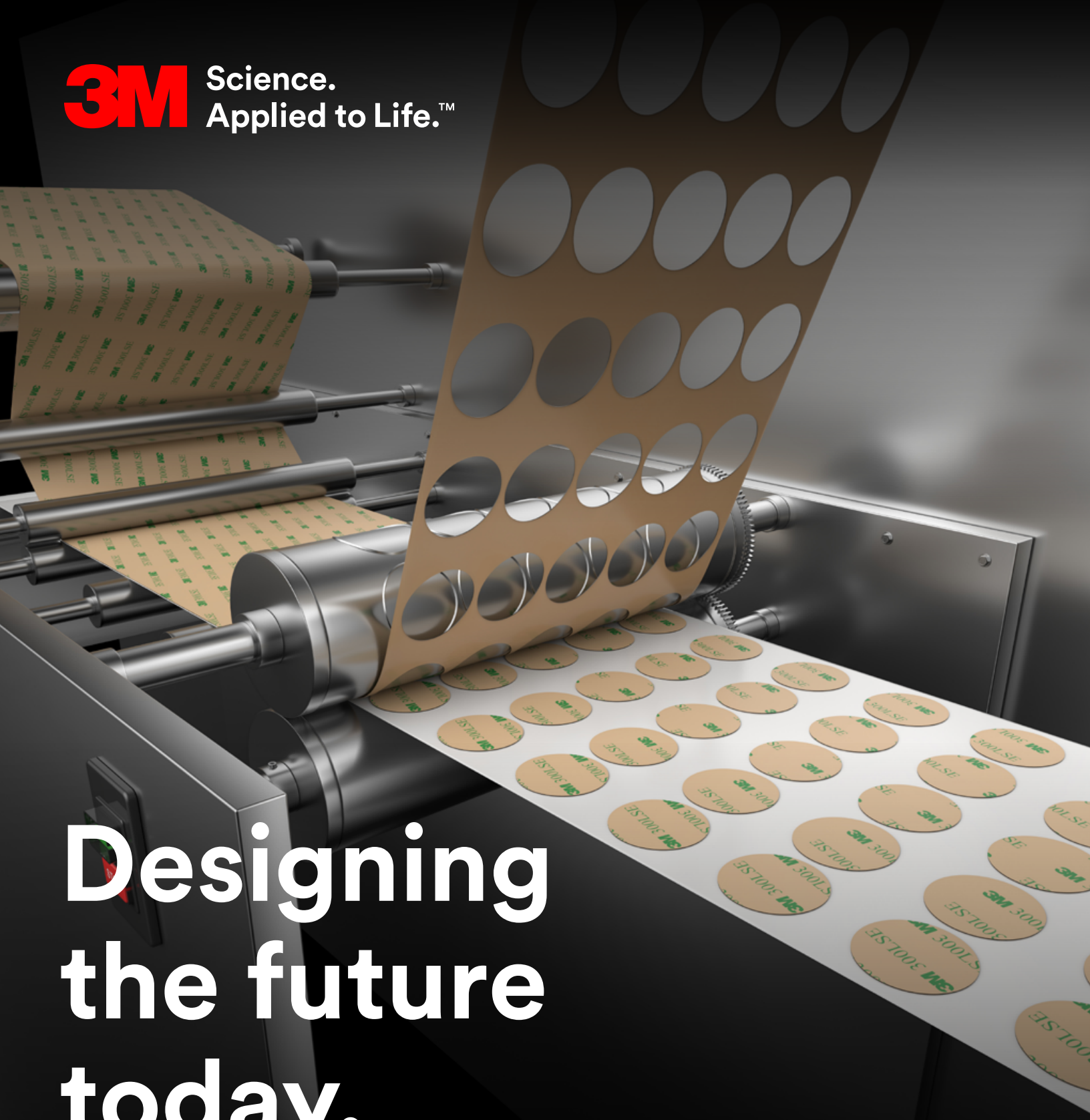
3M Science. Applied to Life.™



Designing the future today.

3M Converter Markets

Selection Guide | January 2026

MARIAN

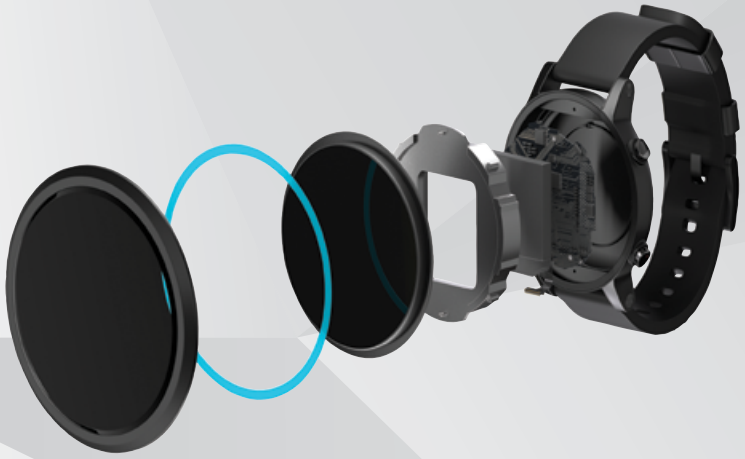
www.marianinc.com
1-800-773-0062

Creative Precision

3M's legacy of innovation drives the continual improvement of our adhesive technologies. Pair that with the tools and technical support we provide, and you're on your way to quickly finding the products that meet your precise requirements.

3M's industry-leading adhesive technologies, added to your own expertise, will help increase production efficiency and improve product performance, appearance, and identification. Partner with 3M to create converted parts that are perfect for your customer's designs.

Trust 3M Converter Markets as your source for tapes, films, release liners, reclosable fasteners, labeling materials, flexographic mounting systems, graphic solutions and more.



Expect performance. Spec 3M.



Persistent Innovation

It's all about helping customers around the globe increase their production efficiency and improve product performance, appearance and identification.

3M Converter Solution Tools — just a click away.

Compare bonding products based on your specifications using our online Bonding Product Comparison Tool. 3M design specialists can provide additional insight into these options, plus make recommendations tailored to your specific needs.

Let's work together. 3M products are constantly evolving to better meet customer needs. If you need help finding the right product for your solutions, get in touch with us.

Make a winning combination with the 3M TSR Program.

When you're digging into a new project, reach out to your 3M Specialist who will work with you on initial testing of an adhesive design solution.

Give 3M a Call

1-888-3M-HELPS
1-888-36-43577
Monday–Friday
8:00 AM to 4:30 PM
Central Time

Send us a Message

Find "Support Link" at
3M.com/Converter

Information access — 24/7.

From product information and educational materials to our selector tools, you'll find our online resources invaluable.

3M.com/Converter

3M.com/AssemblySolutions

3M.com/VHB

3M.com/EngineeredTapes

3M.com/Masking

3M.com/ElectronicsBonding

3M.com/DurableLabels

3M.com/FEA

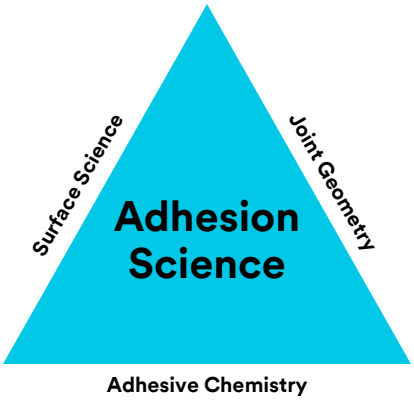
3M.com/Doublesidedtape

3M.com/BondingProductSelector

3M.com/ThinBonding

3M.com/SDS

The Science of Adhesion



Bonding and Assembly eLearning Academy
Our website offers courses that will expand your knowledge of bonding solutions: how they work, what might go wrong and products to consider for various applications.

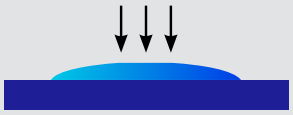
Adhesion Science consists of three equally essential parts which combine to form the basis of adhesive selection and adhesive engineering: Surface Science, Adhesive Chemistry, and Joint Geometry.

Go to 3M.com/AssemblySolutions and click on our Resources section to learn more about the Science of Adhesion, surface energy on different substrates and to register to our webinar educational series.

Surface energy ranges.

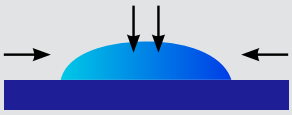
All materials have properties such as density or melting point that help us characterize and differentiate between them. Surface energy is another property of materials: it's a measure of how attracted a material's molecules are to each other and to other materials' molecules. Surface energy is a good measure of how easy or hard the surface may be to adhere.

Metal Surfaces (High Surface Energy)



mJ/m²	Surfaces
1103	Copper
840	Aluminum
753	Zinc
526	Tin
458	Lead
700–1100	Stainless Steel
250–500	Glass Porcelain

High Surface Energy Plastics (HSE)



mJ/m²	Surfaces
50	Polyimide Industrial Film
47	Phenolic
46	Nylon
45	Alkyd Enamel
43	Polyester
43	Epoxy Paint
43	Polyurethane Paint
42	ABS
42	Polycarbonate
39	PVC Rigid
38	Modified PPE Resin
38	Acrylic

Low Surface Energy Plastics (LSE)



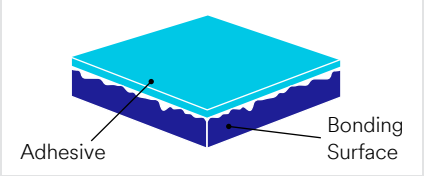
mJ/m²	Surfaces
37	PVA
36	Polystyrene
36	Acetal
33	EVA
31	Polyethylene
29	Polypropylene
28	Polyvinyl Fluoride Film
18	PTFE
Broad Range	Powder Coated Paints

As a rule of thumb, the higher the surface energy, the greater the strength of adhesion.
Note: These values are provided as a guide. Formulation modifications can substantially alter surface energies.

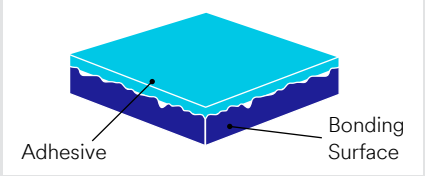
Secure bonding. It's all about adhesive surface contact.

Applying firm pressure to the bond increases adhesive flow and contact for more secure bonding. Time and temperature will typically further increase contact and adhesion values. To achieve an optimal bonding performance with 3M Tapes, ensure you are working in a clean, contaminant-free substrate that promotes strong and durable adhesion. Surfaces may be prepared by one of the following procedures: Degrease only; Degrease, abrade and solvent clean; Degrease and chemically pre-treat. Also consider working with 3M™ Primers or Adhesive Promoters when working with challenging surfaces or specific requirements, as it enhances adhesion by creating a receptive substrate, improving wetting, and promoting a secure and long-lasting bond.

1 Initial Contact (Minimal Contact)



2 After Rubdown (More Contact)



3 After Dwell Time (Excellent Contact)

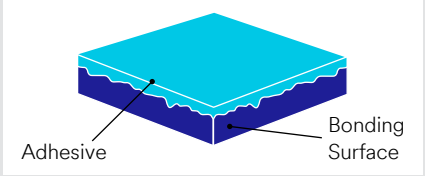


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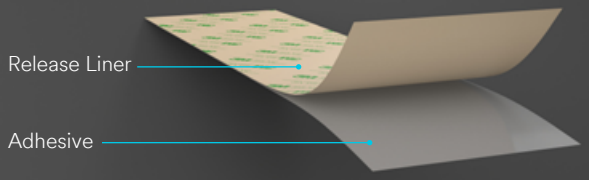
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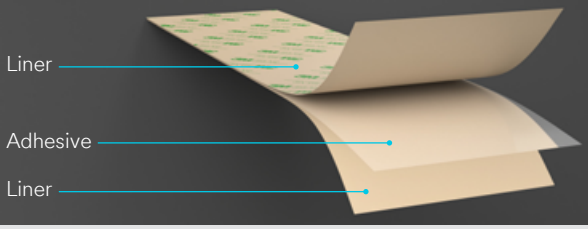
Expect performance. Spec 3M.

Pressure Sensitive Adhesive Tape Constructions

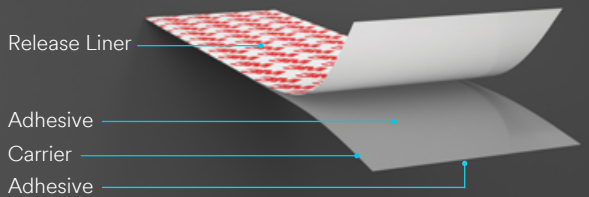
3M™ Adhesive Transfer Tapes



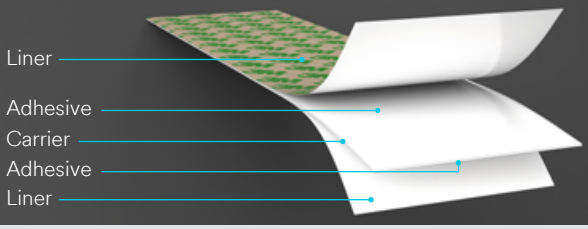
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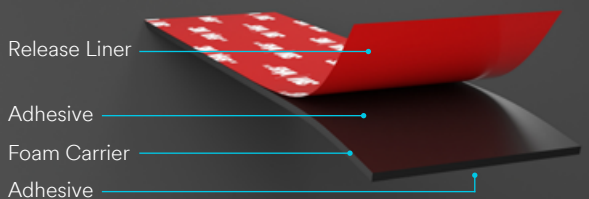
3M™ Double Coated Tapes



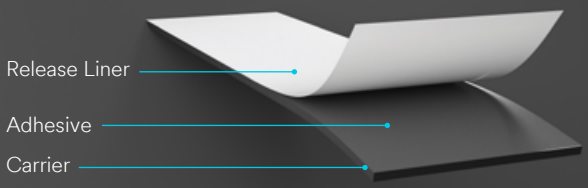
3M™ Double Coated Spacers



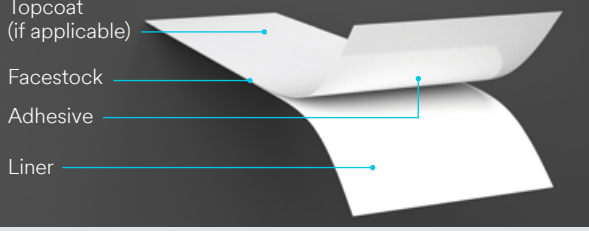
3M™ VHB™ Tape and Double Coated Foam Tapes



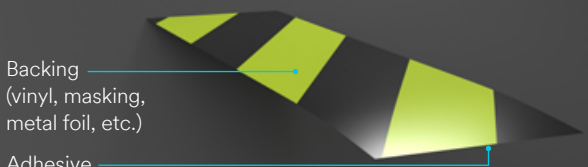
3M™ Single Coated Foam Tapes



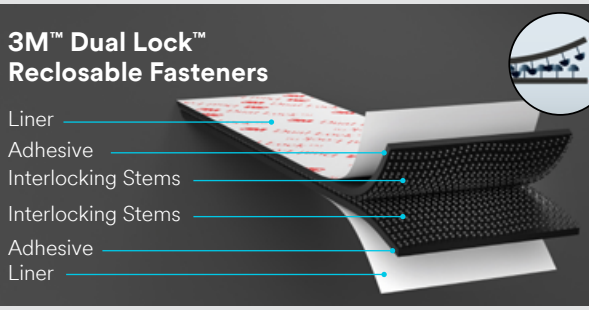
3M™ Durable Label Materials



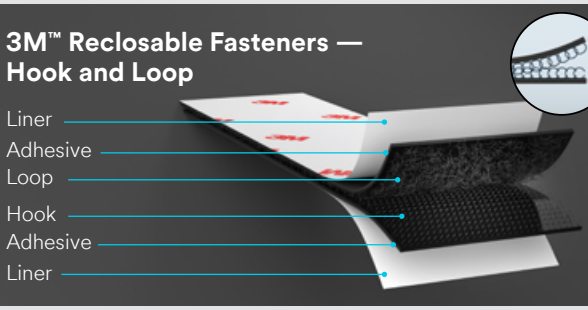
3M™ Single Coated Tapes



3M™ Dual Lock™ Reclosable Fasteners



3M™ Reclosable Fasteners — Hook and Loop



3M Digital Materials Hub

Connecting engineers to 3M expertise through modeling.

Your ultimate one-stop solution for accessing verified 3M material data cards, modeling data, and data specifications all in one powerful, easy-to-use platform. Get the reliable information you need, when you need it, right at your fingertips. Simplify your workflow and make smarter, faster decisions with 3M's trusted expertise.



Our Solution

A practical, collaborative solution for material data cards that gives engineers direct access to 3M's expertise, helping them accelerate time to market and stand out from competitors.

3M and material data cards can help product teams:

- Innovate faster and help you reduce cost of innovation
- Design your next generation device with confidence
- Decrease physical sample iterations
- Minimize the impact of supply chain
- Helping reach their ESG goals through digital technology

Your Innovation Journey Accelerated

With the new 3M Digital Materials Hub, you have direct access to verified 3M material data cards, modeling data and data specifications, all within one easy-to-use tool.

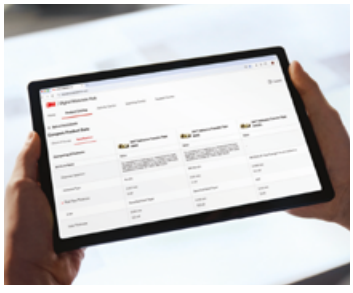
Why

3M knows engineers need to gather and evaluate materials data fast to model and simulate adhesive solutions for their unique applications.



Value

With the 3M Digital Materials Hub, engineers can now quickly compare and download verified 3M materials data to help them determine best-fit 3M solutions.



Register and get started today:
digitalmaterialshub.3M.com

Key Features

Using the 3M Digital Materials Hub is incredibly easy and provides the following benefits to engineers:

01
Search and filter for 3M adhesives in a way that is most suitable to your context and needs.

02
Compare multiple products' data side-by-side, including simulated models and technical specifications.

03
Download verified material data cards to directly utilize in your own modeling and simulations.

04
Our material data cards support a variety of software, including Abaqus2™, ANSYS Workbench™, ANSYS®, COMSOL®, LS-DYNA®, Optistruct®, RADIOSS®, and SolidWorks® Simulation.

05
Request support, including new models and verified data cards.

3M Go-To Converter Products

3M™ Adhesive Transfer Tapes

F9460PC 19, 36
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467MC 19
467MP 19, 36
467MPF 19
468MC 19
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9671LE 21
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9774WL+ 21
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3M™ Double Linered Adhesive Transfer Tapes

7952MP 23
7955MP 23
7962MP 23
7965MP 23
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3M™ Double Coated Tapes

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93015LE 25, 37
93020LE 25, 37
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3M™ Membrane Switch Spacers – Double Coated Spacer

7945MP 30
7953MP 30
7956MP 30
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7956WDL 30
7957MP 30
7959MP 30
7961MP 31
7966MWS 31
7966WDL 31
9045MP 31
9057MP 31
9059MP 31
9061MP 31

3M™ Membrane Switch Spacers – Single Coated Spacers

7992MP 31
7993MP 31
7995MP 31
7997MP 31

3M™ Extended Liner Tapes

476XL 32
9925XL 32

3M™ VHB™ Tapes

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4936 40
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3M Go-To Converter Products

3M™ VHB™ Tapes

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5930 41
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5952 41
5952P 41
5962 41
5962P 41
5958FR 41
LSE-060WF 41
LSE-110WF 41
LSE-160WF 41
LVO-040BF 42
LVO-060BF 42
LVO-080BF 42
LVO-110BF 42
LVO-160BF 42
Max-060GF 42
Max-110GF 42
Max-160GF 42
Max-230GF 42
RP+040GP 42
RP+040GF 42
RP+060GP 42
RP+060GF 42
RP+080GP 42
RP+080GF 42
RP+110GP 42
RP+110GF 42
RP+160GP 42
RP+160GF 42
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5423 78
471/4712 79

3M™ Dual Lock™ Reclosable Fasteners

SJ3550CF 86
SJ3551CF 86
SJ3552CF 86
SJ4570 86

3M™ Double Sided Tapes

Make your design a reality.

Whether you're bonding similar or different substrates, our double sided tapes provide the strength, conformability, adhesion and aesthetic requirements you need to make your project successful.

Learn more at:
3M.com/DoubleSidedTape



Bond glass to plastic.
Help make sales soar with anti-lifting, drop-resistant 3M™ Double Coated Tape 93015LE.

Tapes created for performance.

A double sided tape has pressure-sensitive adhesive exposed on both sides, allowing two parts to be bonded together by the tape between them. A carrier that holds adhesive can range from a film as thin as a fraction of a millimeter up to a thick foam that helps damp vibrations. Pressure sensitive adhesives can meet specific needs from low-tack, which allows for repositioning, all the way up to permanent bonding solutions. A double sided tape that has a carrier can be produced with the same adhesive on both sides, or with different adhesives to meet the bonding requirements of different substrates.

Benefits of a 3M™ Double Sided Tape.

While the characteristics of adhesive families and individual tapes vary, double sided tapes generally offer these benefits to your production.



Faster Assembly Time

Tape is easy to apply by hand or with automation. No waiting for adhesive to cure or mechanical fastening to be completed.



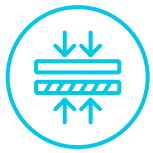
Design Flexibility

Conformability, gap filling, invisible bond lines–the flexible design options you need.



Immediate Handling Strength

Immediate handling strength with no cure time. Assembled parts move faster to the next step.



LSE and Dissimilar Materials Bonding

Versatile for lightweight designs and hard-to-stick-to surfaces.



Clean Aesthetics and Reduced Product Bulk

Virtually invisible bond lines without protruding fasteners. Replaces mechanical fasteners with thinner, lighter materials.



Moisture Intrusion Prevention

Provides adhesion to both substrates, helping prevent moisture from penetrating the bond.

Making the best choice for the needed performance.

What materials are you bonding? How will the assembly be used?

- Type of substrate or hard-to-bond materials
- Bonding dissimilar materials
- Configuration of your part (design/shape)
- Appearance and aesthetic considerations
- Need for disassembly for maintenance or service

How will the product be processed?

- Need high-speed bonding
- Need to be able to reposition
- Will be subjected to vibration
- Requires heat and/or pressure for bonding
- Desire to cut costs, increase production, or simplify operation

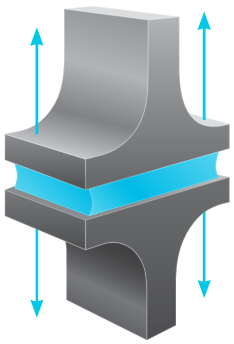
How do you need the adhesive to perform?

- Match strength to stresses/ combination of stresses: tensile, shear, cleavage and peel
- Flexibility
- Maintain surface integrity
- Bond and seal
- Resist harsh environmental conditions

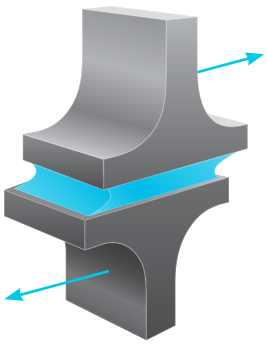
Learn more at: 3M.com/DoubleSidedTape

Design for challenges.

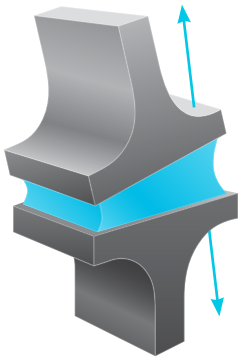
Regardless of the joint type used, it's important to understand the different stresses that are imparted onto a bonded assembly.



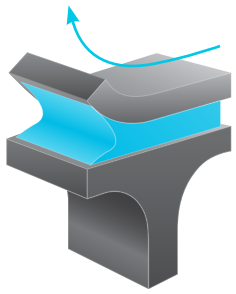
Tensile is pull exerted equally over the entire joint. Pull direction is straight and away from the adhesive bond.



Shear is pull directed across the adhesive, forcing the substrates to slide over each other.



Cleavage is pull concentrated at one edge of the joint, exerting a prying force on the bond. The other edge of the joint is theoretically under zero stress.



Peel is concentrated along a thin line at the edge of the bond where one substrate is flexible. Once peeling has begun, the stress line stays out in front of the advancing bond separation.

Thin, clean designs made easy.

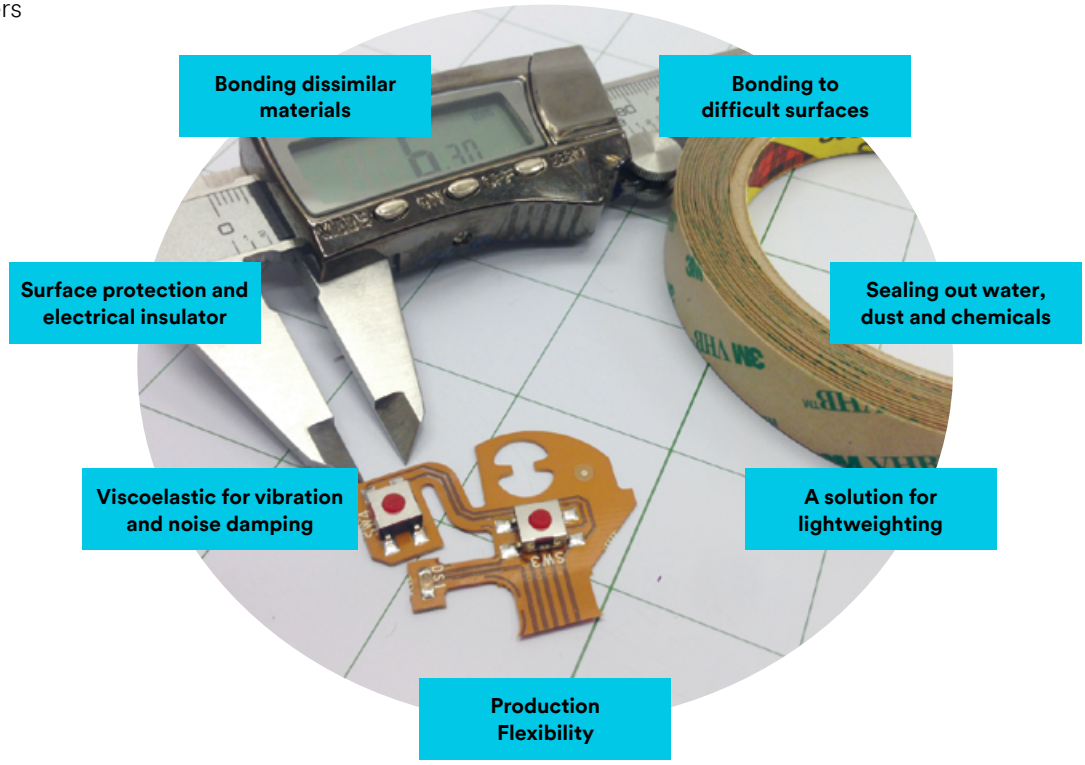
Pressure Sensitive Adhesives (PSA)

A quick peel and stick that offers consistent bondline thickness.

PSAs easily distribute loading over the entire bondline. They are low odor so no ventilation is needed. Plus, there's no curing required.

Production flexibility: Hand apply, ATG, die cuts, automation, or roll-to-roll processing.

Learn more at: 3M.com/Bonding



3M Go-To Adhesives

The bond between concept and reality.

Acrylic adhesives open the door to solving the challenges of speed, strength and product shelf life. Now it's time to dream bigger. 3M Go-To Adhesives are flagged throughout this catalog with the red circle next to product numbers.



100MP

3M™ High-Performance Acrylic Adhesive 100MP

Higher peel strength than most acrylic formulations. Exceptional shear strength, even at high temperatures.

Video Brochure



200MP

3M™ High-Strength Acrylic Adhesive 200MP

Shear strength with versatility for bonding a variety of commonly used substrates. Great for outdoor applications and repeat use.

Video Brochure



300LSE

3M™ Low Surface Energy Acrylic Adhesive 300LSE

For hard-to-bond surfaces. Great solution for dissimilar material bonding. Holds securely and performs reliably — giving you more freedom to imagine. To design. To build.

Video Brochure



300MP+

3M™ High-tack Acrylic Adhesive 300MP+

For hard-to-bond and textured materials such as foams and textiles.

Video Brochure

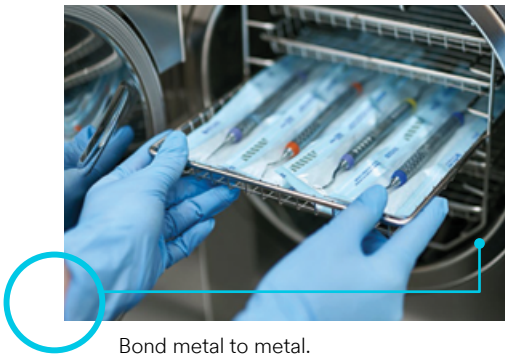
Giving you more freedom to imagine.

Attach. Seal. Reduce noise. Expand your materials—and your design possibilities. Advanced adhesives keep it together under the harshest of conditions, while you feel the thrill of defying creative limitations.

100MP

Built for extremes. Indoor and out.

Adhesives that deliver in high temperatures and other challenging environments. Exceptional sheer strength even at elevated temperatures; outstanding solvent resistance.

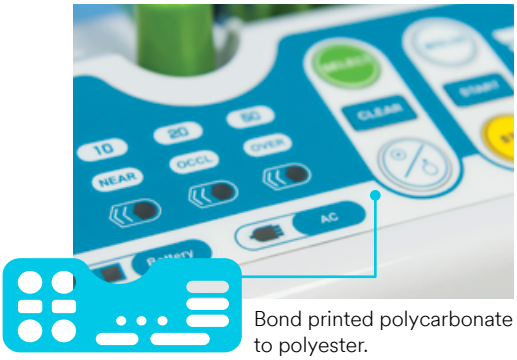


Bond metal to metal.

200MP

Brought together by design.

Best for bonding metals and high surface energy substrates. Anti-lifting for precision and staying-power performance on curved surfaces.



Bond printed polycarbonate to polyester.

300LSE

Thin can do what you can imagine.

Make your design a reality. Bond plastic to metals. Rubber to plastic. Even foam to chrome. Open your mind to new design possibilities.



Bond metal speaker mesh to plastic.

300MP+

It's a textured world. Design for it.

Attach, seal, reduce noise. This adhesive is for bonding foam and fabric.



Attach fabric to metal.

Adhesive Transfer Tapes	Double Coated Tapes
Product Page	
19	—
19	23
21	25
21	26

Expect performance. Spec 3M.

Adhesive Families Color coded to make cross referencing between charts easier.

100

100 High Temperature Acrylic
- Up to 450°F (232°C) short-term heat resistance and excellent solvent resistance
- High peel strength compared to other acrylic formulations
- Exceptional shear strength even at elevated temperatures
- Exhibits low outgassing characteristics

100MP

100MP High Performance Acrylic
- Up to 500°F (260°C) short-term heat resistance and outstanding solvent resistance
- Higher peel strength than most other acrylic formulations
- Exceptional shear strength even at elevated temperatures

100HT

100HT Ultra High Temperature Acrylic
- Up to 550°F (288°C) short-term heat resistance and outstanding solvent resistance
- Higher peel strength than most other acrylic formulations
- Exceptional shear strength even at elevated temperatures

200MP

200MP High Performance Acrylic
- Up to 400°F (204°C) short-term heat resistance and excellent solvent resistance
- Outstanding adhesion to metal and high surface energy plastics
- Excellent shear strength to resist slippage and edge lifting
- Short-term repositionability for placement accuracy

220

220 Industrial Acrylic
- Up to 350°F (177°C) short-term heat resistance and good chemical resistance
- Good shear strength and chemical resistance for general purpose industrial applications
- Good adhesion to most metal and high surface energy plastics

290

290 Low Outgassing Acrylic
- Up to 450°F (232°C) short-term heat resistance
- Exceeds most OEM specifications for outgassing and long-term performance
- High peel strength compared to other acrylic formulations
- Exceptional shear strength even at elevated temperatures

300

300 High Strength Acrylic
- Up to 250°F (121°C) short-term heat resistance
- High initial adhesion especially to low surface energy plastics
- Quick flowing to speed lamination of textured plastics, foams, fabrics and coated papers

300LVC

300LVC Low Volatile Organic Compounds
- Over 80% reduction in total VOCs compared to standard 3M Tapes
- Low Fog – Tested to SAEJ1756 Standard
- Tested to JASO M902 (JAMA) VOC Standard
- Tested to VDA methodology for low Volatile Organic Content, fogging and odor requirements

300LSE

300LSE Low Surface Energy Acrylic
- Up to 300°F (149°C) short-term heat resistance
- Outstanding adhesion to low surface energy plastics, powder coated paints and lightly oiled metals
- Good chemical and humidity resistance

300MP+

300MP+ High-tack Acrylic
- Designed especially to bond most plastics, fabrics and foams

320AF

320AF Acid Free
- Provides a consistently strong bond across a range of temperatures up to 180°F (82°C)
- PH balance between 7.0 and 8.5 so it will not discolor and damage papers, photographs and other acid sensitive materials

340

340 High-tack Acrylic
- Up to 180°F (82°C) short-term heat resistance
- Good bonding to foam and other substrates
- High-tack adhesive
- Medium shear strength

350

350 High Performance Acrylic
- Up to 450°F (232°C) short-term heat resistance
- Excellent solvent resistance and adhesion to LSE materials

Go-To Product

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

360

360 Acrylic Adhesive

- Up to 250°F (121°C) short-term heat resistance
- Outstanding adhesion to polypropylene and LSE plastics as well as HSE materials
- Very quick bonding dwell time to achieve full adhesion level

375

375 High Performance Double Coated

- Up to 300°F (149°C) short-term heat resistance
- Good adhesion to both high and low surface energy substrates
- Excellent initial tack

400

400 Acrylic Adhesive

- Up to 250°F (121°C) short-term heat resistance
- Good low temperature performance and peel strength on many surfaces
- Excellent adhesion to uncoated papers
- Clarity and UV resistance for window label applications

700 Series

700 Series Synthetic Rubber

- Up to 200°F (93°C) short-term heat resistance
- Good adhesion to low surface energy substrates
- For indoor and room temperature applications

800 Series

800 Series Natural Rubber

- Up to 200°F (93°C) short-term heat resistance
- Offers good adhesion to a variety of surfaces
- For indoor and room temperature applications

1000 Series

1000 Series Repositionable Acrylic

- Good holding to many surfaces
- Clean removal

2000MP

2000MP Optically Clear Acrylic

- Visual accuracy — light transmission > 99%, free of birefringence, refractive index of 1.47
- High cohesive and peel strengths
- High temperature, humidity and UV light resistance
- Long-term durability without yellowing, delaminating or degrading

Electric

Electrically Conductive

- Good initial tack, non-corrosive adhesive
- Built-in conductive tape
- Helps reinforce tape
- Low electrical resistance with good conductivity

Low VOC

Low VOC Acrylic

- Low emission adhesives that meet indoor air quality standards for automotive and construction markets
- Low odor

Vinyl

Plasticizer Resistant

- Bonds to many flexible vinyls
- Outstanding resistance to effects of plasticizer migration

Screen Print

Screen Printable Adhesive

- For selective placement of pressure sensitive adhesive using screen print technology
- Available as UV curable or water based

Silicone

Silicone Adhesive

- Up to 500°F (260°C) short-term heat resistance
- Outstanding solvent resistance
- Adheres to silicone without priming

Thermal

Thermally Conductive

- High-performance acrylic adhesive with highly conductive ceramic particles
- For an extremely reliable thermal interface
- Highly conformable

Other

Other Adhesive Family

- Newly developed or specialty adhesives that do not fit in the current adhesive family definitions

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Double Sided Tapes Selection Guide Based on Surface Energy

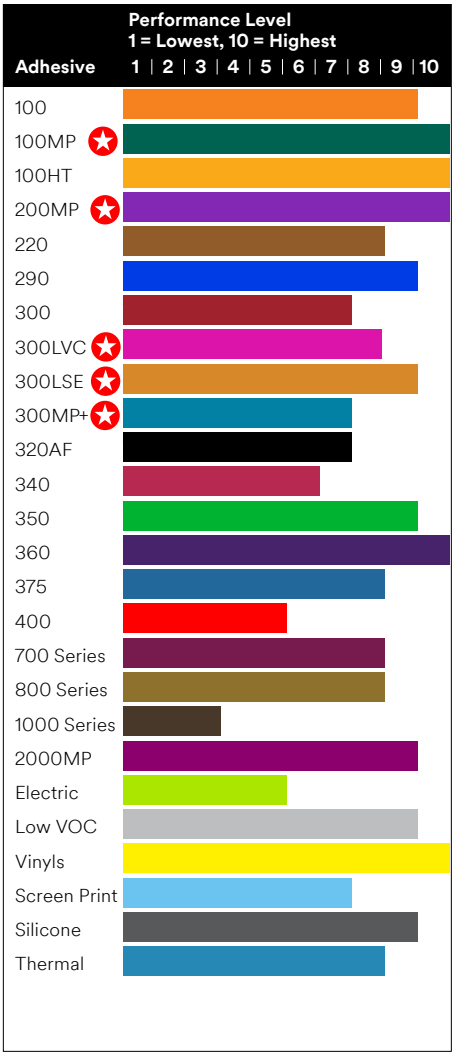
These charts are based on relative adhesion within each given surface energy category.

Metals	Surface Energy (Dynes/cm)
Copper	1103
Aluminum	840
Zinc	753
Tin	526
Lead	543

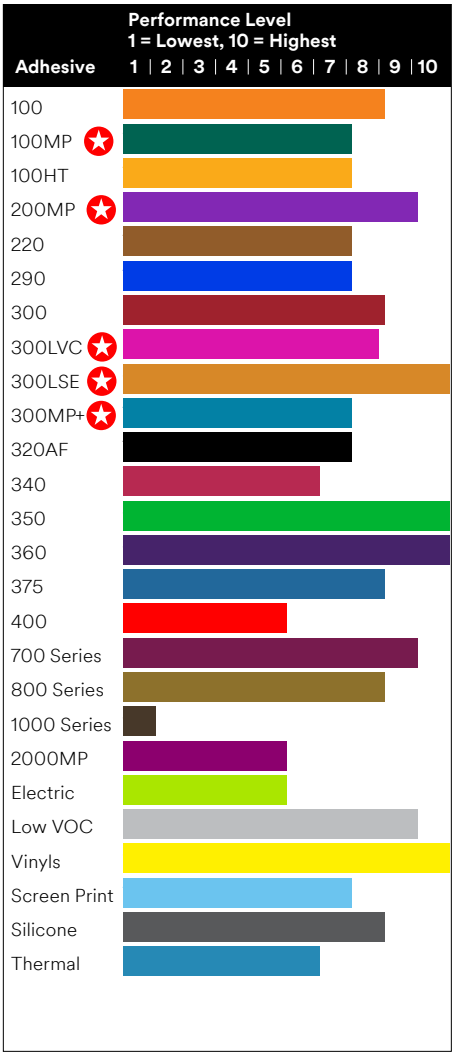
High Surface Energy (HSE) Plastics	Surface Energy (Dynes/cm)
Polyimide	50
Phenolic	47
Nylon®	46
Alkyd Enamel	45
Polyester	43
Epoxy Paint	43
Polyurethane	43
ABS	42
Polycarbonate	42
PVC	39
Modified PPE Resin	38
Acrylic	38

Low Surface Energy (LSE) Plastics	Surface Energy (Dynes/cm)
PVA	37
Polystyrene	36
Acetal	36
EVA	33
Polyethylene	31
Polypropylene	29
PVF	28
PTFE	18
Powder Coatings	Broad Range

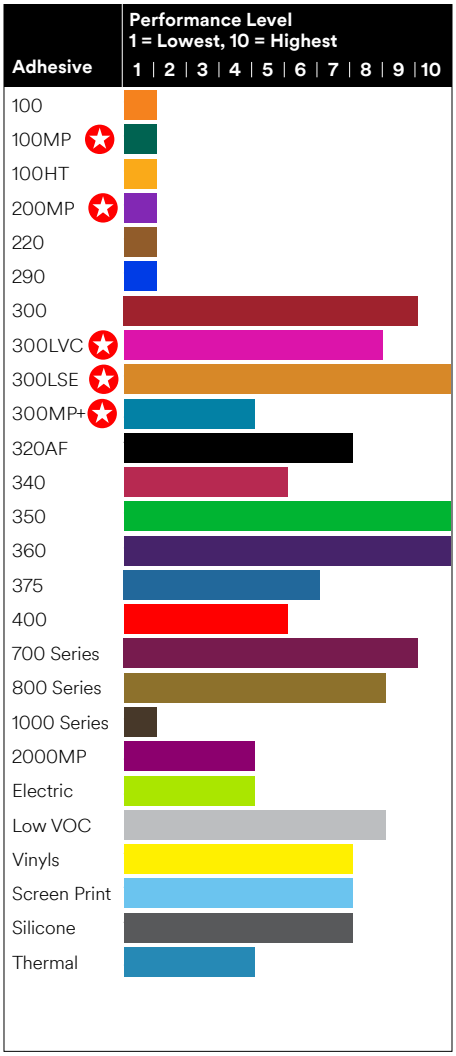
Adhesive Performance on Metals



Adhesive Performance on High Surface Energy (HSE) Plastics



Adhesive Performance on Low Surface Energy (LSE) Plastics



Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.

Go-To Product

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Adhesive Family Comparison

Adhesive Family	Adhesive Properties				Adhesion to:			Environmental Performance Resistance to:				Temperature °F (°C)		
	Peel		Shear											
	Initial	Ultimate	Room Temp.	150°F	Metal	HSE Plastic	LSE Plastic	Chemical	Ultra Violet	Plasticizers	Humidity	Minimum Application	Service Low†	Service High†
Acrylic Adhesives														
100	3	9	10	10	9	8	1	9	10	5	10	50 (10)	-40 (-40)	450 (232)
100MP ★	4	10	10	10	10	7	1	10	10	5	10	50 (10)	-40 (-40)	500 (260)
100HT	4	10	10	10	10	7	1	10	10	5	10	50 (10)	-40 (-40)	550 (288)
200MP ★	4	10	10	10	10	9	1	9	10	5	10	50 (10)	-40 (-40)	400 (204)
220	4	8	10	9	8	7	1	8	10	4	8	50 (10)	-40 (-40)	350 (177)
290	3	9	10	10	9	8	1	9	10	5	10	50 (10)	-40 (-40)	350 (177)
300	6	7	4	1	7	8	9	6	7	3	8	50 (10)	-40 (-40)	250 (121)
300LVC ★	6	8	7	7	8	8	8	—	—	—	9	50 (10)	-40 (-40)	250 (121)
300LSE ★	7	9	8	8	9	9	10	8	7	4	9	50 (10)	-40 (-40)	300 (149)
300MP+ ★	6	7	5	5	7	7	4	—	—	—	9	50 (10)	-60 (-51)	225 (107)
320AF	7	7	4	1	7	7	7	6	6	3	8	50 (10)	-40 (-40)	250 (121)
340	6	7	6	5	6	6	5	7	7	4	9	50 (10)	-40 (-40)	180 (82)
350	7	9	8	8	9	10	10	8	7	4	9	50 (10)	-40 (-40)	450 (232)
360	10	10	8	5	10	10	10	8	7	4	8	50 (10)	-40 (-40)	250 (121)
375	6	8	8	8	8	8	6	7	7	5	8	50 (10)	-10 (-23)	300 (149)*
400	4	5	5	4	5	5	5	5	10	4	8	50 (10)	-60 (-51)	250 (121)
Rubber Adhesives														
700 Series	7	9	10	2	8	9	9	2	4	1	9	50 (10)	-40 (-40)	200 (93)
800 Series	9	10	6	2	8	8	8	1	1	1	1	50 (10)	-40 (-40)	180 (82)
Other Adhesives														
1000 Series	2	3	3	3	3	1	1	2	7	3	4	50 (10)	-20 (-29)	250 (121)
2000MP Series	4	6	6	5	9	5	4	7	10	5	10	50 (10)	-40 (-40)	350 (177)
Electric	3	5	5	4	5	5	4	7	7	5	10	50 (10)	-20 (-29)	160 (71)
Low VOC (Acrylic)	7	10	8	7	9	8	8	8	8	5	10	50 (10)	-40 (-40)	350 (177)
Vinyls	4	6	5	5	10	10	7	5	7	10	10	50 (10)	-40 (-40)	250 (121)
Screen Printable	5	6	6	5	7	7	7	5	6	4	5	50 (10)	-40 (-40)	300 (149)
Silicone	4	5	10	8	9	8	7	10	10	3	10	40 (4)	-60 (-51)	500 (260)
Thermally Conductive	3	5	5	4	8	6	4	7	7	5	10	50 (10)	20 (-6.7)	185 (85)

†Reflects lowest service temperature that bond holds and highest temperature for short periods (minutes, hours).
*Service temperature dependent on carrier. See technical data page for further information.

Values: 1 = Lowest Performance; 10 = Highest Performance

Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.

★ **Go-To Product**

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Liner Reference Chart

3M offers paper and film release liners in a number of different constructions and weights to meet various process requirements.

Paper liners include densified kraft (DK) to reduce the edge burr on metal plates and for rotary processing, Extended DK liners (XL) and polycoated kraft (PCK) for moisture stability to resist wrinkling and curling are also available on selected tapes.

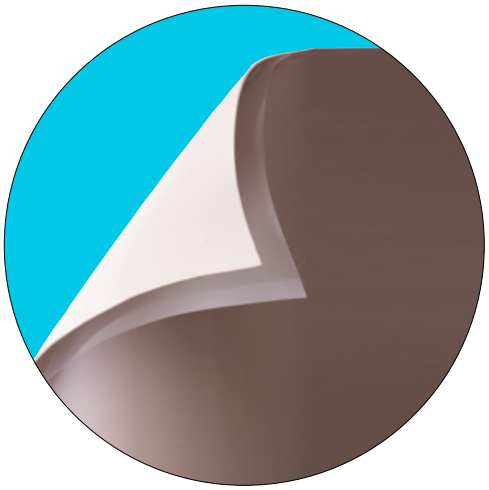
Film liners add strength in high-speed processing and dispensing and are available for clean room processing. They also offer high clarity for graphic inspection.

Product Group	Basis Weight	Caliper mils	Liner Type	Description	High Tensile Strength	Humidity Resistance	Rotary Processing	Kiss Cutting	Steel Rule
Paper Liners	**43#**	2.5	Densified Kraft (DK)	Silicone treated on one side for use as a second liner to protect adhesive during selective die-cutting. Printable.			■		
	55#	3.2	Densified Kraft (DK)	Caliper-controlled hard liner for consistent base in rotary printing and die-cutting of labels.			■	■	■
	60#	3.5	Densified Kraft (DK)	Hard dense liner reduces edge burr in hand tool processing of metal plates.			■	■	■
	62#	3.7	Densified Kraft (DK)	Heavier version of 60#.			■	■	■
	58#	3.0	Glassine	Hard dense liner that is resistant to water and oils.	■	■	■	■	■
	60#	3.2	Glassine	Hard dense liner that is resistant to water and oils.	■	■	■	■	■
	58#	4.2	Polycoated Kraft (PCK)	Moisture stable. Flat-bed die-cutting.		■			■
	58#	4.2	Polycoated Kraft (PCK) Lay-flat	Excellent moisture stability for lay-flat processing.		■	■		■
	78#	5.7	Polycoated Kraft (PCK)	Extra tough liner for tear resistance. Conformable for EMI/RFI shielding applications. Moisture stable. Flat-bed die-cutting.	■	■		■	■
	78#	6.0	Extensible Polycoated Kraft (EK)	Extra tough liner for tear resistance. Conformable for EMI/RFI shielding applications.	■	■		■	■
	83#	6.2	Polycoated Kraft (PCK)	Excellent moisture stability for lay-flat processing. Thicker caliper for kiss-cutting and steel rule die-cutting.		■		■	■
Film Liners	—	2.0	Clear Polyester (PET)	High strength reduces breakage during die-cutting and dispensing.	■	■	■	■	■
	—	3.0	Clear Polyester (PET)	High strength reduces breakage during die-cutting and dispensing.	■	■	■	■	■
	—	3.0	Clear High Density Polyethylene (HDPE)	Silicone treated for easy release. Clarity for see-through applications.	■	■			■

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Secondary Release Liners

Product Group	Product	Description/Application Ideas	Construction		Master Size	Printable
			Caliper (mils)	Liner		
Secondary Release Liners	**4994**	Caliper-controlled liner for rotary die-cutting. Release coated two sides.	3.2	55# Densified Kraft, White	54" width – length can vary	No
	4997	Heavy liner ideal for kiss-cutting and lay-flat applications. Release coat one side.	4.0	70# Flatstock, Clear	48" width – length can vary	No
	4998	Release coat two sides (matte).	4.2	58# Polycoated Kraft, Tan	60" width – length can vary	No
	4999	Caliper controlled liner for rotary die-cutting. Release coat one side.	3.2	55# Densified Kraft, White	54" width – length can vary	Yes
	5051	Special PCK liner for double linering. Release coat one side.	4.2	58# Polycoated Kraft	48" width – length can vary	Yes



Preventing premature adhering. 3M™ Release Liners deliver a flexible solution for a wide range of applications and adhesive products.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Adhesive Transfer Tapes

Adhesive Family[1]	Product	Description/Application Ideas	Adhesive Caliper (mils)	Liner[2]		Master Size*	Specs	Adhesion				Chemical Resistance	Temperature	
				Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
100 High Temperature Acrylic	**941**	Graphic attachment for low odor appliance applications.	2	58# PCK	4.2	48" x 180 yd		9	8	1	2	9	-40 (-40)	450 (232)
	965	Fuel and hydraulic line labels. Excellent chemical resistance. Aerospace.	2	55# DK	3.2	48" x 180 yd	—	9	8	1	2	9	-40 (-40)	450 (232)
	966	Meets NASA guidelines for low outgassing material for spacecraft. Flex circuit attachment. High temp.	2	62# DK	3.5	48" x 180 yd		9	8	1	2	9	-40 (-40)	450 (232)
	966FL	Meets NASA guidelines for low outgassing material for spacecraft. Flex circuit attachment. Static dissipative PET liner.	2	PET	3.0	48" x 180 yd		9	8	1	2	9	-40 (-40)	450 (232)
	9461P	Thinner version of laminating adhesive 9462P.	1	55# DK	3.2	48" x 360 yd	—	9	8	1	2	9	-40 (-40)	450 (232)
	9462P	Laminating adhesive 966 on a caliper-controlled liner for rotary die-cutting.	2	55# DK	3.2	48" x 360 yd		9	8	1	2	9	-40 (-40)	450 (232)
100MP High Performance Acrylic[3]	**F9460PC**	High-performance industrial joining and metal fabrication.	2	58# PCK	4.2	60" x 180 yd		10	7	1	2	10	-40 (-40)	500 (260)
	F9469PC	High-performance industrial joining and metal fabrication.	5	58# PCK	4.2	60" x 180 yd		10	7	1	2	10	-40 (-40)	500 (260)
	F9473PC	High-performance industrial joining and metal fabrication.	10	58# PCK	4.2	60" x 180 yd		10	7	1	2	10	-40 (-40)	500 (260)
100HT Ultra High Temperature Acrylic	**9082**	Excellent heat resistance in high temp environments. For applications that require both higher processing and operating temperatures.	2	White DK Liner	3.2	48" x 180 yd		10	7	1	2	10	-40 (-40)	550 (288)
	9085	Thicker version of 9082.	5	White DK Liner	3.2	48" x 180 yd	—	10	7	1	2	10	-40 (-40)	550 (288)
	9085UV	Same as 9085 but with UV light detectable adhesive.	5	58# PCK	4.2	48" x 360 yd	—	10	7	1	2	10	-40 (-40)	550 (288)
200MP High Performance Acrylic	**467MC**	Same as 467MP with a paper MicroChannel liner to aid in bubble- and wrinkle-free graphic attachment.	2	58# PCK	4.2	54" x 180 yd		10	9	1	3	9	-40 (-40)	400 (204)
	467MP	Graphic attachment and general industrial joining. Industry standard.	2	58# PCK	4.2	60" x 600 yd		10	9	1	3	9	-40 (-40)	400 (204)
	467MPF	Polyester liner for rotary processing of graphic and die cut parts.	2	PET	2.0	54" x 180 yd		10	9	1	3	9	-40 (-40)	400 (204)
	468MC	Same as 468MP with a paper MicroChannel liner to aid in bubble- and wrinkle-free graphic attachment.	5	58# PCK	4.0	54" x 180 yd	—	10	9	1	3	9	-40 (-40)	400 (204)
	468MP	Industry standard for graphic attachment and die cut parts.	5	58# PCK	4.2	60" x 600 yd		10	9	1	3	9	-40 (-40)	400 (204)
	468MPF	Thicker version of 467MPF.	5	PET	2.0	54" x 180 yd		10	9	1	3	9	-40 (-40)	400 (204)
	9667MP	Same as 467MP on heavy, lay-flat liner for kiss-cutting.	2	78# PCK	5.7	54" x 180 yd		10	9	1	3	9	-40 (-40)	400 (204)
	9668MP	Same as 468MP on heavy, lay-flat liner.	5	78# PCK	5.7	54" x 360 yd		10	9	1	3	9	-40 (-40)	400 (204)

1. More information on pages 11–14. 2. More information on page 16. 3. Products in this platform are 3M™ VHB™ Tapes offering our highest strength.
*Select products have multiple master sizes. Verify with your 3M sales representative.

Values: 1 = Lowest Performance; 10 = Highest Performance

Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.

= UL Recognized

Go-To Product

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

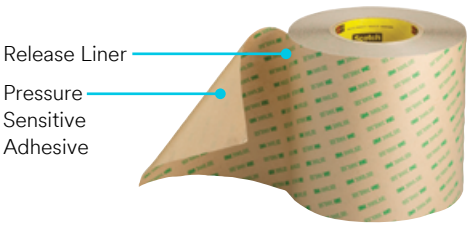
3M™ Adhesive Transfer Tapes (cont.)

Adhesive Family[1]	Product	Description/Application Ideas	Adhesive Caliper (mils)	Liner[2]		Master Size*	Specs	Adhesion				Chemical Resistance	Temperature	
				Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
220 Industrial Acrylic	9502	Economical attachment of graphics and industrial joining.	2	58# PCK	4.2	60" x 360 yd	UL	8	7	1	2	8	-40 (-40)	350 (177)
	9505	Thicker version of 9502 for textured surfaces.	5	58# PCK	4.2	60" x 360 yd	UL	8	7	1	2	8	-40 (-40)	350 (177)
290 Low Outgassing Acrylic	501FL	Ultra-clean adhesive for low outgassing applications.	1	PET	2.0	23.5" x 180 yd	—	9	7	1	2	9	-40 (-40)	450 (232)
	502FL	Ultra-clean adhesive for low outgassing applications.	2	PET	2.0	23.5" x 180 yd	—	9	7	1	2	9	-40 (-40)	450 (232)
300 High Strength Acrylic	927	Attach gaskets and a variety of industrial foam and LSE materials.	2	60# DK	3.5	48" x 180 yd	—	7	9	9	9	6	-40 (-40)	250 (121)
	950	Thicker version of 927.	5	58# Glassine	3.2	48" x 180 yd	UL	7	9	9	9	6	-40 (-40)	250 (121)
	950EK	950 with Extensible Kraft liner.	5	78# EK	5.7	48" x 180 yd	—	7	9	9	9	6	-40 (-40)	250 (121)
	9458	Thin, high-tack adhesive for rotary processing HSE and LSE parts.	1	55# DK	3.2	54" x 360 yd	UL	7	9	9	9	6	-40 (-40)	250 (121)
	9459W	White adhesive version of laminating adhesive.	1.5	55# DK	3.2	48" x 360 yd	UL	7	9	9	9	6	-40 (-40)	250 (121)
	9471	For smooth LSE plastics.	2	60# DK	3.5	48" x 180 yd	UL	7	9	9	9	6	-40 (-40)	250 (121)
	9472	5.0 mil version of 9471. For textured surfaces.	5	60# DK	3.5	48" x 180 yd	UL	7	9	9	9	6	-40 (-40)	250 (121)
	9671	Heavier lined version of 9471 for easy handling, lay-flat properties.	2	83# PCK	6.2	48" x 180 yd	UL	7	9	9	9	6	-40 (-40)	250 (121)
	9672	Heavier lined version of 9472 for easy handling, lay-flat properties.	5	83# PCK	6.2	48" x 180 yd	UL	7	9	9	9	6	-40 (-40)	250 (121)
★ 300LVC	59812LVC	Low VOC Acrylic Adhesive for bonding a variety of materials include LSE Plastics.	5	58# PCK	4.2	54"x 180	—	8	8	8	8	—	-40 (-40)	250 (121)
Low VOC	98010LVC	Designed for low fogging and low VOC emissions, ideal for auto interiors.	3.9	58# DK	3.2	54" 60"	—	9	8	3	3	—	-40 (-40)	250 (121)

1. More information on pages 11–14. 2. More information on page 16.
*Select products have multiple master sizes. Verify with your 3M sales representative.

Values: 1 = Lowest Performance; 10 = Highest Performance

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Made for easy handling. Adhesive Transfer Tape (ATT or unsupported tape) is composed of a thin film of adhesive with a liner over the top so it can be easily handled.

UL = UL Recognized

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3M™ Adhesive Transfer Tapes (cont.)

Adhesive Family[1]	Product	Description/Application Ideas	Adhesive Caliper (mils)	Liner[2]		Master Size*	Specs	Adhesion				Chemical Resistance	Temperature	
				Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
300LSE Low Surface Energy Acrylic	**9453FL**	Film lined version of 9453LE for rotary processing.	3.5	PET	2.0	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	9453LE	A 3.5 mil version of 9471LE for application to rough surfaces.	3.5	58# PCK	4.2	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	9471FL	Film lined version of 9471LE for rotary processing.	2	PET	2.0	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	9471LE	Bonds graphics to powder coatings, LSE plastics and oily materials.	2	58# PCK	4.2	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	9472FL	A 5 mil version of 9471LE with film liner for textured surfaces.	5	PET	2.0	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	9472LE	Thicker adhesive for textured LSE plastics and powder coatings.	5	58# PCK	4.2	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	9653LE	Heavy lined 9453LE for easy handling and lay-flat properties.	3.5	83# PCK	6.2	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	9671LE	Heavy lined 9471LE for easy handling and lay-flat properties.	2	83# PCK	6.2	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	9672LE	Heavy lined 9472LE for easy handling and lay-flat properties.	5	83# PCK	6.2	54" x 360 yd		9	9	10	8	8	-40 (-40)	300 (149)
300MP+ High-tack Acrylic	**6035PC+**	Pressure sensitive adhesive transfer tape specifically formulated to be low fogging. It features good adhesion to many materials and is ideal for use in automotive interior applications.	5	58# PCK	4.2	60" x 180 yd	Ford WSS-M99P48-B3	9	7	7	10	5	-76 (-60)	200 (93)
	6038PC+	Pressure sensitive adhesive transfer tape specifically formulated to be low fogging. It features good adhesion to many materials and is ideal for use in automotive interior applications.	8	58# PCK	4.2	60" x 180 yd	—	9	7	7	10	5	-76 (-60)	200 (93)
	9772WL+	Provides excellent bond to various fabricated foams, fabrics and substrates.	2	96# PCK	7.0	60" x 360 yd	—	7	7	4	9	—	-60 (-51)	225 (107)
	9773WL+	Provides excellent bond to various fabricated foams, fabrics and substrates.	3	96# PCK	7.0	60" x 360 yd	—	7	7	4	9	—	-60 (-51)	225 (107)
	9774WL+	Provides excellent bond to various fabricated foams, fabrics and substrates.	4	96# PCK	7.0	60" x 360 yd	—	7	7	4	9	—	-60 (-51)	225 (107)
	9775WL+	Provides excellent bond to various fabricated foams, fabrics and substrates.	5	96# PCK	7.0	60" x 360 yd	—	7	7	4	9	—	-60 (-51)	225 (107)
350 High Performance Acrylic	**9442**	Excellent temperature and solvent resistance. High bond to low surface energy substrates.	2	55# DK	3.2	48" x 180 yd		9	10	10	9	8	-40 (-40)	450 (232)
	9445	Thicker version of 9442.	5	55# DK	3.2	48" x 180 yd		9	10	10	9	8	-40 (-40)	450 (232)
	9482PC	High-tack and shear strength. Excellent adhesion to plastics and foams.	2	58# PCK	4.2	48" x 180 yd		9	10	10	9	8	-40 (-40)	450 (232)
	9485EK	Thicker version of 9482PC with an Extensible Kraft liner.	5	78# EK	5.7	48" x 180 yd		9	10	10	9	8	-40 (-40)	450 (232)
	9485PC	A 5 mil version of 9482PC.	5	58# PCK	4.2	48" x 180 yd		9	10	10	9	8	-40 (-40)	450 (232)
	9675	Heavy lined version of 9485PC for easy handling, lay-flat properties.	5	83# PCK	6.2	48" x 180 yd		9	10	10	9	8	-40 (-40)	450 (232)

1. More information on pages 11–14. 2. More information on page 17.
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3M™ Adhesive Transfer Tapes (cont.)

Adhesive Family[1]	Product	Description/Application Ideas	Adhesive Caliper (mils)	Liner[2]		Master Size*	Specs	Adhesion				Chemical Resistance	Temperature	
				Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
360 Acrylic Adhesive	**9626**	Quick stick with high bond strength. Designed for use with 3M™ Label Component Systems.	2	60# Glassine	3.2	54" x 540 yd	—	10	10	10	9	8	-40 (-40)	250 (121)
	9627	Quick stick with high bond strength. Designed for use with 3M™ Label Component Systems.	5	60# Glassine	3.2	54" x 180 yd	—	10	10	10	9	8	-40 (-40)	250 (121)
400 Acrylic Adhesive	**463**	High-tack and excellent adhesion to most paper stocks. For automatic dispensing.	2	58# Glassine	3.5	48" x 180 yd	—	5	5	5	4	5	-60 (-51)	250 (121)
	465	Same as 463, but with easy liner release for manual or hand application.	2	60# DK	3.5	48" x 180 yd	—	5	5	5	4	5	-60 (-51)	250 (121)
	9457	Adhesive with long-term stability, excellent outdoor performance and UV resistance. Adhesive 400 is best if necessary to apply at cooler temperatures.	1	55# DK	3.2	54" x 360 yd		5	5	5	4	5	-60 (-51)	250 (121)
Vinyl	**F9465PC**	Vinyl plasticizer resistant adhesive.	5	58# PCK	4.2	54" x 360 yd	—	10	10	7	5	5	-40 (-40)	200 (93)
	F9467U	Vinyl plasticizer resistant adhesive.	3.5	58# PCK	4.2	54" x 180 yd	—	10	10	7	5	5	-40 (-40)	200 (93)
Other	**97053**	Micro scrim reinforced adhesive transfer tape has excellent quick stick for permanent bond applications on plastics, metals, non-wovens, felts and foams.	2.5	50# DK	3.0	60" x 720 yd	—	6	6	5	5	5	-40 (-40)	175 (79)

1. More information on pages 11–14. 2. More information on page 17.
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Attach upholstery material to high-density foam.
Keep materials together under the hardest conditions with 3M™ Double Coated Tape 99786+ with Adhesive 300MP+.



Attach glass to metal.
Hold securely for a clean finish with 3M™ Adhesive Transfer Tape 468MP with Adhesive 200MP.

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3M™ Double Lined Adhesive Transfer Tapes

Adhesive Family[1]	Product	Description/Application Ideas	Adhesive Caliper (mils)	Liner[2]		Master Size	Specs	Adhesion				Chemical Resistance	Temperature	
				Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
200MP High Performance Acrylic	**7952MP**	Double lined laminating adhesive 467MP.	2	58# PCK	4.2	48" x 360 yd		10	9	1	3	9	-40 (-40)	400 (204)
				58# PCK	4.2	48" x 36"		10	9	1	3	9	-40 (-40)	400 (204)
	7955MP	Double lined laminating adhesive 468MP. For selective die-cutting.	5	58# PCK	4.2	48" x 360 yd		10	9	1	3	9	-40 (-40)	400 (204)
				58# PCK	4.2	48" x 36"		10	9	1	3	9	-40 (-40)	400 (204)
	7962MP	Laminating adhesive 7952MP on a lay-flat liner for kiss-cutting and selective die-cutting.	2	78# PCK	5.7	48" x 360 yd		10	9	1	3	9	-40 (-40)	400 (204)
				58# PCK	4.2	48" x 36"		10	9	1	3	9	-40 (-40)	400 (204)
	7965MP	Laminating adhesive 7955MP on a lay-flat liner for kiss-cutting and selective die-cutting.	5	78# PCK	5.7	48" x 360 yd		10	9	1	3	9	-40 (-40)	400 (204)
				58# PCK	4.2	48" x 36"		10	9	1	3	9	-40 (-40)	400 (204)
300LSE Low Surface Energy Acrylic	**8132LE**	Double lined laminating adhesive 9471LE. For selective die-cutting. Application to smooth surfaces.	2	58# PCK	4.2	48" x 360 yd		9	10	10	8	8	-40 (-40)	300 (149)
				83# PCK	6.2	48" x 36"		9	10	10	8	8	-40 (-40)	300 (149)
	8153LE	Double lined laminating adhesive 9453LE. For selective die-cutting. Application to rough surfaces.	3.5	58# PCK	4.2	48" x 360 yd		9	10	10	8	8	-40 (-40)	300 (149)
				83# PCK	6.2	48" x 36"		9	10	10	8	8	-40 (-40)	300 (149)

1. More information on pages 11–14. 2. More information on page 17.

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Double lined adhesive transfer tapes are excellent for selective die-cutting applications.

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3M™ Double Lined Adhesive Transfer Tapes (cont.)

Adhesive Family[1]	Product*	Description/Application Ideas	Adhesive Caliper (mils)	Liner[2]		Master Size	Specs	Adhesion				Chemical Resistance	Temperature	
				Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
2000MP Optically Clear Acrylic[3]	**8211**	General purpose, high adhesion optically clear adhesive.	1	PET/PET	2.0/2.0	60" x 180 yd	—	7	9	—	—	9	-40 (-40)	350 (177)
	8212	General purpose, high adhesion optically clear adhesive.	2	PET/PET	2.0/2.0	60" x 180 yd	—	7	9	—	—	9	-40 (-40)	350 (177)
	8213	General purpose, high adhesion optically clear adhesive.	3	PET/PET	2.0/2.0	60" x 180 yd	—	7	9	—	—	9	-40 (-40)	350 (177)
	8214	General purpose, high adhesion optically clear adhesive.	4	PET/PET	2.0/2.0	60" x 180 yd	—	7	9	—	—	9	-40 (-40)	350 (177)
	8215	General purpose, high adhesion optically clear adhesive.	5	PET/PET	2.0/2.0	60" x 180 yd	—	7	9	—	—	9	-40 (-40)	350 (177)
	8142KCL	Very soft, optically clear adhesive.	2	PET/PET	3.0/3.0	60" x 180 yd	—	—	5	—	—	6	-40 (-40)	185 (85)
	8171PCL	UV blocking, optically clear adhesive.	1	PET/PET	2.0/2.0	60" x 180 yd	—	—	4	—	—	6	-40 (-40)	185 (85)
	9483	Optically clear adhesive.	5	PET/PP	3.0/3.0	48" x 180 yd	—	9	9	—	—	9	-40 (-40)	350 (177)

1. More information on pages 11–14. 2. More information on page 17.
3. All optically clear adhesives can be manufactured in a single coated or double coated tape format upon special request.

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3M™ Double Coated Tape

The ideal general purpose industrial thin bond tape for use in many markets including consumer appliances, industrial machinery, transportation, signage, general industrial and consumer electronics. Bonds to many high surface energy substrates and some low surface energy substrates, including: stainless steel, HDPE, ABS, acrylic, PP, polycarbonate, aluminum and glass.

Adhesive Family*	Product	Adhesive Type	Carrier Type (Thickness)	Liner Type (Thickness)	Total Tape Thickness w/o Liner	Short-Term Temperature Performance	Long-Term Temperature Performance	Color
General Purpose Tapes GPT	**GPT-020**	Solventless Acrylic	PET 0.5 mils (12 micron)	White PCK 4 mils (100 micron)	8 mils (200 micron)	300 °F (149 °C)	200 °F (93 °C)	Transparent
	GPT-020F	Solventless Acrylic	PET 0.5 mils (12 micron)	White PP 4 mils (100 micron)	8 mils (200 micron)	300 °F (149 °C)	200 °F (93 °C)	Transparent
	GPT-020TF	Solventless Acrylic	PET 0.5 mils (12 micron)	Translucent Red PP 3.1 mils (80 micron)	8 mils (200 micron)	300 °F (149 °C)	200 °F (93 °C)	Transparent

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3M™ Double Coated Tapes



Bond foam to plastic.
Bond curved plastic pieces to foam or plastic with 3M™ Double Coated Tape 93015LE with Adhesive 300LSE.

Adhesive Family[1]	Product	Description/Application Ideas	Tape Cal. (mils)	Carrier Type	Liner[2]		Master Size*	Specs	Adhesion				Chemical Resistance	Temperature	
					Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
200MP High Performance Acrylic	**92015**	Double coat with thin polyester film carrier for dimensional stability and improved handling.	5.9	PET	58# PCK	4.2	54" x 180 yd		10	9	1	2	9	-40 (-40)	300 (149)
	9495B	Black version of 9495MP.	5.7	Black PET	58# PCK	4.2	54" x 180 yd		10	9	1	2	9	-40 (-40)	300 (149)
	9495MP	Double coated film tapes feature a thin polyester film for dimensional stability and improved handling with ease of die cutting and laminating.	5.7	PET	58# PCK	4.2	54" x 180 yd		10	9	1	2	9	-40 (-40)	300 (149)
300LSE Low Surface Energy Acrylic	**93005LE**	Very thin double coated polyester tape with good anti-lifting properties.	2.0	PET	58# PCK/ 78# PCK	4.2/ 6.2	54" x 360 yd		9	9	10	8	8	-40 (-40)	300 (149)
	93010LE	Double coated tape with a polyester film carrier for dimensional stability, improved handling and die cuttability.	3.9	PET	58# PCK	4.2	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	93015LE	Double coated tape with a polyester film carrier for dimensional stability, improved handling and die cuttability.	5.9	PET	58# PCK	4.2	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	93020LE	Double coated tape with a polyester film carrier for dimensional stability, improved handling and die cuttability.	7.9	PET	58# PCK	4.2	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
	9495LE	Double coated tape with a polyester film carrier for dimensional stability, improved handling and die cuttability.	6.7	PET	58# PCK	4.2	54" x 180 yd		9	9	10	8	8	-40 (-40)	300 (149)
300 High Strength Acrylic	**444**	Foam lamination. Gasket attachment.	3.9	PET	55# DK	3.2	48" x 108 yd	—	7	9	9	9	6	-40 (-40)	250 (121)
	444PC	Foam lamination. Gasket attachment.	3.9	PET	58# PCK	4.2	48" x 648 yd	—	7	9	9	9	6	-40 (-40)	250 (121)
	9009	Thin double coat for applications where thickness is critical.	2.1	PET	55# DK	3.2	54" x 180 yd	—	7	9	9	9	6	-40 (-40)	250 (121)
	9019	Ultra-thin double coat for applications where thickness is critical.	1.1	PET	55# DK	3.2	54" x 180 yd	—	7	9	9	9	6	-40 (-40)	250 (121)

1. More information on pages 11–14. 2. More information on page 17.
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Go-To Product

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3M™ Double Coated Tapes (cont.)

Adhesive Family[1]	Product	Description/Application Ideas	Tape Cal. (mils)	Carrier Type	Liner[2]		Master Size*	Specs	Adhesion				Chemical Resistance	Temperature	
					Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
300MP+ High-tack Acrylic (cont.)	**9690+**	Offers high adhesion to a wide variety of substrates, including plastics and foams. The polyester film (PET) carrier provides dimensional stability and improved handling during slitting and die cutting operations.	5.5	PET	83# PCK	6.2	54"	—	7	7	4	9	—	-60 (-51)	225 (107)
	9832+	General purpose tape with improved temperature resistance.	4.8	PET	58# PCK	4.2	54" x 250 yd	—	7	7	4	9	—	-60 (-51)	225 (107)
	9832HL+	Same as 9832+ except with a heavier liner.	4.8	PET	83# PCK	6.2	54" x 250 yd	—	7	7	4	9	—	-60 (-51)	225 (107)
	99786+	Thin non-woven carrier for dimensional stability and improved handling.	5.5	Non-Woven	58# PCK Printed	4.2	48" x 180 yd	—	7	7	4	9	—	-60 (-51)	225 (107)
	99786NP+	Same as 99786+ except on an unprinted liner.	5.5	Non-Woven	58# PCK Unprinted	4.2	54" x 180 yd	—	7	7	4	9	—	-60 (-51)	225 (107)
340 High-tack Acrylic	**9456**	High-tack acrylic adhesive with good adhesion to many plastics.	4.3	Tissue	55# DK	3.2	54" x 180 yd	—	6	6	5	4	8	-40 (-40)	180 (82)
	9824	Foam lamination. Gasket attachment.	3.1	PET	55# DK	3.2	54" x 250 yd	—	6	6	5	4	8	-40 (-40)	180 (82)
	9828	Foam lamination. Gasket attachment.	4.0	PET	55# DK	3.2	54" x 250 yd	—	6	6	5	4	8	-40 (-40)	180 (82)
	9828PC	High-tack acrylic adhesive with good adhesion to many foams.	4.0	PET	74# PCK	5.6	54" x 250 yd	—	6	6	5	4	8	-40 (-40)	180 (82)
350 High Performance Acrylic	**9500PC**	High performance with good chemical resistance.	5.6	PET	58# PCK	4.5	48" x 108 yd	—	9	10	10	9	8	-40 (-40)	350 (177)
	3028EK	Same as 9500PC with an Extensible Kraft liner which facilitates narrow slitting.	5.6	PET	77# EK	5.5	48" x 108 yd	—	9	10	10	9	8	-40 (-40)	350 (177)
360 Acrylic Adhesive	**9628B**	Outstanding quick stick and adhesion to polypropylene.	2.0	PET Black	60# Glassine	3.2	54" x 180 yd	—	10	10	10	6	8	-40 (-40)	250 (121)
	9629B	Outstanding quick stick and adhesion to polypropylene.	4.0	PET Black	60# Glassine	3.2	54" x 180 yd	—	10	10	10	6	8	-40 (-40)	250 (121)
	9629PC	Outstanding quick stick and adhesion to polypropylene.	4.0	PET	58# PCK	4.2	54" x 540 yd	—	10	10	10	6	8	-40 (-40)	250 (121)
375 High Performance Double Coated	**9086**	Easy tearing, easy handling.	7.5	Tissue	Glassine Black Logo	3.0	54" x 750 yd	—	8	8	6	3	7	-10 (-23)	250 (121)
	9087	Thick adhesive to bond rough surfaces.	10.2	PVC	Glassine Green Logo	3.0	54" x 750 yd	—	8	8	6	3	7	-10 (-23)	185 (85)
400 Acrylic Adhesive	**415**	Splice papers, films and foils.	4.0	PET	60# DK	4.0	48" x 504 yd	—	5	5	5	5	5	-60 (-51)	250 (121)

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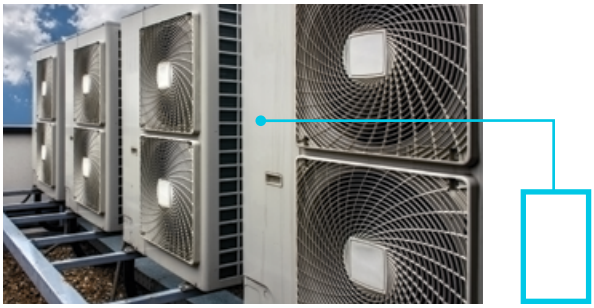
3M™ Double Coated Tapes (cont.)

Adhesive Family[1]	Product	Description/Application Ideas	Tape Cal. (mils)	Carrier Type	Liner[2]		Master Size*	Specs	Adhesion				Chemical Resistance	Temperature	
					Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
700 Synthetic Rubber	**476**	High-tack. Permanent	6.0	Film	62# DK	3.7	27" x 120 yd	—	8	9	9	3	2	-40 (-40)	150 (65)
	9443NP	High-tack rubber adhesive with good adhesion to most plastics.	6.0	HDPE	60# DK	3.7	27" x 120 yd	—	8	9	9	2	2	-40 (-40)	200 (93)
	9579	Core starting on metal cores.	9.0	HDPE	62# DK	3.7	27" x 144 yd	—	8	9	9	2	2	-40 (-40)	200 (93)
860 Natural Rubber	**401M**	Used for mounting rubber or photopolymer printing plates.	9.0	Paper	54# DK	3.0	23.5" x 72 yd	—	8	8	8	5	1	-40 (-40)	180 (82)
	410M	Core starting/end tabbing of papers, films and foils.	6.0	Paper	54# DK	3.0	23.5" x 108 yd	—	8	8	8	5	1	-40 (-40)	200 (93)
Low VOC	**9599**	Acrylic adhesive for high adhesion to a variety of materials including metals and HSE plastics. Low-VOC properties suitable for interior automotive applications.	5.0	Non-Woven Tissue	PCK White	4.5	51" x 55 yd	—	9	8	8	4	7	-40 (-40)	275 (135)
	99015LVC	Designed for low fogging and low VOC emissions, ideal for auto interiors.	5.9	Tissue	58# DK	3.2	54" 60"	—	9	8	3	3	—	-40 (-40)	250 (121)
	DCX 1018	Acrylic adhesive for high adhesion to a variety of materials including metals and HSE plastics. Low-VOC properties suitable for interior automotive applications.	5.0	Tissue	PCK White	4.2	51" x 55 yd	—	9	9	8	8	8	-40 (-40)	350 (177)
Double Coated Tissue Tapes	**56212**	General-purpose double coated tissue tape with high initial tack for a broad range of industrial applications. Provides better clarity compared to traditional 3M™ Double Coated Tissue Tapes. Manufactured through a solvent-free adhesive coating process.	4.7	Tissue	73# PCK	5.3	47.2" x 109.3 yd		8	6	6	8	—	-40 (-40)	250 (121)
	56215		5.9	Tissue	73# PCK	5.3	47.2" x 109.3 yd		8	6	6	8	—	-40 (-40)	250 (121)
	56412	Designed for bonding on low surface-energy and hard-to-bond substrates. Engineered to provide durable and versatile bonds, this translucent tape offers high tack and is designed for high-performance bonding. Manufactured through a solvent-free adhesive coating process.	4.7	Tissue	73# PCK	5.3	47.2" x 109.3 yd		7	7	8	7	—	-40 (-40)	250 (121)
	56415		5.9	Tissue	73# PCK	5.3	47.2" x 109.3 yd		7	7	8	7	—	-40 (-40)	250 (121)

1. More information on pages 11–14. 2. More information on page 17.
*Select products have multiple master sizes. Verify with your 3M sales representative.

Values: 1 = Lowest Performance; 10 = Highest Performance

Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.



Attach closed-cell foam to galvanized steel.
3M™ Double Coated Tape 9832HL+.



Attach rubber to plastic.
3M™ Double Coated Tape 93015LE with Adhesive 300LSE.

= UL Recognized

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Differential Double Coated Tapes

Adhesive Family [1,3]	Product	Description/Application Ideas	Tape Cal. (mils)	Carrier Type	Liner[2]		Master Size*	Specs	Adhesion				Chemical Resistance	Temperature	
					Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
350/ Silicone Differential Adhesive	**9731**	Differential adhesive-silicone adhesive on back side. Silicone keypad attachment, printer toner cartridge refurbishing.	5.5	PET	58#PCK/ 3 mil PET	2.9/4.2	48" x 108 yd	—	9	10	10	9	8	-40 (-40)	250 (121)
	9731-50	Differential adhesive-silicone adhesive on back side which provides adhesion to many difficult to bond to substrates including silicone rubbers and low surface energy plastics.	2.0	PET	58# PCK/ 2.9 mil PET	2.9/4.2	48" x 36 yd	—	9	10	10	9	8	-40 (-40)	250 (121)
	9731-100	Differential adhesive-silicone adhesive on back side which provides adhesion to many difficult to bond to substrates including silicone rubbers and low surface energy plastics.	4.0	PET	58# PCK/ 2.9 mil PET	2.9/4.2	48" x 36 yd	—	9	10	10	9	8	-40 (-40)	250 (121)
200MP/ 300LSE Differential Adhesive	**9496LE**	Adhesive 200MP provides excellent bond strength to a variety of high surface energy substrates. 300LSE bonds to powder coated metals, oily metals and LSE plastic.	6.7	PET	58#/58#	4.2/4.2	24" x 36"	—	10	9	1	3	9	-40 (-40)	250 (121)
		Adhesive 200MP provides excellent bond strength to a variety of high surface energy substrates. 300LSE bonds to powder coated metals, oily metals and LSE plastic.	6.7	PET	58#/58#	4.2/4.2	24" x 36"	—	9	10	10	1	7	-40 (-40)	250 (121)
300MP+/ 300LSE	**9490LE+**	Differential adhesive tape is excellent for a broad range of challenging substrates. The face side features 3M™ Adhesive 300MP+, excellent for bonding foams and fabrics. The back side is coated with 3M™ Adhesive 300LSE, which delivers high bond strength to a range of similar and dissimilar surfaces including plastics, metals, glass and paint.	6.7	Clear PET	58# PCK	4.2	54"	—	7/9	7/9	4/10	9/8	—	-60 (-51)	225 (107)

1. More information on pages 11–14. 2. More information on page 17. 3. Second number reflects removable adhesive side.
*Select products have multiple master sizes. Verify with your 3M sales representative.

Values: 1 = Lowest Performance; 10 = Highest Performance

Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Removable/Repositionable Tapes

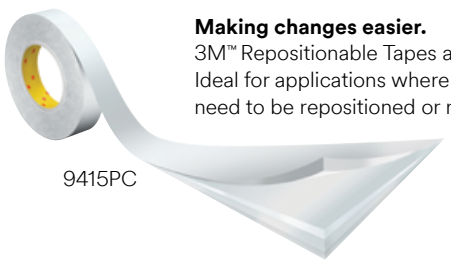
Adhesive Family [1,3]	Product	Description/Application Ideas	Tape Cal. (mils)	Carrier Type	Liner[2]		Master Size*	Specs	Adhesion				Chemical Resistance	Temperature	
					Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low °F (°C)	High °F (°C)
400/ 1000 Differential Adhesive	**9415PC**	High-tack/low tack differential adhesive. Polyester film carrier.	2	PET	77# EK	6.0	48" x 216 yd	—	5	5	5	4	5	-20 (-29)	150 (65)
	9416	High-tack/low tack differential adhesive. Tissue carrier.	2	Tissue	78# EK	5.6	47" x 432 yd	—	3	1	1	—	2	-20 (-29)	150 (65)
420/ 1050 Differential Adhesive	**9425**	High-tack/medium tack for repositionable parts. Hot wire cutable.	5.5	UPVC	58# PCK	4.2	48" x 144 yd	—	8/3	7/1	1	4/1	2	-20 (-29)	125 (52)
	9425HT	High-tack/medium tack acrylic adhesive offers permanent adhesion to one substrate with removability to the other.	5	PET	58# PCK	4.2	48" x 360 yd	—	8/3	7/1	1	4/1	2	-20 (-29)	250 (121)
400/ 1070 Repositionable Acrylic	**665**	Medium tack/medium tack differential adhesive. Hot wire cutable. Linerless.	3.5	UPVC	None	—	48" x 216 yd	—	5	5	5	4	5	-60 (-51)	125 (52)
	666	Linered version of 665.	3.5	UPVC	LDPE	4.0	48" x 108 yd	—	5	5	5	4	5	-60 (-51)	125 (52)
100 High Temp. Acrylic	**4658F**	Clear, closed foam acrylic foam tape. Initially repositionable, but will create permanent bond.	31.0	None	PET	2.0	48" x 162 yd	—	9	8	1	—	9	-40 (-40)	450 (232)

1. More information on pages 11–14. 2. More information on page 17. 3. Second number reflects removable adhesive side.
*Select products have multiple master sizes. Verify with your 3M sales representative.

Values: 1 = Lowest Performance; 10 = Highest Performance

Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.

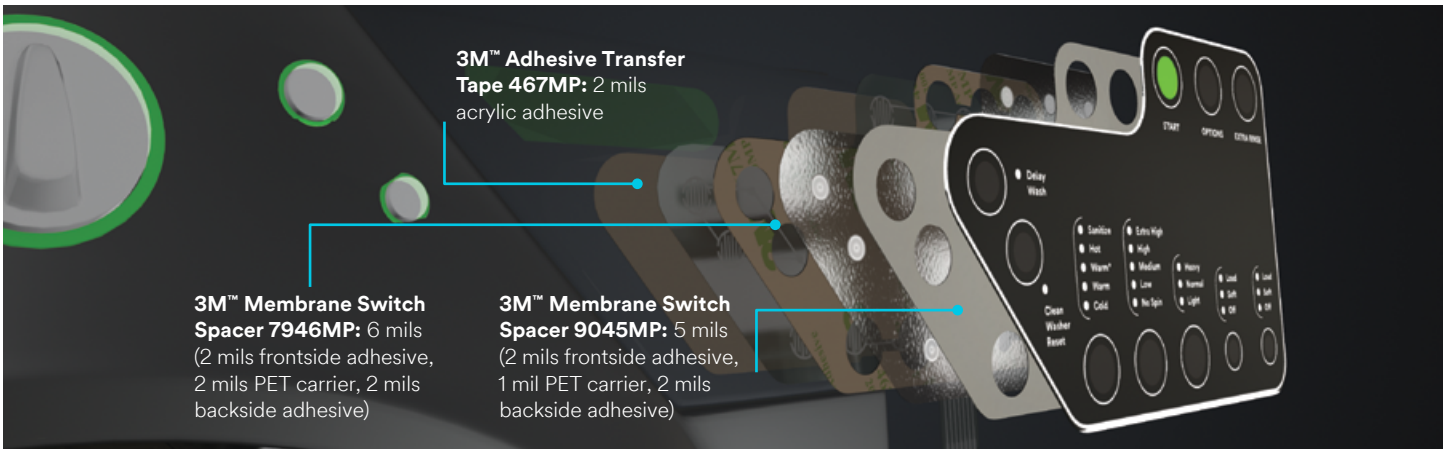




Making changes easier.
3M™ Repositionable Tapes are double coated. Ideal for applications where one or both parts need to be repositioned or removed easily.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Membrane Switch Spacers — Double Coated Spacers



Accuracy with one touch.

Piece together the power of precision, then seal it in. Design machines that respond to your commands with the lightest touch — so we can live better, work smarter and surpass the limits of yesterday. Because that's how progress is made — and how success is felt. Membrane switches engineered with 3M™ Acrylic Adhesives measure up to the most demanding standards. With exceptionally high shear strength, great durability and features that streamline the creative process, you can trust that your design delivers accuracy with style–and stands up to the test of time.

Adhesive Family[1]	Product	Description/Application Ideas	Construction			Sheet Size* Master Roll	Specs
			Total Thickness (mils)	Top Liner Adhesive Type Carrier Adhesive Type Bottom Liner	Caliper (mils)		
★ 200MP High Performance Acrylic	7945MP	Excellent temperature, chemical and UV resistance. High shear strength withstands repeated stresses of switch actuation. Designed to separate switch circuitry until actuation. Both liners are printed.	5	58# PCK 200MP Polyester 200MP 58# PCK	— 2 1 2 —	48" x 36" 48" x 360 yd	
	7953MP	Same characteristics as 7945MP. Primary liner is printed. Also used for graphic attachment.	3.5	58# PCK 200MP Polyester 200MP 58# PCK	— 1.5 0.5 1.5 —	48" x 36" 48" x 360 yd	
	7956MP	Same characteristics as 7945MP. Both liners are printed.	6	58# PCK 200MP Polyester 200MP 58# PCK	— 2 2 2 —	24" x 36" 48" x 360 yd	
	7956MWS	For use in graphic and non-graphic applications. Metalized vapor coat and white color provide strong opacity for facilitating backlighting and eliminating floodcoats. Single liner.	6	58# PCK 200MP Polyester (white, vapor coated) 200MP	— 2 2 2	48" x 360 yd	
	7956WDL	Same characteristics as 7956MWS except in sheets.	6	58# PCK 200MP Polyester (white, vapor coated) 200MP 58# PCK	— 2 2 2 —	24" x 36" 48" x 360 yd	
	7957MP	Same characteristics as 7945MP, except thicker polyester. Both liners are printed.	7	58# PCK 200MP Polyester 200MP 58# PCK	— 2 3 2 —	48" x 36" 48" x 360 yd	
	7959MP	Same characteristics as 7945MP, except thicker polyester. Both liners are printed.	9	58# PCK 200MP Polyester 200MP 58# PCK	— 2 5 2 —	48" x 36" 48" x 360 yd	

1. More information on pages 11–14.
*Select products have multiple master sizes. Verify with your 3M sales representative.

= UL Recognized

★ Go-To Product

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Membrane Switch Spacers — Double Coated Spacers (cont.)

Adhesive Family[1]	Product	Description/Application Ideas	Construction			Sheet Size Master Roll	Specs
			Total Thickness (mils)	Top Liner Adhesive Type Carrier Adhesive Type Bottom Liner	Caliper (mils)		
200MP High Performance Acrylic (cont.)	7961MP	Same characteristics as 7945MP, except thicker polyester. Both liners are printed.	11	58# PCK 200MP Polyester 200MP 58# PCK	— 2 7 2 —	48" x 36"* 48" x 360 yd	
	7966MWS	For use in graphic and non-graphic applications. Metalized vapor coat and white color provide strong opacity for facilitating backlighting and eliminating floodcoats.	9	58# PCK 200MP Polyester (white, vapor coated) 200MP	— 2 2 5	48" x 360 yd	
	7966WDL	Same characteristics as 7966MWS except in sheets.	9	58# PCK 200MP Polyester (white, vapor coated) 200MP 58# PCK	— 2 2 5 —	24" x 36" 48" x 360 yd	
	9045MP	Excellent high temperature, chemical and UV resistance. High cohesive strength withstands repeated stresses of switch actuation. Heavy liner for improved handling and lay-flat properties. Both liners are printed.	5	94# PCK 200MP Polyester 200MP 94# PCK	— 2 1 2 —	48" x 36"* 48" x 360 yd	
	9057MP	Excellent high temperature, chemical and UV resistance. High cohesive strength withstands repeated stresses of switch actuation. Heavy liner for improved handling and lay-flat properties. Both liners are printed.	7	94# PCK 200MP Polyester 200MP 94# PCK	— 2 3 2 —	24" x 36" 48" x 360 yd	
	9059MP	Excellent high temperature, chemical and UV resistance. High cohesive strength withstands repeated stresses of switch actuation. Heavy liner for improved handling and lay-flat properties. Both liners are printed.	9	94# PCK 200MP Polyester 200MP 94# PCK	— 2 5 2 —	48" x 36"* 48" x 360 yd	
	9061MP	Excellent high temperature, chemical and UV resistance. High cohesive strength withstands repeated stresses of switch actuation. Heavy liner for improved handling and lay-flat properties. Both liners are printed.	11	94# PCK 200MP Polyester 200MP 94# PCK	— 2 7 2 —	24" x 36" 48" x 360 yd	

1. More information on pages 1–14.

3M™ Membrane Switch Spacers — Single Coated Spacers

Adhesive Family[1]	Product	Description/Application Ideas	Construction			Sheet Size* Master Roll	Specs
			Total Thickness (mils)	Carrier Adhesive Type Bottom Liner	Caliper (mils)		
200MP High Performance Acrylic	7992MP	Adhesive 200MP on one side of a clear polyester carrier.	4	Polyester Film 200MP 94# PCK	2 2 —	24" x 36" 48" x 360 yd	—
	7993MP	Excellent temperature, chemical and UV resistance. Used for lead protection, dome retainer sheets, and for printing conductive circuitry.	3	Polyester Film 200MP 94# PCK	1 2 —	48" x 36" 48" x 360 yd	
	7995MP	Same characteristics as 7993MP, except with thicker polyester.	5	Polyester 200MP 94# PCK	3 2 —	24" x 36" 48" x 360 yd	
	7997MP	Same characteristics as 7993MP, except with thicker polyester.	7	Polyester 200MP 94# PCK	5 2 —	24" x 36" 48" x 360 yd	

1. More information on pages 11–14.
*Select products have multiple master sizes. Verify with your 3M sales representative.

= UL Recognized

Go-To Product

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3M™ Extended Liner Tapes

Adhesive Family[1]	Product	Application Ideas	Tape Thickness w/o Liner mils (mm)	Liner Type[2]	Description	Temperature Resistance °F (°C)		Solvent Resistance	Relative Adhesion	
						Short-Term	Long-Term		HSE	LSE
400 Acrylic Adhesive	**465XL**	Seal flaps on overnight envelopes. Pressure sensitive edging on business forms. General commercial joining applications. For attaching materials that require more adhesive thickness. Larger outsert attachments.	2.0 (0.05)	60# DK Tan with Green Print	General purpose.	250 (121)	180 (82)	5	5	5
	450EK	Pharmaceutical outsert attachment. For applications requiring a more tear resistant liner.	1.0 (0.025)	78# Extensible Kraft White (No Print)	General purpose.	250 (121)	180 (82)	5	5	5
	920XL	Seal flaps on poly-bags and envelopes. Pressure sensitive edging on business forms, literature, photos, posters and labels.	1.0 (0.025)	40# DK White with Red Print	General purpose.	250 (121)	180 (82)	5	5	5
760 Synthetic Rubber	**476XL**	Heavy-duty sealing. Mounting of promotional items. Core starting. Closure of overnight boxes, tubes and envelopes. Indirect food-contact applications.[3]	6.0 (0.16)	62# DK White with Red Print	High-tack, double coated film.	150 (65)	120 (49)	5	9	9
770 Synthetic Rubber	**9925XL[4]**	General mounting. P.O.P. items. Attaching tags and labels. Core starting. Permanent bonding paper-to-paper, business forms, traffic tickets, novelty items and literature. Indirect food-contact applications.[3]	2.5 (0.065)	43# DK White with Black Print	Tissue reinforced. High initial adhesion to a wide variety of materials.	150 (65)	100 (41)	4	9	9

1. More information on pages 11–14.
2. More information on page 17.
3. FDA acceptable dry ingredients listed as indirect food-contact additives when used in food packing with minimal opportunity for exposure.
4. Non-liner side is adhesive coated full width.

Easy liner starting and removal.
3M™ Extended Liner Tapes are constructed with liners that extends beyond the width of the adhesive to provide easy liner starting. The dry edge or finger lift edge on each side of the tape makes liner removal easy.



Go-To Product

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Screen Printable Adhesives

Product Group	Product	Description/Application Ideas	Adhesion Specs	Size
Screen Printable Adhesives	**SP7533**	Water-dispersed, pressure sensitive. Excellent balance of peel and shear strength. High heat resistance.	Process dependent	1 liter (6/case) 5 liters (2/case) 1 gallon (4/case)



Scotch® ATG Adhesive Transfer Tapes

Adhesive Family [1,2]	Product	Tape Thickness w/o Liner mils (mm)	Description	Temperature Resistance °F (°C)		Solvent Resistance	Relative Adhesion[2]		Application Ideas	Adhesive Transfer Tape Equivalent
				Short-Term	Long-Term		HSE	LSE		
300 High-tack Acrylic	**976**	2.0 (0.05)	High-tack. Excellent adhesion to most plastics.	250 (121)	150 (65)	6	8	9	Attach fabric swatches in sample books.	927
	969	5.0 (0.13)	High-tack. Excellent adhesion to most plastics.	250 (121)	150 (65)	6	8	9	Assemble P.O.P. displays. Bond trim strips to furniture or luggage. Bond labels to plastic toys. Attach gaskets or foams.	950
350 High Performance Acrylic	**926**	5.0 (0.13)	High performance. Excellent solvent and temperature resistance.	450 (232)	300 (149)	8	10	10	Bond fabric or trim to window blinds. Splice aluminum coils. Bond foam insulation. Mount nameplates on award plaques.	9485PC
400 General Purpose Adhesive	**924**	2.0 (0.05)	General purpose. Excellent adhesion to most paper stocks.	250 (121)	180 (82)	5	5	5	Seal pocket in folders. Bond mat board in picture frames. Splice paper, films and foils. General purpose bindery attaching.	465
	987*	1.7 (0.040)	General purpose. Excellent adhesion to most paper stocks.	250 (121)	180 (82)	5	5	5	Seal pocket in folders. Bond mat board in picture frames. Splice paper, films and foils. General purpose bindery attaching.	465
400/ 1000 Repositionable Adhesive	**928**	2.0 (0.05)	Differential tack. Repositionable.	180 (82)	150 (65)	5	5/1	5/1	Attach credit card in mailer. Core start/end tab paper, films and foils. Attach temporary labels.	9416

1. More information on pages 11–14. 2. Second number reflects removable adhesive side.
*3M Brand.



Scotch® ATG Applicator 714
Used for 1/4" wide tape



Scotch® ATG Applicator 3662
Used for 2" wide tape

Scotch® ATG Applicator 752C
3/4", 1/2" and 1/4" wide tape
(1/4" adapter purchased separately)





Scotch® ATG Applicator 700
Used for 1/2" and 3/4" wide tape

No mess, no cleanup.
A touch of the finger triggers a quick, controlled application of Scotch® ATG Adhesive Transfer Tape at the same time as the liner rewinds into the applicator.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

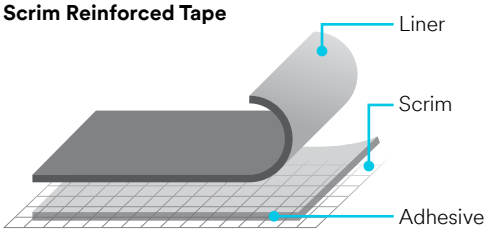


3M™ Foam Lamination Tapes — L-Series

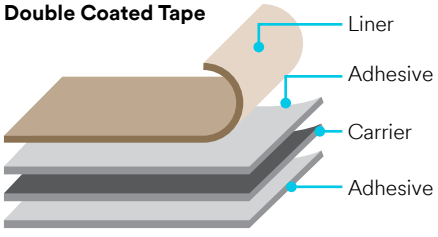
The perfect seal. Just the right amount of acoustic insulation. Ideal impact damping. Whatever your design challenge, there's a 3M™ Foam Lamination Tape that can make your vision a reality. Our L1/L3 series adhesive platforms allow you to pair your design with the right foam and adhesive for your application.

Product Family	Product	Adhesive Caliper mils (mm)	Liner Type	Liner Caliper mils (mm)	Temperature Resistance °F (°C)	Roll size Width in. (mm) Length yds. (m)	Application Ideas
L1 Platform Modified acrylic adhesive with good initial tack and peel adhesion.	**Double Coated Tape L1+DCP**	3.5 (0.088)	74# white, unprinted DK	4.1 (0.104)	200°F (93°C)	Widths: 39 (1000), 54 (1372), 60 (1524) Length: 251 (230)	Foams, including cross-linked PE, EVA and microcellular urethane.
	Scrim Reinforced Adhesive Transfer Tape L1+RT	3.2 (0.081)	74# white, unprinted DK	4.1 (0.104)	200°F (93°C)	Widths: 39 (1000), 54 (1372), 60 (1524) Length: 251 (230)	Foams, including cross-linked PE, EVA and microcellular urethane.
L3 Platform Specialty acrylic adhesive with good adhesion to many elastomeric substrates.	**Adhesive Transfer Tape L3+T3**	3.0 (0.076)	83# tan, unprinted PCK	6.2 (0.157)	275°F (135°C)	Width: 54 (1372) Length: 54 (229)	Elastomers, including TPV, neoprene rubber, butyl rubber and many versions of EPDM rubber.
	Adhesive Transfer Tape L3+T5	5.0 (0.127)	83# tan, unprinted PCK	6.2 (0.157)	275°F (135°C)	Width: 54 (1372) Length: 54 (229)	Elastomers, including TPV, neoprene rubber, butyl rubber and many versions of EPDM rubber.

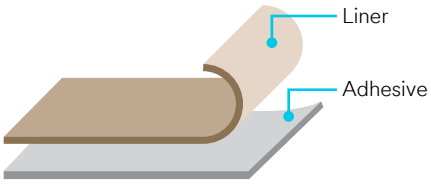
Scrim Reinforced Tape



Double Coated Tape



Adhesive Transfer Tape



Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Bonding Films

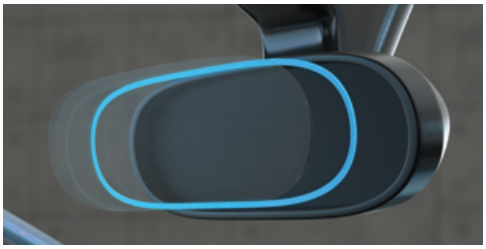
Product	Caliper (mils)	Base Resin	Color	Bond/ Cure Time	Bondline Temp. (°F)	Description	Spec	Size
406	3.0	EAA	Clear	2–5 sec.	320	Flexible, light colored, thermoplastic bonding film exhibits good adhesion to a variety of substrates, especially metals.	—	48" x 180 yd
583	2.0	Nitrile Phenolic	Brown	2–5 sec.	250	Heat or solvent-activated dry film adhesive.	UL	48" x 180 yd
615	2.5 or 4.0	Polyester	Tan	2–5 sec.	280	Flexible, light colored, thermoplastic bonding films exhibit good adhesion to a variety of substrates. 615 contains a non-woven scrim.	—	0.6m x 155m
615S	6.0 or 9.0	Polyester	Tan	2–5 sec.	280	Flexible, light colored, thermoplastic bonding films exhibit good adhesion to a variety of substrates. 615S contains a non-woven scrim.	—	6 mil: 0.6m x 155m 9 mil: 0.6m x 80m
668	2.5 or 4.0	Polyamide	Tan	2–5 sec.	320	Flexible, light colored, thermoplastic bonding film is tacky at room temperature and has good adhesion to a variety of substrates at elevated temperatures.	—	0.6m x 155m
690	8.0	Polyester	Tan	2–5 sec.	280	Flexible, light colored, thermoplastic bonding film is tacky at room temperature and has good adhesion to a variety of substrates at elevated temperatures.	—	0.6m x 80m*

*MOQ is 2 rolls.

3M™ Double Coated Foam Tapes

Carrier	Product	Liner Type	Tape Thickness mils (mm)	Description	Adhesive Type	Temperature Resistance °F (°C)		Solvent Resistance	Relative Adhesion		Application Ideas
						Minutes Hours	Days Weeks		HSE	LSE	
Urethane	**4004**	A	250 (6.4)	Off-white, open-cell urethane foam carrier. High shear adhesive with high temperature resistance.	100	380 (193)	220 (104)	Med	High	Low	Bond acoustic panels to walls. Mount air fresheners, soap dispensers, interior signs and nameplates. Attach wire clips to various surfaces. Mount electrical channel to wall.
	4008	A	125 (3.2)		100	380 (193)	220 (104)	Med	High	Low	
	4016	A	62 (1.6)		100	380 (193)	220 (104)	Med	High	Low	
	4026	A	62 (1.6)		100	380 (193)	220 (104)	Med	High	Low	
	4052	A	31 (0.8)	Black version of 4032.	100	380 (193)	220 (104)	Med	High	Low	Bond acoustic panels to walls. Mount air fresheners, soap dispensers, interior signs and nameplates. Attach wire clips to various surfaces. Mount electrical channel to wall.
	4056	A	62 (1.6)	Black version of 4016 and 4026.	100	380 (193)	220 (104)	Med	High	Low	
Polyethylene	**4492**	C	31 (0.8)	White or black, closed-cell polyethylene foam carrier. High shear adhesive with high temperature resistance.	430	180 (82)	158 (70)	Med	High	Low	Mount nameplates on awards and novelties. P.O.P. displays and signs.
	4496	C	62 (1.6)		430	180 (82)	158 (70)	Med	High	Low	
Acrylic	**4658F**	D	31 (0.8)	Clear, closed-cell acrylic foam tape. Clean removability from many substrates.	100	212 (100)	175 (80)	High	High	Low	Removable P.O.P. displays, signs, exhibits and trade shows, nameplates.

Liner Types: A. 3 mil 62# Densified Kraft-Green Plaid; B. 3 mil Densified Kraft-White; C. 4 mil 58# Polycoated Kraft-Tan; D. 2 mil Polyester Film-clear; E. 3 mil Densified Kraft-Tan.



3M™ Double Coated Urethane Foam Tape 4026
An excellent choice for interior mounting applications where the tape will be protected from the environment.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.



3M™ Electronics Bonding Tapes

Smartphones, tablets, notebook computers, wearables and headphones go everywhere with their users, and that means they need to withstand everyday bumps and shocks. And even though smart appliances, smart speakers, smart sensors, and security systems don't leave the home, they still need to be durable enough to stand up to heavy use. Enter 3M™ Electronics Bonding Tapes, a comprehensive portfolio that help enable your most ambitious consumer electronics designs. From curved and foldable surfaces to small components, these solutions offer the right combination of properties for tough bonding applications.

Product	Primary feature	Thickness (µm)	Color	Adhesive	180° Peel, SUS (N/mm)	180° Peel, PC (N/mm)	Static Shear @ RT (min)	Static Shear @ 70°C (min)	Tensile Strength (kPa)	Tensile Impact (J)	Other features
3M™ Electronics Bonding Tapes – Adhesive Transfer Tapes											
467MP	Shear strength, anti-lift	60	Clear	Acrylic	0.8	0.8	10,000+	10,000+	253	0.3	Bonding to metals. Bonding to high surface energy plastics.
468MP		130			1	0.9			271	0.5	
74911NH	Low modulus at low temperature	110	Clear	Acrylic	0.3	0.4	10,000+	10,000+	13	0.4	Produced in clean room. Easily converted.
F9460PC	High temperature resistance	58	Clear	Acrylic	0.4	0.7	10,000+	10,000+	279	0.4	Up to 260°C short-term. High shear strength even at high temperature.
F9469PC		130			1	1.1			1'082	0.4	
F9473PC		250			1.2	1.3			462	0.4	
9079		50			0.8	0.9			153	0.3	Up to 260°C short-term, low outgas.
9617		50			0.9	1			204	0.2	Up to 204°C short-term. Fast bubble-free application.
9471LE	Bonding to low surface energy substrates	58	Clear	Acrylic	0.8	1.2	9'258	10,000+	271	0.2	Bonding to PP and PE
9472LE		132			1	1.3	10,000+	10,000+	246	0.2	
95005	Impact resistance	50	Black	Modified acrylic	1	1	10,000+	10,000+	179	0.3	Conformable
95010		100			1.5	1.1	8'496	4'035	280	0.5	
962CR-50	Chemical resistance	50	Clear	Specialty adhesive	0.9	1	10,000+	10,000+	998	0.4	Produced in clean room.
962CR-200		200			1.6	1.7			1'600	0.4	

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3M™ Electronics Bonding Tapes (cont.)

Product	Primary feature	Thickness (µm)	Color	Adhesive	Carrier Type	180° Peel, SUS (N/mm)	180° Peel, PC (N/mm)	Static Shear @ RT (min)	Static Shear @ 70°C (min)	Tensile Strength (kPa)	Tensile Impact (J)	Other features
3M™ Electronics Bonding Tapes – Double Coated Tapes												
9077	High temp resistance	50	Clear	Acrylic	Non-woven	1	0.2	10,000+	10,000+	201	0.2	Up to 260°C short-term heat resistance.
9080A	Conformable	150	Clear	Acrylic	Tissue	0.8	1.3	10,000+	10,000+	372	0.4	Up to 150°C short-term heat resistance.
93420	Conformable	200	Black	Acrylic	Specialty core	0.9	1.1	10,000+	10,000+	450	0.3	Impact resistance. Anti-lifting
93425	Conformable	250	Black	Acrylic	Specialty core	1.5	1.6	10,000+	10,000+	361	0.3	
93430	Conformable	300	Black	Acrylic	Specialty core	1.7	1.9	10,000+	10,000+	292	0.4	
9448A	Conformable	150	White	Acrylic	Tissue	1	1.1	10,000+	1'284	299	0.4	Up to 150°C short-term heat resistance.
9415PC	Repositionable	50	Trans-lucent	Acrylic	PET	0.06/0.01[1]	0.09/0.02[1]	3	1	869	0.1	Low tack on liner, high tack on face.
9425HT	Repositionable	130	Clear	Acrylic	PET	0.44/0.11[1]	0.45/0.32[1]	175	80	145	0.3	Medium tack on liner, high tack on face.
9492MP	Bonding to high surface energy substrates	60	Clear	Acrylic	PET	0.8	0.5	10,000+	10,000+	281	0.2	Up to 149°C short-term heat resistance.
9495MP		140	Clear	Acrylic	PET	0.9	0.6	10,000+	10,000+	239	0.4	
93005LE	Bonding to low surface energy substrates	50	Clear	Acrylic	PET	0.7	0.8	10,000+	10,000+	242	0.1	Bonding to PP and PE.
93010LE		100	Clear	Acrylic	PET	0.9	1.2	10,000+	10,000+	261	0.2	
93015LE		150	Clear	Acrylic	PET	0.9	1.2	10,000+	10,000+	202	0.2	
93020LE		200	Clear	Acrylic	PET	0.9	1.3	8'012	10,000+	224	0.3	
9495LE		170	Clear	Acrylic	PET	1.2	1.7	10,000+	10,000+	453	0.2	
9628B		50	Black	Acrylic	PET	0.9	1	10,000+	10,000+	505	0.2	Bonding PP and PE. Fast bonding dwell time.
9629B		100	Black	Acrylic	PET	1.1	1.2	10,000+	10,000+	310	0.3	
9731-050	Bonding to silicone substrates	50	Clear	Acrylic / Silicone	PET	0.6[2]	0.58/0.25[3]	10,000+	10,000+	104	0.2	Up to 177°C short-term heat resistance.
94130HD	Debondable with heat	300	Black	Specialty adhesive	PE foam	1.1 / 1.6[4]	1.4 / 1.5[4]	10,000+	10,000+	699	0.4	Water resistance
55256P/BP	Good initial tack	50	Clear, Black	Acrylic	PET	0.9	1	10,000+	10,000+	197	0.2	Good shear holding power.
55261P/BP	Good initial tack	100	Clear, Black	Acrylic	PET	0.8	1.3	10,000+	10,000+	173	0.3	
GTM705P/BP	Good initial tack	50	Clear, Black	Acrylic	PET	1	1.2	10,000+	10,000+	253	0.1	High static shear.
GTM708P/BP	Good initial tack	80	Clear, Black	Acrylic	PET	1.1	1.5	10,000+	10,000+	273	0.2	
GTM710P/BP	Good initial tack	100	Clear, Black	Acrylic	PET	1.3	1.6	10,000+	10,000+	241	0.2	
GTM715P/BP	Good initial tack	150	Clear, Black	Acrylic	PET	1.5	1.8	10,000+	10,000+	317	0.2	
GTM720P/BP	Good initial tack	200	Clear, Black	Acrylic	PET	2	2.3	10,000+	10,000+	317	0.2	
GTM725P/BP	Good initial tack	250	Clear, Black	Acrylic	PET	2	2.7	10,000+	10,000+	349	0.2	
UCT-10	Ultra clear	10	Clear	Acrylic	PET	0.3	0.5	10,000+	10,000+	91	0.1	Produced in clean room. High initial tack.
UCT-20	Ultra clear	20	Clear	Acrylic	PET	0.5	0.7	10,000+	10,000+	128	0.1	
UCT-30	Ultra clear	30	Clear	Acrylic	PET	0.7	0.8	10,000+	10,000+	148	0.1	
UCT-50	Ultra clear	50	Clear	Acrylic	PET	1.1	1.2	10,000+	10,000+	319	0.2	

1: Measured on high tack and low tack sides, respectively. 2: Measured on acrylic side. 3: Measured on polycarbonate and silicone, respectively.
4: Measured on debondable side and normal side respectively

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3M™ Electronics Bonding Tapes (cont.)

Product	Primary feature	Thickness (µm)	Color	Adhesive	Carrier Type	180° Peel, SUS (N/mm)	180° Peel, PC (N/mm)	Static Shear @ RT (min)	Static Shear @ 70°C (min)	Tensile Strength (kPa)	Tensile Impact (J)	Other features
3M™ VHB™ Tapes for Electronics Bonding – 4950 Tape Family												
3M™ VHB™ 4914-015	High holding power	150	White	Acrylic	Acrylic foam	1.6	1	10,000+	10,000+	371	0.6	Firm for easy converting. Water resistance.
3M™ VHB™ 4914-020		200	White	Acrylic	Acrylic foam	1.8	1	10,000+	10,000+	442	0.7	
3M™ VHB™ 4914		250	White	Acrylic	Acrylic foam	1.5	1.8	10,000+	10,000+	397	0.7	
3M™ VHB™ Tapes for Electronics Bonding – 5952 Tape Family												
3M™ VHB™ 5906	Drop resistance	150	Black	Acrylic	Acrylic foam	0.9	0.9	10,000+	10,000+	419	0.4	Conformable. Water resistance.
3M™ VHB™ 5907		200	Black	Acrylic	Acrylic foam	1.3	1.2	10,000+	10,000+	409	0.5	
3M™ VHB™ 5908		250	Black	Acrylic	Acrylic foam	1.2	1.3	10,000+	10,000+	395	0.6	
3M™ VHB™ 5909		300	Black	Acrylic	Acrylic foam	1.5	1.4	10,000+	10,000+	374	0.6	
3M™ VHB™ 5913		350	Black	Acrylic	Acrylic foam	2.1	2.1	10,000+	10,000+	388	0.7	
3M™ VHB™ 5915		400	Black	Acrylic	Acrylic foam	1.2	1.8	10,000+	10,000+	409	0.5	
3M™ VHB™ Tapes for Electronics Bonding – 5980 Tape Family												
3M™ VHB™ 5980-015	High bonding strength	150	White, Black	Acrylic	Acrylic foam	1.2	1.8	10,000+	10,000+	324	0.5	Conformable. Water resistance.
3M™ VHB™ 5980-020		200	White, Black	Acrylic	Acrylic foam	1.4	2.1	10,000+	10,000+	204	0.6	
3M™ VHB™ 5980-025		250	White, Black	Acrylic	Acrylic foam	1.3	2.2	10,000+	10,000+	177	0.8	
3M™ VHB™ 5980-030		300	White, Black	Acrylic	Acrylic foam	1.1	1.8	10,000+	10,000+	341	0.8	
3M™ VHB™ Tapes for Electronics Bonding – 5981 Tape Family												
3M™ VHB™ 5981-020	Good re-workability	200	Black	Modified acrylic	Acrylic foam/ PET	1.2	1.5	10,000+	10,000+	469	0.4	Easily converted with PET carrier. Anti-lift. Water resistance.
3M™ VHB™ 5981-025		250	Black	Modified acrylic	Acrylic foam/ PET	1.3	1.7	10,000+	10,000+	594	0.6	
3M™ VHB™ 5981-030		300	Black	Modified acrylic	Acrylic foam/ PET	1.5	1.8	10,000+	10,000+	590	0.4	
3M™ VHB™ 5981-035		350	Black	Modified acrylic	Acrylic foam/ PET	1.6	1.8	10,000+	10,000+	542	0.5	
3M™ VHB™ 5981-040		400	Black	Modified acrylic	Acrylic foam/ PET	1.3	1.7	10,000+	10,000+	442	0.5	
3M™ VHB™ Tapes for Electronics Bonding – 864XX Tape Family												
3M™ VHB™ 86415	Tensile impact	150	Black	Acrylic	Acrylic foam	1.3	1.4	5'254	10,000+	218	0.5	Excellent conformability. Water resistance.
3M™ VHB™ 86420		200	Black	Acrylic	Acrylic foam	0.9	1.3	2'922	10,000+	244	0.9	
3M™ VHB™ 86425		250	Black	Acrylic	Acrylic foam	1.8	1.2	3'828	10,000+	255	1	
3M™ VHB™ 86430		300	Black	Acrylic	Acrylic foam	1.9	1.5	3'850	10,000+	277	0.9	
3M™ Foam Tapes for Electronics Bonding – PE Foam Tape Family												
5126-025	High push-out force	250	Black	Acrylic	PE foam	1.6	2.9	10,000+	10,000+	777	0.6	Creep resistance. Anti-lift.
5126-030		300	Black	Acrylic	PE foam	1.3	3.3	10,000+	10,000+	799	0.6	

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3M™ VHB™ Tapes

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Discover new horizons with 3M™ VHB™ Tape, empowering converters to innovate beyond traditional fasteners. This high-strength, double-sided viscoelastic tape allows for seamless bonding of metals, plastics, glass, and more, enabling designs that are both robust and visually striking.

3M™ VHB™ Tape enhances efficiency and productivity across various applications with its quick application, reducing assembly time and costs. Its unique properties ensure a lasting, reliable bond, instilling confidence in your customers' creations.

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Water resistance/Shock absorption.
3M™ VHB™ Tape solutions empower converters with design freedom and optimal performance, meeting many industry test requirements.



3M™ VHB™ Tapes

With 3M™ VHB™ Tapes, you can maintain consistency from sketch to construction, eliminating distracting, visible fasteners, like screws and bolts. These high-strength, double-sided acrylic foam tapes let you quickly and easily create a long-lasting bond that actually builds strength over time. With the ability to join a variety of materials including aluminum, steel, glass, plastics and painted and powder-coated surfaces. They provide resilient bonding solutions in just about anything you can dream up. Visit 3M.com/VHB to open a world of new possibilities.

Product	Tape Thickness w/o Liner mils (mm)	Liner Type	Description	Temperature Resistance °F (°C)		Solvent Resistance	Relative Adhesion		Spec	Application Ideas
				Minutes Hours	Days Weeks		HSE	LSE		
3M™ VHB™ 4910 Tapes – For transparent materials										
4905	20 (0.5)	F	Clear, acrylic construction for joining transparent material.	300 (150)	200 (93)	High	High	Low		Excellent for applications where clear or colorless is desired. The general purpose adhesive on both sides is suitable for high surface energy substrates.
4910	40 (1.0)	F	Clear, acrylic construction for joining transparent material.	300 (150)	200 (93)	High	High	Low		
3M™ VHB™ 4941 Tapes – Ideal for multi-material bonding										
4926	15 (0.4)	A	Gray, closed-cell acrylic foam carrier. Conformable. For most critical applications where a customer needs the strongest possible solution. Tested to resist high windloads, vibration, etc. where holding strength is critical.	300 (149)	200 (93)	High	High	Med		Bond architectural signs to frames. Attach trim and extrusions. Hat channels and stiffeners.
4936	25 (0.64)	A		300 (149)	200 (93)	High	High	Med		
4936F	25 (0.64)	F		300 (149)	200 (93)	High	High	Med		
4941	45 (1.1)	A		300 (149)	200 (93)	High	High	Med		
4941F	45 (1.1)	D		300 (149)	200 (93)	High	High	Med		
4956	62 (1.6)	A		300 (149)	200 (93)	High	High	Med		
4956F	62 (1.6)	F		300 (149)	200 (93)	High	High	Med		
4991	90 (2.3)	F		250 (121)	200 (93)	High	High	Med		
4991B	90 (2.3)	F	Black version of 4991.	250 (121)	200 (93)	High	High	Med	—	Bond architectural signs to frames. Attach trim and extrusions. Hat channels and stiffeners.
4919F	25 (0.64)	F	Black version of 4936F.	300 (149)	200 (93)	High	High	Med		
4947F	45 (1.1)	F	Black version of 4941F.	300 (149)	200 (93)	High	High	Med		
4979F	62 (1.6)	F	Black version of 4956F.	300 (149)	200 (93)	High	High	Med		

Liner Types: A. 3 mil 54# Densified Kraft Paper; B. 5 mil Clear Polyethylene Film; C. 2 mil Polyester Film D. 5 mil Red Polyethylene Film; E. 4 mil 58# Polycoated Kraft Paper; F. 5 mil Red Printed Polyethylene Film; G. 3 mil Clear PET. **Relative Adhesion:** HSE: High Surface Energy; LSE: Low Surface Energy. **Multi-purpose Acrylic:** Bonds to a wide range of materials including metals, glass, and high and medium surface energy plastics and paints. Resists migration of plasticizers in vinyl substrates. **Modified Acrylic:** Bonds to medium low surface energy paints and plastics, including many powder coated paints in addition to the substrates listed with the multi-purpose acrylic adhesive (except plasticized vinyl).

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3M™ VHB™ Tapes (cont.)

Product	Tape Thickness w/o Liner mils (mm)	Liner Type	Description	Temperature Resistance °F (°C) Minutes Hours	Temperature Resistance °F (°C) Days Weeks	Solvent Resistance	Relative Adhesion HSE	Relative Adhesion LSE	Spec	Application Ideas
3M™ VHB™ 4950 Tapes – Products with a firm core										
4914-015	6 (0.15)	A	Closed-cell acrylicfoam tape.	300 (150)	200 (93)	High	High	Med	—	This family has general purpose adhesive on both sides of firm type foam. Typically used on metal, glass and high surface energy plastic substrates. Available in white and black.
4914-020	8 (0.20)	A		300 (150)	200 (93)	High	High	Med	—	
4914	10 (0.25)	A	Closed-cell acrylicfoam tape. UL 746C.	300 (150)	200 (93)	High	High	Med		
4920	15 (0.4)	A		300 (150)	200 (93)	High	High	Med		
4930	25 (0.6)	A		300 (150)	200 (93)	High	High	Med		
4950	45 (1.1)	A		300 (150)	200 (93)	High	High	Med		
4955	80 (2.0)	A		400 (204)	300 (150)	High	High	Med		
4959	120 (3.0)	A		400 (204)	300 (150)	High	High	Med		
3M™ VHB™ 5952 Tapes – For powder coated surfaces										
5906	6 (0.15)	G	Black, closed cell acrylic foam carrier. A highly conformable tape that excels at bonding a variety of paint systems, medium surface energy plastics and irregular surfaces.	300 (149)	250 (121)	High	High	Med	—	Automotive Displays. Bond and seal polycarbonate lens over LCD. Bond and seal plastic windows to pre-painted control panels/switch gear. Mount vinyl wiring ducts and conduit channels. Seam vinyl banners.
5907	8 (0.20)	G		300 (149)	250 (121)	High	High	Med	—	
5908	10 (0.25)	G		300 (149)	250 (121)	High	High	Med	—	
5909	12 (0.30)	G		300 (149)	250 (121)	High	High	Med	—	
5913	14 (0.35)	G		300 (149)	250 (121)	High	High	Med	—	
5915	16 (0.40)	F		300 (149)	250 (121)	High	High	Med		
5915P	16 (0.40)	E		300 (149)	250 (121)	High	High	Med		
5925	25 (0.60)	F		300 (149)	250 (121)	High	High	Med		
5925P	25 (0.60)	E		300 (149)	250 (121)	High	High	Med		
5930	32 (0.80)	F		300 (149)	250 (121)	High	High	Med		
5930P	32 (0.80)	E	Black, closed cell acrylic foam carrier. A highly conformable tape that excels at bonding a variety of paint systems, medium surface energy plastics and irregular surfaces.	300 (149)	250 (121)	High	High	Med		Automotive Displays. Bond and seal polycarbonate lens over LCD. Bond and seal plastic windows to pre-painted control panels/switch gear. Mount vinyl wiring ducts and conduit channels. Seam vinyl banners.
5952	45 (1.1)	F		300 (149)	250 (121)	High	High	Med		
5952P	45 (1.1)	E		300 (149)	250 (121)	High	High	Med		
5962	62 (1.6)	F		300 (149)	250 (121)	High	High	Med		
5962P	62 (1.6)	E		300 (149)	250 (121)	High	High	Med		
5958FR	40 (1.0)	F	Meets FAR 25.853 (a) 12 sec vertical burn Appendix F, Part 1 (a) (ii).	300 (149)	200 (93)	High	High	Med	—	Overhead stow bins, signage, kick plates, galley modules, plastic and metal decorative trim, ceiling tile stiffeners, mirror mounting, air duct spuds, floor and wall panel attachment, clip attachment.
3M™ VHB™ GPH Tapes – For high temperatures and before powder coating										
GPH-060GF	25 (0.6)	F	Superior high-temp performance for powder coat or liquid paint processes and multi material bonding.	450 (230)	300 (150)	High	High	Med		GPH's high temperature resistance allows it to reduce the number of "touches," leading to a more streamlined manufacturing process.
GPH-110GF	45 (1.1)	F		450 (230)	300 (150)	High	High	Med		
GPH-160GF	62 (1.6)	F		450 (230)	300 (150)	High	High	Med		
3M™ VHB™ LSE Tapes – For critical plastics and composite materials										
LSE-060WF	25 (0.6)	F	White, closed cell acrylic foam carrier. Designed to bond composites, TPE, TPO, PP and low surface energy (LSE) plastics without primer. UL 746C.	300 (150)	200 (93)	High	High	High		Made to live outdoors. Resists hot, cold and cycling temperature, UV light, moisture and solvents. Seals against environmental conditions. Low-temperature bonding with high initial tack at low temperatures on frost-free surfaces down to 0°C.
LSE-110WF	45 (1.10)	F		300 (150)	200 (93)	High	High	High		
LSE-160WF	62 (1.6)	F		300 (150)	200 (93)	High	High	High		

Liner Types: A. 3 mil 54# Densified Kraft Paper; B. 5 mil Clear Polyethylene Film; C. 2 mil Polyester Film D. 5 mil Red Polyethylene Film; E. 4 mil 58# Polycoated Kraft Paper; F. 5 mil Red Printed Polyethylene Film; G. 3 mil Clear PET. **Relative Adhesion:** HSE: High Surface Energy; LSE: Low Surface Energy. **Multi-purpose Acrylic:** Bonds to a wide range of materials including metals, glass, and high and medium surface energy plastics and paints. Resists migration of plasticizers in vinyl substrates. **Modified Acrylic:** Bonds to medium low surface energy paints and plastics, including many powder coated paints in addition to the substrates listed with the multi-purpose acrylic adhesive (except plasticized vinyl).

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3M™ VHB™ Tapes (cont.)

Product	Tape Thickness w/o Liner mils (mm)	Liner Type	Description	Temperature Resistance °F (°C) Minutes Hours	Temperature Resistance °F (°C) Days Weeks	Solvent Resistance	Relative Adhesion HSE	Relative Adhesion LSE	Spec	Application Ideas
3M™ VHB™ LVO Tapes – Low VOC Products										
LVO-040BF	16 mil (0.4)	PE Film	85% reduced VOC's compared to common acrylic foam tapes, tested to VDA278 standard. Low in Odor – tested to VDA270 standard.	250 (121)	200 (93)	High	High	High		3M™ VHB™ Tape LVO can be used for bonding and sealing in electronics assembly, attaching trim and moldings in automotive applications, mounting signage and displays, securing panels and frames in construction, and assembling appliances and furniture.
LVO-060BF	25 mil (0.6)	PE Film		250 (121)	200 (93)	High	High	High		
LVO-080BF	32 mil (0.8)	PE Film		250 (121)	200 (93)	High	High	High		
LVO-110BF	45 mil (1.1)	PE Film		250 (121)	200 (93)	High	High	High		
LVO-160BF	62 mil (1.6)	PE Film		250 (121)	200 (93)	High	High	High		
3M™ VHB™ MAX Tapes – The strongest 3M™ VHB™ Tape ever invented										
Max-060GF	25 mil (0.6)	PE Film	When used in combination with the 3M™ VHB™ Max Promoter, the tape offers two to three times the shear and tensile strength of existing 3M™ VHB™ Tapes.	356 (180)	250 (121)	High	High	Med		This tape is the ideal solution to achieve robust bonds across a wide range of applications in transportation, building construction, appliance, and general industrial markets, bonding panels to frames, attaching stiffeners, or undertaking other critical designs.
Max-110GF	45 mil (1.1)	PE Film		356 (180)	250 (121)	High	High	Med		
Max-160GF	62 mil (1.6)	PE Film		356 (180)	250 (121)	High	High	Med		
Max-230GF	90 mil (2.3)	PE Film		356 (180)	250 (121)	High	High	Med		
3M™ VHB™ RP+ Tapes – Versatile tape for a range of bonding needs										
RP+040GP	16 (0.4)	A	Gray, closed-cell acrylic foam carrier. A general purpose adhesive with 3M™ VHB™ Tape performance, designed for a wide range of general bonding needs.	450 (230)	250 (121)	High	High	Med		Panel bonding, stiffener attachment and trim attachment.
RP+040GF	16 (0.4)	F		450 (230)	250 (121)	High	High	Med		
RP+060GP	25 (0.6)	A		450 (230)	250 (121)	High	High	Med		
RP+060GF	25 (0.6)	F		450 (230)	250 (121)	High	High	Med		
RP+080GP	32 (0.8)	A		450 (230)	250 (121)	High	High	Med		
RP+080GF	32 (0.8)	F		450 (230)	250 (121)	High	High	Med		
RP+110GP	45 (1.1)	A		450 (230)	250 (121)	High	High	Med		
RP+110GF	45 (1.1)	F		450 (230)	250 (121)	High	High	Med		
RP+160GP	62 (1.6)	A		450 (230)	250 (121)	High	High	Med		
RP+160GF	62 (1.6)	F		450 (230)	250 (121)	High	High	Med		
RP+230GP	90 (2.3)	A		450 (230)	250 (121)	High	High	Med		
RP+230GP	90 (2.3)	F		450 (230)	250 (121)	High	High	Med		

Liner Types: A. 3 mil 54# Densified Kraft Paper; B. 5 mil Clear Polyethylene Film; C. 2 mil Polyester Film D. 5 mil Red Polyethylene Film; E. 4 mil 58# Polycoated Kraft Paper; F. 5 mil Red Printed Polyethylene Film; G. 3 mil Clear PET. **Relative Adhesion:** HSE: High Surface Energy; LSE: Low Surface Energy. **Multi-purpose Acrylic:** Bonds to a wide range of materials including metals, glass, and high and medium surface energy plastics and paints. Resists migration of plasticizers in vinyl substrates. **Modified Acrylic:** Bonds to medium low surface energy paints and plastics, including many powder coated paints in addition to the substrates listed with the multi-purpose acrylic adhesive (except plasticized vinyl).

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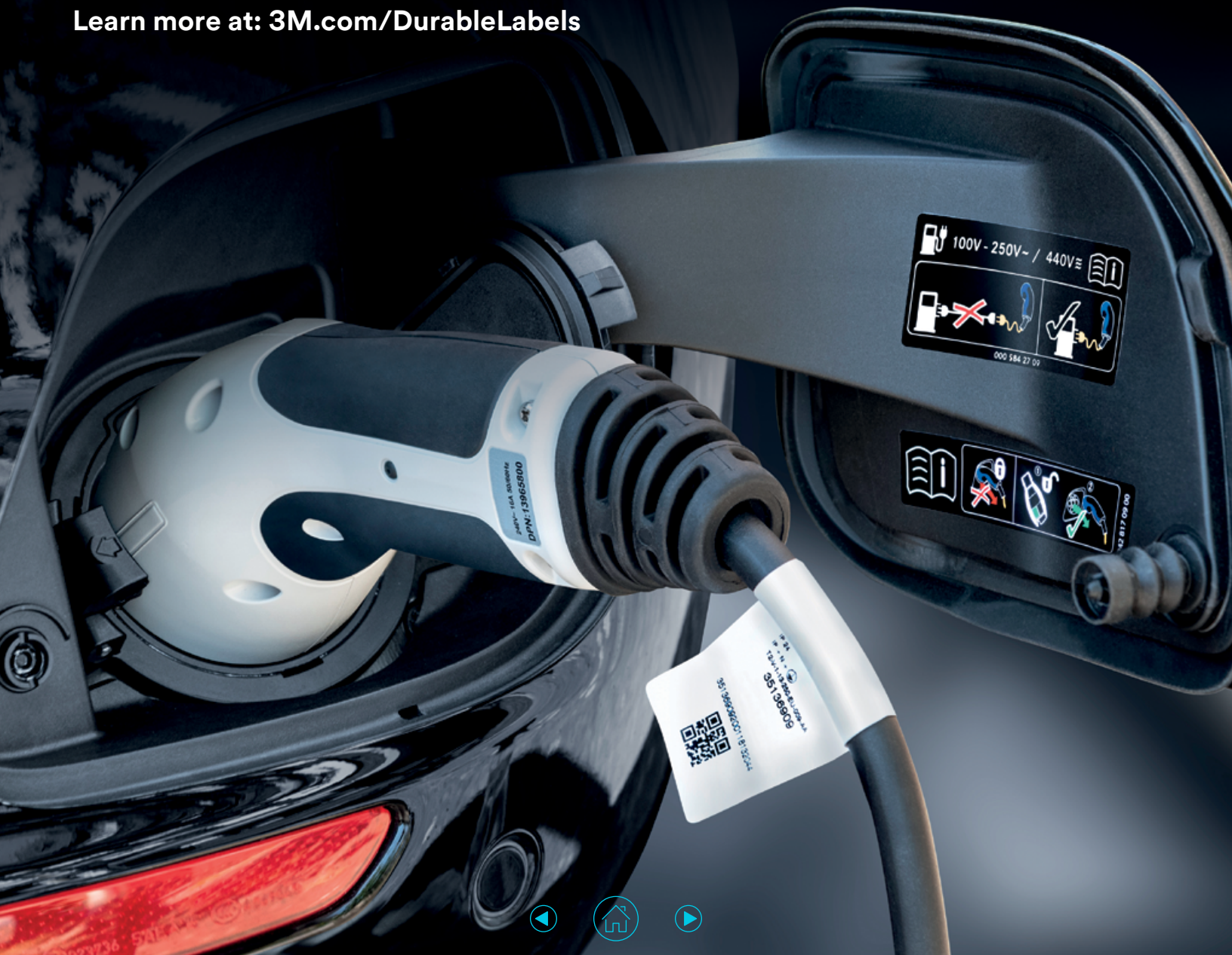
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Learn more at: 3M.com/DurableLabels



Selecting a 3M™ Durable Label

3M™ Durable Label Materials combine performance-based adhesives, topcoats, liners and more to meet your marketing and environmental labeling challenges.



Topcoat

- Print Treated
- Gloss TC
- V-Series
- TT TC
- Water-Based Inkjet
- TC3

Facestock

- Service Temperature
- Outdoor Durability
- Chemical Resistance
- Conformability
- Moisture Resistance

Adhesive

- High Temperature
- High Performance
- General Purpose
- Specialty
- Rubber Based
- Removable

Liner

- Layflat
- Semi Layflat
- Back Side Printable
- Fanfold
- Roll-to-Roll

Product

- Branding
- Tracking
- Security
- Protection
- Safety

Contact a Specialist

When you're facing a challenging situation, you can talk to a 3M Technical Services Specialist about your exact needs and we'll help you find a solution.



3M Durable Label Product Selector

Tell us a few things about your print method, facestock, substrate and color preferences to find the best 3M label products to fit your job requirements.

Scan or click to go to selector

Get the speed, flexibility and service you need.

3M™ Durable Labels — Quick Cuts Program

Take advantage of our collection of go-to durable label materials. Designed to suit most applications, these products utilize both solvent and solventless adhesive technologies as well as a range of facestocks and topcoats to ensure a speedy solution to your labeling challenges.

Scan or click to go to program



2-Day Pre-Slit Program

- Pre-slit stocked 6" wide rolls
- Shipped within 48 hours
- Minimum order 6" pre-slit rolls
- No upcharge



Half-Master Program

- Custom-slit 27" wide rolls at 1688 ft. length
- Optimized for UV Inkjet and flexographic printing
- Solvent and solventless portfolio offering
- No upcharge



2-Day Precision Roll Program

- Custom-slit widths
- Roll length of 1668 ft.
- No upcharge

Adhesive Selection Guide Based on Surface Energy

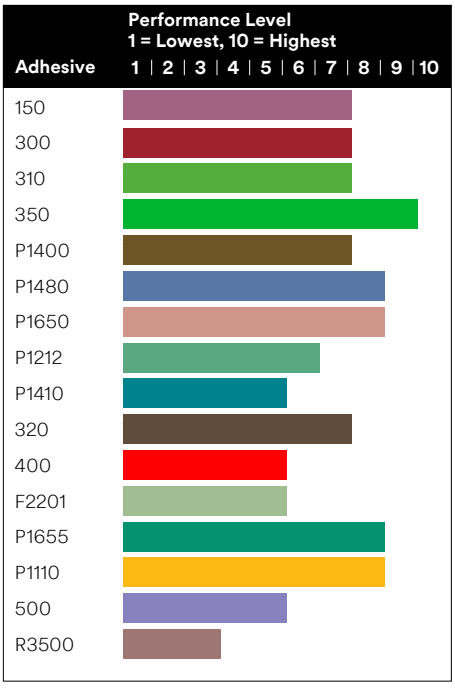
These charts are based on relative adhesion within each given surface energy category.

Metals	Surface Energy (Dynes/cm)
Copper	1103
Aluminum	840
Zinc	753
Tin	526
Lead	543

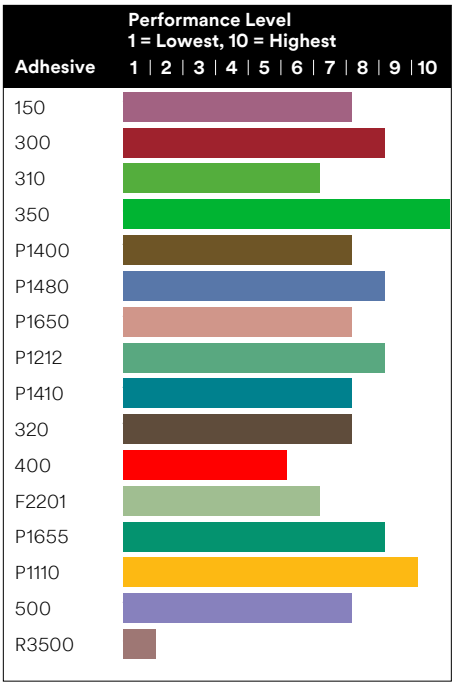
High Surface Energy (HSE) Plastics	Surface Energy (Dynes/cm)
Polyimide	50
Phenolic	47
Nylon®	46
Alkyd Enamel	45
Polyester	43
Epoxy Paint	43
Polyurethane	43
ABS	42
Polycarbonate	42
PVC	39
Modified PPE Resin	38
Acrylic	38
Polane® Paint	38

Low Surface Energy (LSE) Plastics	Surface Energy (Dynes/cm)
PVA	37
Polystyrene	36
Acetal	36
EVA	33
Polyethylene	31
Polypropylene	29
PVF	28
PTFE	18
Powder Coatings	Broad Range

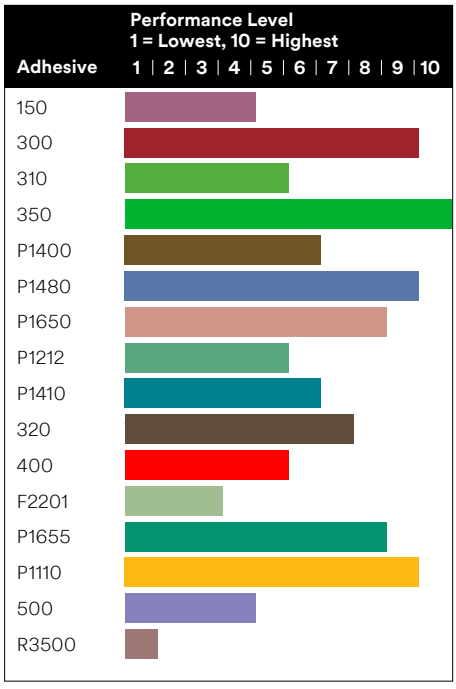
Adhesive Performance on Metals



Adhesive Performance on High Surface Energy (HSE) Plastics



Adhesive Performance on Low Surface Energy (LSE) Plastics



Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Adhesive Families — Label Materials

150

150 High Temperature Acrylic
- Up to 450°F (232°C) short-term heat resistance and excellent solvent resistance
- High internal strength ideal for applications on high surface energy plastics and metals

300

300 High Strength Acrylic
- Up to 250°F (121°C) short-term heat resistance
- Greater initial adhesion especially to low surface energy plastics
- Quick flowing to speed lamination of textured plastics, foams, fabrics and coated papers

310

310 High Precision Acrylic
- Provides firmness and high precision strength on a variety of surfaces including HSE plastics and metals
- Compatible with a variety of print technologies including thermal transfer and laser printing

320

320 High Tenacity Acrylic
- Up to 250°F (11°C) short-term heat resistance
- High bond strength to a variety of surfaces
- Excellent flagging resistance on small diameter surfaces

350

350 High-Holding Acrylic
- Ideal for very high bond strength to many surfaces
- Most universal adhesive — ideal for powder coatings, LSE plastics and oily metals
- Up to 350°F (177°C) short-term heat resistance and excellent solvent resistance

400

400 Low Temperature Acrylic
- Good low temperature performance and peel strength on many surfaces
- Up to 250°F (121°C) short-term heat resistance
- Excellent adhesion to uncoated papers
- Clarity and UV resistance for window label applications

500

500 High Stability Acrylic
- Cleanly removes from most surfaces up to one year after application
- Excellent for die-cut masks needing outdoor performance and removability
- For vinyl label stocks only

F2201

F2201 Freezer Acrylic
- Low 0°F (-18°C) application temperature, high initial tack
- Good moisture resistance
- Good long-term adhesion

P1110

P1110 Permanent Rubber Based
- Excellent ultimate adhesion
- High initial tack
- Good choice for labeling LSE or waxy surfaces
- Good choice for toy labeling applications

P1212

P1212 General Purpose Acrylic
- Excellent clarity, good initial tack
- Excellent die-cutting properties
- Good UV resistance
- UL recognized for indoor use

P1400

P1400 High Performance Tackified Acrylic
- Excellent UV and moisture resistance
- Formulated for use in demanding environments
- Excellent adhesion to wide variety of substrates
- UL recognized for indoor/outdoor use

P1410

P1410 Tackified Acrylic
- High-tack
- Neutral pH
- Good adhesion to polyolefins

P1480

P1480 High Performance Tackified Acrylic
- High initial tack
- Good ultimate adhesion on a wide variety of surfaces
- Excellent choice for textured surfaces or powder coats
- Designed to meet difficult automotive underhood battery specifications

P1650

P1650 High Performance Acrylic
- Designed to meet difficult automotive underhood specifications
- Good chemical and moisture resistance
- Excellent thermal stability
- Resistance to many automotive and industrial fluids

P1655

P1655 White Opaque High Performance Acrylic
- Excellent opacity
- Designed to meet difficult automotive underhood specifications
- Excellent thermal stability

R3500

R3500 Ultra Removable Adhesive
- Good initial tack and long-term adhesion
- Multi-repositionable, static cling alternative
- Clean removability (no residue)

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Adhesive Properties

Adhesive Family	Temperature °F (°C)			Adhesive Properties			Adhesion to:			Environmental Properties Resistance to:		
	Minimum Application	Low Service	High Service	Initial Peel	Ultimate Peel	Convertibility	Metal	HSE Plastic	LSE Plastic	Chemical	Ultra Violet	Moisture
High Temperature Adhesives												
150	50 (10)	-40 (-40)	450 (232)	6	7	10	7	7	4	5	10	9
High Performance Adhesives												
300	50 (10)	-40 (-40)	300 (149)	6	7	4	7	8	9	7	7	8
310	50 (10)	-40 (-40)	300 (149)	5	6	6	7	7	5	7	7	8
350	50 (10)	-40 (-40)	350 (177)	7	9	8	9	10	10	9	7	10
P1400	40 (4)	-20 (-29)	302 (150)	4	6	6	7	7	6	5	8	7
P1480	40 (4)	-22 (-30)	300 (149)	6	8	4	8	8	9	7	5	7
P1650	40 (4)	-40 (-40)	302 (150)	6	7	4	8	7	8	7	5	7
General Purpose Adhesive												
P1212	40 (4)	-20 (-29)	302 (150)	4	5	6	6	8	5	4	5	6
P1410	40 (4)	-20 (-29)	302 (150)	6	6	6	5	6	4	5	—	5
Specialty Adhesives												
320	50 (10)	-40 (-40)	250 (121)	7	7	6	7	7	7	6	6	8
400	10 (-12)	-60 (-51)	250 (121)	5	5	6	5	5	5	5	10	8
F2201	0 (-18)	-40 (-40)	250 (121)	3	4	5	5	6	3	3	5	4
P1655	40 (4)	-40 (-40)	302 (150)	1	7	4	8	8	8	7	5	7
Rubber Based Adhesives												
P1110	55 (13)	-40 (-40)	155 (68)	6	7	4	8	9	9	3	3	3
Removable Adhesives												
500	50 (10)	-40 (-40)	175 (79)	4	5	3	5	7	4	5	10	10
R3500	40 (4)	-20 (-29)	155 (68)	1	3	6	3	1	1	2	7	3

Values: 1 = Lowest Performance; 10 = Highest Performance

Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.

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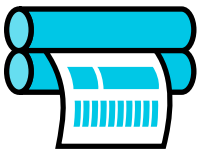
Printing Methods Overview

Each printing process can be suited to different needs. What are the label requirements?



Thermal Transfer

- Variable information on demand
- Barcoding, track and trace
- Extreme durability
- End-user print on demand



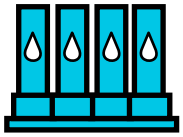
Flexographic

- Most economical for high volume printing
- Most common print method for labels
- Wide choice of inks (water-based, UV)
- Large number of label material options



UV Inkjet

- Printing on demand
- Variable data
- Design freedom
- Reduced need for constant cleaning



Laser/Toner-Based

- Cost effective print method for short runs
- Designed for small to medium runs
- Less set up material waste (vs. Flexo)



Screen Print

- Extremely durable inks, fade resistant
- Outdoor durability
- Less expensive on large runs vs. digital



Solvent Inkjet

- Extremely durable inks, fade resistant
- Outdoor durability
- Digital short run capability
- Wide web format for large graphics and banners



Water-Based Inkjet

- Color variable information on demand
- Can be utilized for small to medium digital runs
- Durability has greatly improved in recent years
- Media is converted often in blanks processed by converters

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3M™ Versatile Print Label Material

Versatile — let the creativity flow.

- Proprietary 3M topcoat offers exceptional performance across multiple print methods
- Streamline estimating with one go-to label material

Vibrant — stunning results.

- Streak free and crystal clear with crisp edges
- Near zero edge bleed and high image sharpness
- Create highly durable, glossy labels on digital and flexo

Value — fluid operations.

- Help improve efficiency by reducing or even eliminating pre-treatment steps like priming
- Rationalize label inventory from multiple products down to one
- Simplifies inventory and workflow
- Streamlines the estimation process

Verified — trusted results on more presses.

- UL Component Recognition to UL969 with many ink systems and print technologies*
- Print press manufacturer tested
- Topcoat has both high gloss and high surface energy compared to competitive offerings, giving strong print performance

*See UL file MH16411 and MH18072 in UL Product iQ™ (Certifications Search) at ul.com for specific details.

Print performance.

3M™ Versatile Print Label Material outperforms traditional gloss PET products in key measures of print performance.

Key Measures of Print Performance							
Product	**UV InkJet Ink Anchorage**	**UV Flexo Ink Anchorage**	**UV Flexo Smear Resistance**	**UV Flexo Scratch Resistance**	**Water Flexo Ink Anchorage**	**Water Flexo Smear Resistance**	**Water Flexo Scratch Resistance**
3M™ Versatile Print Label Material 7871V	+++	+++	+++	+++	+++	+++	++
3M™ Durable Label Material 7871	+++	+++	+++	+	–	++	–
Competitor A	+++	++	+++	–	–	+++	–
Competitor B	+++	++	+++	+	–	+++	–

+++ Excellent ++ Very Good + Good – Poor

Ink anchorage tested via ASTM 3359 for cross hatch adhesion using 3M™ Scotch® Cellophane Film Tape 610. Scratch and smear resistance tested via industry recognized qualitative tests using thumbnail scratch and thumb pressure smear. For more information, please contact a 3M expert at 3M.com/durablelabels.

Stay Tuned! We are continuing to expand our portfolio of 3M Versatile Print products. Please contact your 3M Converter Markets representative for more information regarding Versatile Print series product availability.

3M™ Versatile Print Label Materials

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
3M™ Versatile Print Polyester Gloss White	**7871V**	Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats. Broad applications in automotive, electronics, healthcare, heavy machinery, general industrial. Specialty applications in automotive EV battery, GHS drum labeling. BS5609 certified durable label.	2.0 1.8 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
	7868V	High abrasion and solvent resistance. Excellent high temperature resistance. Excellent adhesion to LSE plastics and smooth powder coats. BS5609 certified durable label.	2.0 1.1 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
	7908V	Heavy adhesive coat weight for textured surfaces. Excellent high temperature resistance. Excellent adhesion to LSE plastics and powder coats. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 1.8 6.8	PET, Versatile Print TC **350** 90# Polycoated Kraft	■	■	■	■	■		
	7331V	Good for general purpose indoor and outdoor use. Excellent bond to LSE plastics. Applications include medical device and equipment, lawn and garden, and appliance.	2.0 0.8 3.2	PET, Versatile Print TC **300** 55# Densified Kraft	■	■	■	■	■		
	7816V	High abrasion and solvent resistance. Economical durable label material with firm adhesive to resist oozing.	2.0 0.8 3.2	PET, Versatile Print TC **310** 55# Densified Kraft	■	■	■	■	■		
3M™ Versatile Print Polyester Gloss Platinum	**7872V**	Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats. Broad applications in automotive, electronics, healthcare, heavy machinery, general industrial. Differentiate your labels with a unique platinum metallic appearance.	2.0 1.8 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
	7875V	Durable label material with firm adhesive to resist oozing. Differentiate your labels with a unique platinum metallic appearance.	2.0 0.8 3.2	PET, Versatile Print TC **310** 55# Densified Kraft	■	■	■	■	■		
3M™ Versatile Print Polyester Gloss Bright Silver	**7323V**	Good for indoor and outdoor use. Excellent bond to LSE plastics. Match a metallic look with gloss bright silver.	2.0 0.8 3.2	PET, Versatile Print TC **300** 55# Densified Kraft	■	■	■	■	■		
	7903V	Good for indoor and outdoor use. Excellent bond to LSE plastics. 90# liner with layflat properties ideal for sheet and screen printing applications. Match a metallic look with gloss bright silver.	2.0 1.8 6.8	PET, Versatile Print TC **350** 90# Polycoated Kraft	■	■	■	■	■		
3M™ Versatile Print Polyester Gloss Brushed Silver	**7909V**	High abrasion and solvent resistance. 90# liner with layflat properties ideal for sheet and screen printing applications. Applications include heavy machinery, name plate, and safety labeling.	2.0 1.8 6.8	PET, Versatile Print TC **350** Polyester Film	■	■	■	■	■		
3M™ Versatile Print Polyester Gloss Clear	**7876V**	High abrasion and solvent resistance. Heavy adhesive coat weight for textured surfaces. Excellent high temperature resistance. Excellent adhesion to LSE plastics and powder coats. Use where you need a printable, clear label with high performance adhesive.	2.0 1.8 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
	7350V	Good for indoor and outdoor use. Excellent bond to LSE plastics. Use where you need a printable, clear label with high performance adhesive.	2.0 0.8 3.2	PET, Versatile Print TC **300** 55# Densified Kraft	■	■	■	■	■		
	7905V	Excellent high temperature resistance. Excellent adhesion to LSE plastics and powder coats. 90# liner with layflat properties ideal for sheet and screen printing applications. Use where you need a printable, clear label with high performance adhesive.	2.0 1.8 6.8	PET, Versatile Print TC **350** 90# Polycoated Kraft	■	■	■	■	■		

*3M™ Durable Label Materials have been tested with various print systems with positive results. Print systems vary, so please request a sample and test in your specific application.

= UL Recognized

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Water-based Inkjet Label Materials

Optimize your water-based inkjet printing with this breakthrough durable label material.

Print with great resolution at a low cost per area.

- Unique topcoat designed for water-based inkjet print systems
- Durable facestock and adhesive stand up to harsh environments
- UL recognized with several different water-based inkjet systems
- BS5609, Section 3 compliant material

For more information or to request a sample, visit 3M.com/DurableLabels.

Scan or click

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
3M™ Water-based Inkjet Polyester White	**7850-IJ**	Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats. Applications include medical device and equipment, heavy machinery.	3.0 1.1 3.2	PP, Waterbased Inkjet TC **350** 55# Densified Kraft				■			■
	7882-IJ	Excellent cold temperature performance for a wide range of applications. Ideal for freezer or pharmaceutical applications.	3.0 0.8 3.2	PP, Waterbased Inkjet TC **400** 55# Densified Kraft				■			■
3M™ Water-based Inkjet Polypropylene White	**7790-IJ**	Durable facestock and adhesive stand up to harsh environments. BS5609 certified durable label. Ideal for use in chemical drum labeling applications.	5.0 1.1 3.2	PP, Waterbased Inkjet TC **350** 55# Densified Kraft				■			■
	FP033-IJ	Emulsion-based, high performance LSE adhesive with high-tack for demanding applications. Broad applications in general industrial.	5.0 1.4 3.2	PP, Waterbased Inkjet TC **P1480** 50# SC				■			■

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More durable than paper-based labels.
This premium graphic label material needs no additional topcoating or priming for print receptivity. This combines with world-class film and adhesive technology to ensure that your label performs, no matter what.

= UL Recognized

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Facestock Properties

Facestock	Features	Film Properties	Processing Properties	Environmental Resistance to:			Print Method*						
		Service Temperatures	Conformability	Chemical	Moisture	Outdoor/UV	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Acetate	Rigid film, tears easily, works well for security seals or overlaminate.	-20 to 140°F	2	2	2	2							
Acrylate	Excellent clarity and UV resistance. 5 year outdoor performance.	-40 to 175°F	3	7	7	10	■						
Acrylate, Cast	Ultra-high temperature performance.	-40 to 392°F 530 for 30 sec. 500 for 7 min.	7	9	9	7	■						
Acrylate, Cast Modified	Ultra-high temperature performance. Can be imaged and kiss cut by a laser beam. Long-term readability, chemical and abrasion resistance.	-40 to 392°F 530 for 1 min. 482 for 5 min. 440 for 60 min.	7	10	8	10				■			
Acrylic	Good clarity and UV resistance.	-20 to 140°F	3	5	7	7		■					
Aluminum Foil	Vinyl top-coated for ink receptivity. Facestock can be embossed using dot matrix impact printers.	-40 to 350°F	4	7	10	10		■			■		
Thermoplastic Polycarbonate	Used to achieve the attractive appearance of subsurface screen printed polycarbonate.	-40 to 250°F	4	8	9	7							
Paper	Pharmaceutical and performance paper.	-40 to 350°F	3	3	2	6	■	■					
Polyester EDP, DMI and Laser TC	Polyester EDP available in white, silver and clear. Optimal clarity for overlaminate applications. High quality rigid film with high tensile strength. Excellent dimensional stability. Not recommended for curved surfaces. High quality rigid film. High tear resistance, notch sensitive.	-40 to 302°F -20 to 257°F Clear only	2	9	9	8	■	■		■	■		
Polyester White and Clear Laser TC	Polyester available in white, silver and clear. Clear polyester provides optimal clarity for overlaminate applications. High quality rigid film with high tensile strength. Excellent dimensional stability. Not recommended for curved surfaces. High quality rigid film. High tear resistance, notch sensitive.	-20 to 257°F	2	9	9	8	■	■		■	■		
Polyester MC		-40 to 302°F	2	9	9	8	■	■		■	■		
Polyester PT		-40 to 302°F -20 to 257°F Clear only	2	9	9	8	■	■			■		

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Values: 1 = Lowest Performance; 10 = Highest Performance

Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.

For product recommendations or technical support, please call the Converter Markets Technical Support Line 1-800-223-7427.

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Facestock Properties (cont.)

Facestock	Features	Film Properties	Processing Properties	Environmental Resistance to:			Print Method*						
		Service Temperatures	Conformability	Chemical	Moisture	Outdoor/UV	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Versatile Print Topcoat	High abrasion and solvent resistance. Polyester films provide moisture barrier properties while able to withstand high temperatures making them ideal for durable label applications. They also demonstrate excellent dimensional stability and tensile strength.	-40° to 302°F	2	9	9	9	■	■	■	■	■		
Polyester Waterbased Inkjet Topcoat	Unique topcoat specifically designed for water-based inkjet printing provides outstanding print receptivity and abrasion resistance. Polyester films provide moisture barrier properties while able to withstand high temperatures making them ideal for durable label applications.	-40° to 302°F	2	8	8	8				■			■
Polyester TC	Polyester films provide moisture barrier properties while able to withstand high temperatures making them ideal for durable label applications. They also demonstrate excellent dimensional stability and tensile strength.	-40° to 302°F -20° to 257°F Clear only	2	9	9	8	■	■	■				
Polyester NTC	Optimal clarity for overlaminate applications.	-20° to 257°F	2	9	9	8							
Polyethylene	High tear resistance and elongation, low tensile strength.	-20° to 140°F	10	3	7	4		■					
Polyolefin	Extremely pliable and conformable, moisture resistant. PVC-free vinyl alternative.	-40° to 140°F	9	7	7	3	■	■					
Polypropylene Waterbased Inkjet Topcoat	Unique topcoat specifically designed for water-based inkjet printing provides outstanding print receptivity and abrasion resistance. A conformable film that offers moisture resistance and durability even in outdoor conditions. Topcoat is water inkjet printable allowing for dynamic, durable, color on demand labels.	-40° to 140°F	8	7	8	7				■			■
Polypropylene, Label-Lyte® EDP	Outdoor UV durability up to one year. Excellent ink adhesion, good stiffness for auto application; excellent opacity.	-20° to 220°F	8	7	8	7	■	■					
Polypropylene, Label-Lyte® T2S	Outdoor UV durability up to one year. Excellent ink adhesion, good stiffness for auto application; excellent opacity.	-20° to 220°F	8	7	8	7	■	■					
Polypropylene T1S	Semi-hard film with high tear resistance and good dimensional stability.	-20° to 140°F	6	7	8	3		■					
Polypropylene EDP	Excellent opacity, moisture and tear resistance, excellent dimensional stability, resistant to cracking and abrasion, antistatic coating to eliminate double feeding when printing and folding.	-20° to 140°F	8	7	8	7	■	■		■			
Polypropylene TC, White, Clear or Metalized	High tensile strength, but notch sensitive.	-20° to 140°F	8	7	8	7		■					
Polystyrene, Matte and Gloss Clear	Economical, hard, rigid film. Tear and temperature sensitive. Not recommended for outdoor use.	-20° to 140°F	2	2	5	2		■					
Retro-Reflective Film	When bar code printed, the facestock extends the max. and min. scanning distance of long-range scanners.	-40° to 300°F	7	7	9	8	■						
Teslin®, Polyolefin	Durable alternative to paper labels, excellent abrasion properties.	-40° to 250°F	9	8	9	7		■		■			

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Facestock Properties (cont.)

Facestock	Features	Film Properties	Processing Properties	Environmental Resistance to:			Print Method*						
		Service Temperatures	Conformability	Chemical	Moisture	Outdoor/UV	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Vinyl (PVC) EDP, White	Conformability reduces as gauge increases. Multi-purpose film available in flexible, semi-rigid or rigid. Polymerically plasticized for dimensional stability. Handles outdoor conditions well. Will burn in flame, but should be self-extinguishing after removal. Low tear resistance. Available in medical grades.	-20° to 140°F	10	4	7	7	■	■		■			
Vinyl (PVC) NTC, White, Clear, Color or Translucent		-20° to 140°F	10	4	7	7						■	
Vinyl (PVC) TC, White		-20° to 140°F	10	4	7	7	■	■					
Vinyl (PVC) TC3, White, Colors or Clear		-20° to 140°F	10	4	7	7		■					
Vinyl, Textured		-20° to 140°F	10	4	7	7	■	■		■	■		

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Values: 1 = Lowest Performance; 10 = Highest Performance

Rankings are a general guide. Adhesives should be tested with actual components to ensure acceptable performance.

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For product recommendations or technical support, please call the Converter Markets Technical Support Line 1-800-223-7427.

Liner Properties

Liner	Mil (nominal) Thickness	Description	Layflat	Semi Layflat	Back Side Printable	Fanfold	Roll-to-Roll
40# SC, 43# DK	2.4	Semi-bleached, super calendered/densified kraft sheet.			■		■
2.2 Glassine	2.2	Double sided glassine liner assures consistent die cutting. The backside release coating helps minimize label blocking.					■
3.0 Glassine	3.0	Double sided glassine liner assures consistent die cutting. The backside release coating helps minimize label blocking.				■	■
44# Polykraft	3.1	Polypropylene has been laminated to a 44# brown kraft sheet. Excellent caliper control and strength making it ideal for high-speed labeling applications.			■		■
50# SC, 55# DK	3.2	Semi-bleached, super calendered/densified kraft sheet designed for high-speed die-cutting and matrix stripping. Not recommended for sheet on press applications.			■		■
50# C2S	3.2	Back side has been lightly coated with silicone to reduce label pick. Recommended when using very soft adhesives or where heavy adhesive coat weights are required.					■
50# TL	3.4	Stabilized bleached kraft sheet with good caliper control. Ideal for most sheet-on-press applications. Back side is printable.		■	■	■	■
78# CCK, HL	4.6	Bleached, clay-coated kraft sheet. Excellent for sheet-on-press applications where additional strength and stiffness is required.		■	■	■	■
90# Polycoated	7.0	Bleached kraft sheet polyethylene-coated on two sides.	■				
1.5 Polyester	1.5	Clear polyester. Used when high strength and caliper control are important. Recommended for high-speed labeling applications or where clarity of the adhesive is critical.					■
4.0 Polyester	4.0	Clear polyester. Excellent for doming applications where ultimate lay flat is required.	■				

The charts above are general guides. Facestocks and liners should be tested with actual components to ensure acceptable performance.

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3M™ Durable Label Materials

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Polyester Gloss White	**7871V**	High abrasion and solvent resistance. Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats. Broad applications in automotive, electronics, healthcare, heavy machinery, general industrial. Specialty applications in automotive EV battery, GHS drum labeling. BS5609 certified durable label.	2.0 1.8 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
	7871VFL	Same product construction as 7871V label stock with film liner. Film liner provides smooth adhesive and resists tearing. Ideal for applications requiring automated dispensing.	2.0 1.8 1.5	PET, Versatile Print TC **350** Polyester Film	■	■	■	■	■		
	7868V	High abrasion and solvent resistance. Excellent high temperature resistance. Excellent adhesion to LSE plastics and smooth powder coats. BS5609 certified durable label.	2.0 1.1 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
	7908V	High abrasion and solvent resistance. Heavy adhesive coat weight for textured surfaces. Excellent high temperature resistance. Excellent adhesion to LSE plastics and powder coats. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 1.8 6.8	PET, Versatile Print TC **350** 90# Polycoated Kraft	■	■	■	■	■		
	7908FL	Same product construction as 7908V with thick polyester liner suitable for domed decals.	2.0 1.8 4.0	PET, Gloss White TC **350** Polyester Film	■	■	■		■		
	7220SA	Adhesive allows releases trapped air to prevent bubbling for easy application of large format graphics. Ideal for applications where outgassing is a concern. High performance adhesive provides great adhesion to HSE and LSE surfaces, powder coated paint, and slightly oily metals. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 1.1 6.8	PET, Gloss White TC **350** 90# Polycoated Kraft	■	■	■		■		
	7037	High performance polyester material that offers thermal stability and moisture resistance with an aggressive adhesive for difficult substrates. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 1.1 6.8	PET, White TC **350** 90# Polycoated Kraft	■	■	■		■		
	7907	350 adhesive for performance applications that require thermal transfer printing and demand adhesive performance on difficult to stick to surfaces (e.g. HSE plastics or powder coats). 90# liner with layflat properties ideal for sheet and screen printing applications.	2.3 1.8 6.8	PET, Matte White TC **350** 90# Polycoated Kraft	■	■	■		■		

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3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Polyester Gloss White (cont.)	**7331V**	High abrasion and solvent resistance. Good for general purpose indoor and outdoor use. Excellent bond to LSE plastics. Applications include medical device and equipment, lawn and garden, and appliance.	2.0 0.8 3.2	PET, Versatile Print TC **300** 55# Densified Kraft	■	■	■	■	■		
	7331FL	Same as 7331V label stock with film liner for automatic application equipment.	2.0 0.8 1.5	PET, White TC **300** Polyester Film	■	■	■				
	7931	High abrasion and solvent resistance. Good for indoor and outdoor use. Excellent bond to LSE plastics. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 0.8 6.8	PET, Gloss White TC **300** 90# Polycoated Kraft	■	■	■		■		
	7816V	High abrasion and solvent resistance. Economical durable label material with firm adhesive to resist oozing.	2.0 0.8 3.2	PET, Versatile Print TC **310** 55# Densified Kraft	■	■	■	■	■		
	7816FL	Offers excellent durability. Firm adhesive that resists oozing. Same as 7816 label stock with polyester liner.	2.0 0.8 1.5	PET, White TC **310** Polyester Film	■	■	■				
	7830/ 7864	Thin label profile provides good performance on small diameter packages. Excellent cold temperature performance. Good abrasion and chemical resistance.	1.0 0.8 3.2	PET, White TC **400** 55# Densified Kraft	■	■	■				
	FM041902	Durable film facestock with aggressive, high-tack emulsion adhesive. Good adhesion to powder coats and heavily textured surfaces. Applications include automotive battery label and general industrial LSE labeling.	2.0 1.3 3.2	PET, White TC **P1480** 55# Densified Kraft	■	■	■				
	OFM03402	Glossy film label with excellent UV resistance and adhesion to a variety of substrates. Good choice for durable goods or lawn and garden applications.	2.0 0.9 3.2	PET, White TC **P1400** 50# Polycoated Kraft	■	■	■				
	7034	Glossy white film for use in general industrial applications. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 0.9 6.8	PET, White TC **P1400** 90# Polycoated Kraft	■	■	■		■		

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Reliable tracking and identification. Labeling needs vary. From durability to removability, indoor or outdoor use, 3M has a solution you can count on to go the distance and communicate important information.



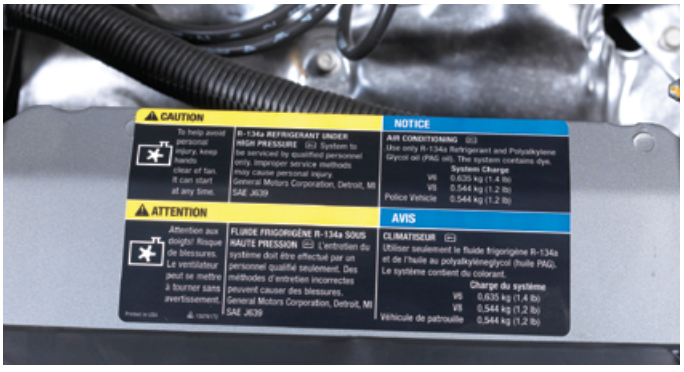
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3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
3M™ Water-based Inkjet Polyester	**7850-IJ**	Topcoat uniquely designed for waterbased inkjet print systems. Durable facestock and adhesive stand up to harsh environments. Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats. Applications include medical device and equipment, heavy machinery.	3.0 1.1 3.2	PET, Waterbased Inkjet TC **350** 55# Densified Kraft				■			■
	7882-IJ	Topcoat uniquely designed for waterbased inkjet print systems. Durable facestock and adhesive stand up to harsh environments. Excellent cold temperature performance for a wide range of applications. Ideal for freezer or pharmaceutical applications.	3.0 0.8 3.2	PET, Waterbased Inkjet TC **400** 55# Densified Kraft				■			■
Polyester Matte White	**7246**	Extreme durability topcoat. Eliminates the need for protective overlaminates in many applications. Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats.	2.2 1.8 2.2	PET TT3, Matte White **350** 40# Densified Glassine	■	■					
	7874	Matte topcoated PET with high abrasion and solvent resistance for thermal transfer printed variable information. Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats. Broad applications in automotive, electronics, healthcare, heavy machinery and general industrial.	2.3 1.8 3.2	PET, White TT TC **350** 50# SC	■	■					
	7850HL	Matte topcoat offers excellent ink anchorage for laser toner and dot-matrix printing. Excellent high temperature performance especially to LSE plastics and smooth powder coats. Clay-coated heavy liner ideal for laser printing applications.	2.3 1.1 4.6	PET, White Laser TC **350** 78# CCK	■	■		■			
	7810	Features ultra smooth topcoat. Ideal for bar code applications. Good durability with a wide range of ribbons.	2.3 0.8 3.2	PET, White TT TC **300** 55# DK	■	■					
	7880	Matte topcoat resists scuffing, chemicals and moisture. Excellent adhesion to LSE plastics.	2.3 0.8 3.2	PET, White DMI TC **300** 55# Densified Kraft	■	■					
	7980	Matte topcoat resists scuffing, chemicals, and moisture. Excellent adhesion to smooth LSE plastics. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.3 0.8 6.8	PET, Matte White TC **300** 90# Polycoated Kraft	■	■			■		

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Important messages need to be seen.
Important information that needs to last: 3M's durable label material innovations keep messaging vibrant and legible for long term, even in harsh conditions.

3M offers a comprehensive listing of UL recognized durable label products, with a dedicated team of Application Engineers to assist you at 800-831-0658.

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3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Polyester Matte White (cont.)	**7880HL**	Heavy liner version of 7880 label stock for excellent liner stability in high humidity. Clay-coated heavy liner ideal for laser printing applications.	2.3 0.8 4.6	PET, White Laser TC **300** 78# CCK	■	■		■			
	7815	Features ultra smooth topcoat. Ideal for variable information applications. Good durability with a wide range of ribbons. Firm adhesive to resist oozing.	2.3 0.8 3.2	PET, White TT TC **310** 50# SC	■	■					
	7815FL	Same product construction as 7815 label stock with polyester liner.	2.3 0.8 1.5	PET, White TT TC **310** Polyester Film	■	■					
	7840HL	Matte topcoat offers excellent ink anchorage for various digital printing technologies. Firm adhesive that resists oozing. Clay-coated heavy liner ideal for laser printing applications.	2.3 0.8 4.6	PET, White Laser TC **310** 78# CCK	■	■		■			
	FM162	Dot-matrix imprintable film that also accepts thermal transfer print. General purpose adhesive bonds well to metals and HSE plastics.	2.0 0.9 3.2	PET, White EDP **P1212** 50# SC	■	■					
	FM034602	Micro-cavitated film with print receptive coating for use with most UV inkjet systems and thermal transfer printing. Designed for use in automotive applications. Excellent thermal stability.	2.0 1.3 3.2	PET, White MC **P1650** 50# SC	■	■	■				
	FM01961K	Specialized adhesive can be applied at temperatures as low as 0°F. Liner has special surface finish on the back side to enhance feed and reduce static problems. Excellent for drum labeling and laser printing applications.	2.0 0.8 4.6	PET, White MC **F2201** 78# CCK	■	■	■	■			
Polyester Gloss Clear	**7876V**	High abrasion and solvent resistance. Heavy adhesive coat weight for textured surfaces. Excellent high temperature resistance. Excellent adhesion to LSE plastics and powder coats. Use where you need a printable, clear label with high performance adhesive.	2.0 1.8 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
	7905	Heavy adhesive coat weight for textured surfaces. Excellent high temperature resistance. Excellent adhesion to LSE plastics and powder coats. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 1.8 6.8	PET, Gloss Clear TC **350** 90# Polycoated Kraft	■	■	■		■		
	7350/ 7861	Offers high abrasion and solvent resistance. Excellent adhesion to LSE plastics. Ideal for indoor and outdoor applications.	2.0 0.8 3.2	PET, Clear TC **300** 55# Densified Kraft	■	■	■				
	7350FL	Same as 7350 label stock with film liner for automatic application equipment.	2.0 0.8 1.5	PET, Clear TC **300** Polyester Film	■	■	■				
	7950	Offers high abrasion and solvent resistance. Excellent adhesion to smooth LSE plastics. Ideal for indoor and outdoor applications. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 0.8 6.8	PET, Gloss Clear TC **300** 90# Polycoated Kraft	■	■	■		■		
	7831	Thin label profile provides good performance on small diameter packages. Excellent cold temperature performance.	1.0 0.8 3.2	PET, Clear TC **400** 55# Densified Kraft	■	■	■				

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3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Polyester Gloss Clear (cont.)	**OFM3102**	Durable film offers thermal stability and moisture resistance. Adheres to a variety of surfaces and offers excellent UV resistance.	2.0 0.9 3.2	PET, Clear TC **P1400** 50# SC	■	■	■				
	7029	Excellent UV resistance. Good adhesion to a variety of surfaces. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 0.9 6.8	PET, Gloss Clear TC **P1400** 90# Polycoated Kraft	■	■	■		■		
	FM042	High clarity emulsion adhesive with good initial tack and excellent die cutting properties. Adhesion to metals and HSE plastics.	2.0 0.9 3.2	PET, Clear TC **P1212** 50# SC	■	■	■				
Polyester Matte Clear	**7881**	Matte topcoat provides good chemical and abrasion resistance. Excellent adhesion to LSE plastics. Dot-matrix printable.	2.3 0.8 3.2	PET, Clear DMI TC **300** 55# Densified Kraft	■	■					
	FM232	Matte film suitable for thin gauge label applications or as a printable overlaminate film. General purpose emulsion adhesive for HSE substrates.	1.0 0.8 3.2	PET, Clear TC **P1212** 50# SC	■	■	■				
Polyester Matte Silver	**7247**	Extreme durability topcoat. Eliminates the need for protective overlaminates in many applications. Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats.	2.3 1.8 2.2	PET TT3, Matte Silver, **350** 40# Densified Glassine	■	■					
	7879FL	Heavy adhesive coat weight for textured surfaces. Excellent adhesion to LSE plastics and powder coats.	3.3 1.8 1.5	PET, Silver TT TC **350** Polyester Film	■	■					
	7033	Aggressive adhesive for harsh environments. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 1.1 6.8	PET, Matte Silver TC **350** 90# Polycoated Kraft	■	■	■				
	7222/ 7865	Durable, moisture resistant film. Adhesive offers adhesion to a variety of surfaces, including LSE plastics. Applications include durable goods in an outdoor environment, instructional messaging and schematic panels.	2.0 0.8 3.2	PET, Matte Silver Gloss TC **300** 55# Densified Kraft	■	■	■				
	7813	Ultra-smooth matte topcoat resists scuffing, chemicals and moisture. Excellent durability with a wide variety of ribbons. Excellent adhesion to LSE plastics.	3.3 0.8 3.2	PET, Silver Matte TT TC **300** 55# Densified Kraft	■	■					
	7883	Matte topcoat ideal for dot matrix printing applications. Excellent adhesion to LSE plastics.	3.3 0.8 3.2	PET, Silver DMI TC **300** 55# Densified Kraft	■	■					
	7883HL	Heavy liner version of 7883 label stock for excellent liner stability in high humidity.	3.3 0.8 4.6	PET, Silver DMI TC **300** 78# CCK	■	■					
	7818	Features ultra smooth matte topcoat, ideal for variable information applications. Good durability with a wide range of ribbons. Firm adhesive that resists oozing. Excellent durability.	3.3 0.8 3.2	PET, Silver TT TC **310** 55# Densified Kraft	■	■					

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3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Polyester Matte Silver (cont.)	**FM047202**	Metalized film offers excellent thermal stability and moisture resistance. Quick tack high performance adhesive ideal for demanding applications, including powder coated paints.	2.0 1.2 3.2	PET, Matte Silver TC **P1480** 50# SC	■	■					
	OFM2402	Durable, moisture resistant film. Adhesion to a variety of surfaces, including LSE plastics. Designed for use on durable goods in an outdoor environment.	2.0 0.9 3.2	PET, Matte Silver TC **P1400** 50# SC	■	■	■				
	FM092	Matte film with gloss topcoat. Adhesive offers good initial tack and excellent clarity and die cutting properties. Excellent choice for use in indoor nameplate applications.	2.0 0.9 3.2	PET, Matte Silver TC **P1212** 50# SC	■	■	■				
Polyester Bright Silver	**7873V**	High abrasion and solvent resistance. Heavy adhesive coat weight for textured surfaces. Excellent high temperature resistance. Excellent adhesion to LSE plastics and powder coats.	2.0 1.8 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
	7340FL	Highly differentiated facestock uses proprietary 3M reflective film technology to produce a mirror-like finish without metalization. Luminous reflectivity >98%.	2.5 1.1 1.5	PET, Mirror Finish **350** Polyester Film	■	■					
	7903V	High abrasion and solvent resistance. Good for indoor and outdoor use. Excellent bond to LSE plastics. 90# liner with layflat properties ideal for sheet and screen printing applications. Match a metallic look with gloss bright silver.	2.0 1.8 6.8	PET, Versatile Print PT **350** 90# Polycoated Kraft	■	■	■	■	■		
	7903FL	Print-treated bright silver polyester with film liner suitable for domed decals.	2.0 1.8 4.0	PET, Bright Silver PT **350** Polyester Film	■	■	■		■		
	7924	Excellent abrasion and chemical resistance. Excellent adhesion to smooth LSE plastics. Ideal for indoor and outdoor applications. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 0.8 6.8	PET, Gloss Silver TC **300** 90# Polycoated Kraft	■	■	■		■		
	7323V/ 7863V	High abrasion and solvent resistance. Good for indoor and outdoor use. Excellent bond to LSE plastics. Match a metallic look with gloss bright silver.	2.0 0.8 3.2	PET, Versatile Print TC **300** 55# Densified Kraft	■	■	■	■	■		

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3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Polyester Bright Silver (cont.)	**OFM2802**	Durable, moisture resistant film. Adhesion to a variety of surfaces, including LSE plastics. Designed for use on durable goods in an outdoor environment.	2.0 0.9 3.2	PET, Bright Silver TC **P1400** 50# SC	■	■	■				
	9017FL	Bright silver with thick polyester liner suitable for domed decals. Thick, high-performance adhesive for durable graphic applications.	2.0 5.0 4.0	PET, Bright Silver PT **200MP** Polyester Film	■	■	■		■		
Polyester Brushed Silver	**7909V**	High abrasion and solvent resistance. 90# liner with layflat properties ideal for sheet and screen printing applications. Applications include heavy machinery, name plate, and safety labeling.	2.0 1.8 6.8	PET, Versatile Print TC **350** 90# Polycoated Kraft	■	■	■	■	■		
	7214SA	Adhesive allows releases trapped air to prevent bubbling for easy application of large format graphics. Ideal for applications where outgassing is a concern. High performance adhesive provides great adhesion to HSE and LSE surfaces, powder coated paint, and slightly oily metals. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 1.1 6.8	PET, Brushed Silver TC **350** 90# Polycoated Kraft	■	■	■		■		
	7028	Similar to 7909V with slightly lower coat weight for easier processing.	2.0 1.1 6.8	PET, Brushed Silver TC **350** 90# Polycoated Kraft	■	■	■		■		
	OFM2902	Durable, moisture resistant film. Adhesion to a variety of surfaces, including LSE plastics. Designed for use on durable goods in an outdoor environment.	2.0 0.9 3.2	PET, Brushed Silver TC **P1400** 50# SC	■	■	■				
	9018FL	Brushed silver with thick polyester liner suitable for domed decals. Thick, high-performance adhesive for durable graphic applications.	2.0 5.0 4.0	PET, Brushed Silver PT **200MP** Polyester		■			■		
Polyester Platinum	**7872V**	High abrasion and solvent resistance. Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats. Broad applications in automotive, electronics, healthcare, heavy machinery, general industrial. Differentiate your labels with a unique platinum metallic appearance.	2.0 1.8 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
	7875V	High abrasion and solvent resistance. Durable label material with firm adhesive to resist oozing. Differentiate your labels with a unique platinum metallic appearance.	2.0 0.8 3.2	PET, Versatile Print TC **310** 55# Densified Kraft	■	■	■	■	■		
Vinyl White	**7904**	Conformable to contoured surfaces. Excellent adhesion to LSE plastics and textured powder coats. 90# liner with layflat properties ideal for sheet and screen printing applications.	3.4 1.8 6.8	Soft White Vinyl NTC **350** 90# Polycoated Kraft					■	■	
	7605	Conformable to contoured surfaces. Excellent adhesion to LSE plastics and textured powder coats.	3.4 1.8 3.2	Soft White NTC **350** 55# Densified Kraft	■	■					

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3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Vinyl White (cont.)	**7930T**	Resists one-piece removal. Facestock fractures and tears easily. Excellent adhesion to powder coating, LSE plastics and oily metals. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 0.8 6.8	White Destructible TC **350** 90# Polycoated Kraft	■	■			■		
	7053	Semi-flexible, non topcoated film. 90# liner with layflat properties ideal for sheet and screen printing applications.	4.0 1.1 6.8	Soft Clear Vinyl NTC **350** 90# Polycoated Kraft					■	■	
	FV027805	Flexible film, ideal for printing with solvent, UV inkjet or UV flexo inks. High-tack and peel adhesive suitable for outdoor, textured LSE substrates. 90# liner with layflat properties ideal for sheet and screen printing applications.	3.2 1.1 6.8	Soft White Vinyl NTC **P1480** 90# Polycoated Kraft			■		■	■	
	FV029405	Extended life, white vinyl offers durability and moisture resistance, and long-term dimensional stability for demanding applications. High performance tackified acrylic formulated for acid resistance and adhesion to polyolefins. 90# liner with layflat properties ideal for sheet and screen printing applications.	3.8 1.1 6.8	Soft White EL Vinyl **P1480** 90# Polycoated Kraft					■	■	
	FV023202	High initial tack adhesive with good moisture resistance. Performs well in ladder label applications.	3.5 1.2 3.2	Soft White TC3 **P1480** 50# SC	■	■	■				
	7045	Non-topcoated film with good conformability. Excellent choice for curved surfaces. 90# liner with layflat properties ideal for sheet and screen printing applications.	3.2 0.9 6.8	Soft White Vinyl NTC **P1400** 90# Polycoated Kraft			■		■	■	
	7049	Non-topcoated film with good conformability. Excellent choice for curved surfaces. General purpose adhesive for a variety of surfaces. High performance adhesive. 90# liner with layflat properties ideal for sheet and screen printing applications.	3.8 0.9 6.8	Soft White EL Vinyl NTC **P1400** 90# Polycoated Kraft					■	■	
	OFV0202	Designed for use in outdoor applications. Good adhesion to HSE and LSE plastics.	3.5 0.9 3.2	Soft White TC3 **P1400** 50# SC	■	■	■				
	FV032	Soft conformable vinyl that offers durability and moisture resistance. General purpose adhesive.	3.5 0.9 3.2	Soft White TC3 **P1212** 50# SC	■	■	■				
	FV172	Soft conformable translucent vinyl that has been topcoated for water-based flexo inks. High clarity general purpose adhesive.	3.5 0.9 3.2	Soft Translucent TC1 **P1212** 50# SC	■	■					
	FV292	Adheres to a variety of surfaces including polyolefins. Excellent choice for wire marking applications.	3.5 0.9 3.2	Soft White TC3 **P1410** 50# SC	■	■	■				

*3M™ Durable Label Materials have been tested with various print systems with positive results. Print systems vary, so please request a sample and test in your specific application.

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Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Vinyl White (cont.)	**IJ39-20**	Flexible film ideal for solvent or UV inkjet printable applications. High-tack and peel adhesive ideal for outdoor applications. Printed 3M™ Scotchcal™ 90# liner with layflat properties ideal for sheet and screen printing applications.	3.5 1.2 6.8	White Vinyl **Permanent Acrylic** 90# Polycoated Kraft					■	■	
Vinyl Cast	**3690E+**	Flexible and conformable white 3M™ Scotchcal™ Film with outstanding weathering properties. Non-transferable on some surfaces.	2.0 1.0 3.2	Bright White NTC **320** 90g/sm glassine	■	■			■	■	
	3698E+	Flexible and conformable silver 3M™ Scotchcal™ Film with outstanding weathering properties. Non-transferable on some surfaces.	2.0 1.0 3.2	Matte Silver NTC **320** 90g/sm glassine	■	■			■	■	
3M™ Water-based Inkjet Poly-propylene	**7790-IJ**	Topcoat uniquely designed for waterbased inkjet print systems. Durable facestock and adhesive stand up to harsh environments. BS5609 certified durable label. Ideal for use in chemical drum labeling applications.	5.0 1.1 3.2	PP, Waterbased Inkjet TC **350** 55# Densified Kraft				■			■
	FP033-IJ	Topcoat uniquely designed for waterbased inkjet print systems. Durable facestock and adhesive stand up to harsh environments. Emulsion-based high performance LSE adhesive with high-tack for demanding applications. Broad applications in general industrial.	5.0 1.4 3.2	PP, Waterbased Inkjet TC **P1480** 50# SC				■			■
Poly-propylene White	**7777**	Bright white facestock offers high opacity. Film stiffness allows for easy die cutting and dispensing for automatic applications. Can be thermal transfer printed with resin ribbon.	2.6 0.9 3.2	Polypropylene Label **Permanent Acrylic** 50# Densified Kraft	■	■	■				
	7779	Same as *7777* except with 350 adhesive. Excellent adhesion to powder coats and LSE plastics.	2.6 1.1 3.2	Polypropylene Label **350** 55# Densified Kraft	■	■					
	7776	Light-duty facestock with firm adhesive that resists oozing.	2.6 0.8 3.2	Polypropylene Label **310** 55# Densified Kraft	■	■	■				
	FP022102	High performance adhesive designed for demanding LSE substrates. Matte film.	3.0 1.2 3.2	PP, EDP **P1480** 50# SC	■	■					
	FP029102	High performance adhesive with high-tack and peel from difficult textured LSE plastics.	2.6 1.2 3.2	PP, TC **P1480** 50# SC	■	■	■				
	FP016102	Conformable moisture resistant film. Freezer-grade adhesive that can be applied at temperatures as low as 0°F.	2.3 0.8 3.2	PP, TC **F2201** 50# SC	■	■	■				

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3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Poly-propylene Clear	**FP102**	General purpose adhesive offers excellent adhesion to a wide variety of substrates, including polyolefins.	2.0 0.9 3.2	PP, Clear TC **P1410** 50# SC	■	■	■				
Poly-propylene Metalized	**FP032302**	White opaque adhesive paired with metalized film offers exceptional opacity.	2.3 1.1 3.2	PP, Metalized TC **P1655** 50# SC	■	■	■				
Poly-ethylene	**FPE06602**	Conformable film suitable alternative to vinyl label materials. Aggressive adhesive designed to adhere to both LSE and HSE surfaces.	2.5 1.1 3.2	White Polyethylene **P1480** 50# SC	■	■					
	FPE42	Conformable film suitable alternative to vinyl label materials. Aggressive adhesive designed to adhere to both LSE and HSE surfaces.	3.0 0.9 3.2	Clear Polyethylene **P1410** 50# SC	■	■					
Teslin®	**7841**	Excellent toner anchorage. Good conformability. Good print contrast when bar coding.	7.0 0.8 3.2	Matte White Teslin™ **310** 55# Densified Kraft	■	■		■			

*3M™ Durable Label Materials have been tested with various print systems with positive results. Print systems vary, so please request a sample and test in your specific application.

Polypropylene facestock for conformable surfaces. With a variety of label materials, users can find the product that suits their application needs. From barcode labels and rating plates, to nameplates and durable goods; our 3M™ Thermal Transfer Label Materials rise to the challenge.



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3M™ Durable Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Paper	**7000**	High-gloss for fine printing. Adheres well to curved surfaces. Ideal for pharmaceutical applications.	4.0 0.9 2.5	60# White High Gloss **320** 43# Densified Kraft	■	■					
	7000FL	Same as 7000 with film liner.	4.0 0.9 1.5	60# White High Gloss **320** Polyester Film	■	■					
	7011	Excellent flag resistance on small diameter vials. Used for unit dose pharmaceutical packages.	2.3 0.9 2.5	35# Coated Paper **320** 43# Densified Kraft	■	■					
	7110	Readily fractures or delaminates. Ideal for tamper-resistant labeling. Provides write-on capability.	2.8 1.1 2.5	40# Uncoated Paper **320** 43# Densified Kraft	■	■					
Acrylate	**7847**	Two-layered film construction designed for laser etching provides excellent long-term durability for critical information.	2.4 1.2 3.2	Matte Black/White **350** 55# Densified Kraft							
	3921	Offers ultra-high temperature performance. Thermal transfer printable.	2.0 1.0 3.0	Matte White Acrylate **150** 55# Densified Kraft	■	■					
	76999	Offers ultra-high temperature performance. Thermal transfer printable with un-branded liner.	2.0 0.8 3.2	Matte White Acrylate **150** C2S Glassine Liner	■	■					
Aluminum Foil Silver	**7940**	Vinyl topcoated for ink receptivity. Heavy adhesive coat weight suitable for textured surfaces. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 1.7 6.8	Matte Silver TC **320** 90# Polycoated Kraft		■			■		
	7800	Vinyl topcoated for ink receptivity. Heavy adhesive coat weight suitable for textured surfaces. Excellent adhesion to LSE plastics.	2.0 1.7 3.0	Matte Silver TC **320** 60# Densified Kraft		■			■		

*3M™ Durable Label Materials have been tested with various print systems with positive results. Print systems vary, so please request a sample and test in your specific application.

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3M™ Removable Label Materials

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Polyester White	**FM01972**	Matte film that offers thermal stability. Suitable for masking applications.	2.0 0.8 3.2	PET, White MC **R3500** 50# SC	■	■					
	FM1732R	Thermal transfer printable with resin ribbons. Removable from a variety of surfaces.	2.0 0.8 3.2	PET, White TC **R3500** 50# SC	■	■	■				
Vinyl White	**7600**	Top-coated, high bond, but offers clean removability on most surfaces for up to one year. Excellent for plasticizer resistance. Key applications include automotive masking, outdoor removable.	3.5 1.0 2.5	Soft White Vinyl NTC **500** 90# Polycoated Kraft	■	■	■				
	FV1222	Soft conformable vinyl that offers long-term adhesion with clean removability.	3.5 0.8 3.2	Soft White Vinyl TC3 **R3500** 50# SC	■	■	■				
	7901	Non-topcoated. High bond, but offers clean removability on most surfaces for up to one year. Excellent for plasticizer resistance. 90# liner with layflat properties ideal for sheet and screen printing applications.	3.5 1.0 6.8	Soft White Vinyl NTC **500** 90# Polycoated Kraft					■	■	
Polypropylene White	**FP016902**	Good conformability and removability from a variety of surfaces. Excellent alternative to static cling.	2.3 0.8 3.2	PP, White TC **R3500** 50# SC	■	■	■				
Polypropylene Clear	**FP56N**	Clear conformable label offers long-term adhesion with clean removability. Excellent alternative to static cling with film liner for high speed dispensing.	2.0 0.8 1.5	PP, Clear TC **R3500** Polyester Film	■	■	■				
	FP0862	Clear conformable label offers long-term adhesion with clean removability. Excellent alternative to static cling.	2.0 0.8 3.2	PP, Clear TC **R3500** 50# SC	■	■	■				

*3M™ Durable Label Materials have been tested with various print systems with positive results. Print systems vary, so please request a sample and test in your specific application.

Stable, clean removal — even outdoors.
Select your range of strength, stability, adhesion and removability. These label materials feature our specially formulated acrylic adhesives, which include 3M™ Removable Adhesive 500 for stable, clean removal even during long-term outdoor applications. 3M™ Removable Adhesive R3500 is for use on smooth surfaces such as glass and plastics. Liners provide added versatility during processing such as die cutting, laminating and kiss cutting.



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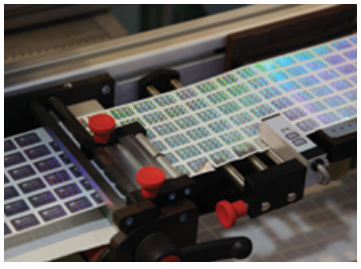
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3M™ Tamper Evident Label Materials

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Destructible Facestocks	**7613T**	Resists one-piece removal. Facestock fractures and tears easily. Excellent adhesion to powder coating, LSE plastics and oily metals.	2.0 0.8 3.2	White Vinyl TC **350** 55# Densified Kraft	■	■	■				
	7930T	Same as 7613T, except with 90# polycoated kraft liner.	2.0 0.8 6.8	White Vinyl TC **350** 90# Polycoated Kraft	■	■	■		■	■	
	3812	This destructible, non-shrink white film is designed as a non-removable security label. Once applied in a correct manner, one-piece removal is not possible on most surfaces.	1.6 1.2 3.2	Urethane, Matte White **350** Glassine	■	■	■				
	7110	Readily fractures or delaminates. Ideal for tamper-resistant labeling. Handwritable.	2.8 1.1 2.5	40# Uncoated White Paper **320** 43# Densified Kraft	■	■					
	FA112	High-quality film resists one piece removal, fractures easily. Good initial tack adhesive.	2.0 0.9 3.2	Clear Acetate **P1212** 50# SC		■					
Polyester Tamper Indicating Films	**7380**	Tamper evident VOID. Ideal for security rating plates and certification plates.	2.3 0.8 3.2	Matte White VOID DMI TC **300** 55# Densified Kraft	■	■					
	7381/7866	Used for closures in packaging of OTC drugs. Facestock resists harsh environments.	2.0 0.8 3.2	Gloss White VOID TC **300** 55# Densified Kraft	■	■	■				
	7384	Tamper evident VOID. Mirror finish hides security feature. Ideal for security closure seal.	2.0 0.8 3.2	PET, Bright Silver TC **300** 55# Densified Kraft	■	■	■				
	7935	Facestock resists harsh environments. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.0 0.8 6.8	Gloss White VOID TC **300** 90# Polycoated Kraft	■	■	■	■	■		
	7937	Ideal for security rating plates and certification plates. 90# liner with layflat properties ideal for sheet and screen printing applications.	2.3 0.8 6.8	Matte White VOID DMI TC **300** 90# Polycoated Kraft	■	■	■	■	■		
	FMV22	Thermal transfer printable VOID label. General purpose adhesive offers excellent adhesion to a wide variety of substrates, including polyolefins.	2.0 0.9 3.2	White VOID TC **P1410** 50# SC	■	■	■				

*Can be used to display the UL listing mark, but each case must be reviewed and approved by UL follow-up services before use.





Peace of mind you can readily see.
3M™ Tamper Evident Labels fracture from many surfaces when label removal is attempted, providing security and peace of mind. Tamper evident options include “void” messages, triangle shapes, or destructible facestocks. These tamper evident security labels feature adhesives that provide permanent or non-permanent markings on numerous substrates.

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3M™ Overlaminate Label Materials

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Polyester Gloss Clear	**7730FL**	Non-topcoated. Film liner offers excellent graphic appearance. Excellent durability and UV resistance.	1.0 0.8 1.5	PET, Clear NTC **400** Polyester Film							
	7731FL	Non-topcoated. Same as 7730FL, except with 2.0 mil facestock.	2.0 0.8 1.5	PET, Clear NTC **400** Polyester Film							
	7733FL	Ideal for long-term outdoor applications. Special UV resistant film provides 3 years outdoor durability.	1.0 0.8 1.5	PET, Clear UV **400** Polyester							
	7741	Non-topcoated. Excellent abrasion, chemical, and UV resistance.	1.0 0.8 2.5	PET, Clear NTC **400** 43# Densified Kraft							
	OFM010N	Excellent UV resistance. Designed for indoor and outdoor overlaminating applications.	1.0 0.8 1.5	PET, Clear NTC **P1400** Polyester Film							
	FM011	Basic polyester overlaminating film with high clarity adhesive.	1.0 0.8 2.5	PET, Clear NTC **P1212** 40# SC							
	FM45N	Heavy gauge durable non-topcoated film designed for overlaminating applications. Abrasion resistant. Designed for indoor applications. Film liner for ultimate adhesive clarity.	5.0 0.9 1.5	PET, Clear NTC **P1212** Polyester Film							
Polyester Matte Clear	**7732FL**	Non-topcoated. Film liner offers excellent graphic appearance. Excellent durability and UV resistance.	1.0 0.8 1.5	PET, Matte NTC **400** Polyester Film							
	7742	Non-topcoated. Excellent abrasion, chemical, and UV resistance.	1.0 0.8 2.5	PET, Matte NTC **400** 43# Densified Kraft							
	7744FL	Thermal transfer printable matte topcoat. Ideal where variable information is needed. Film liner provides smoother adhesive appearance.	1.3 0.8 1.5	PET, Matte TT TC **400** Polyester Film	■	■	■				
	7745FL	Higher matte finish than 7744FL. Can be used in laser and handwritable applications.	1.3 0.8 1.5	PET, Matte DMI TC **400** Polyester Film	■	■				■	
	FM071	Matte clear film for general purpose overlaminating applications.	1.0 0.8 2.5	PET, Matte NTC **P1212** 40# SC							

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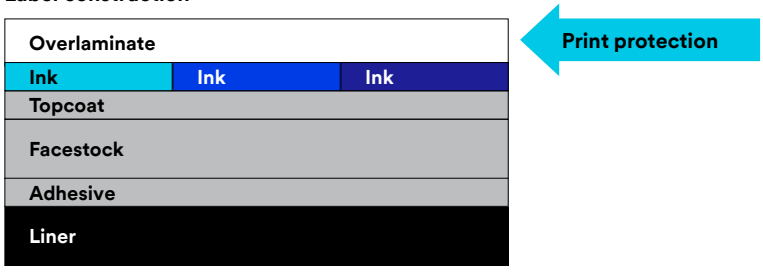
3M™ Overlaminate Label Materials (cont.)

Facestock	Product	Typical Performance Characteristics	Construction	
			Caliper (mils)	Facestock Adhesive Type Liner
Acrylate Clear	**7735FL**	Ideal for long-term outdoor applications. Special UV resistant film and adhesive provides 10 years outdoor durability.	3.0 0.8 1.5	Matte Acetate **400** Polyester Film
Acrylic Clear	**8524**	Clear satin overlaminate for outdoor applications. Ideal for use with 3M™ Scotchcal™ IJ8624. Resists acids, mild alkalis, and salts.	2.0 0.9 3.2	UV Resistant Film **P1212** 50# SC
Vinyl Clear	**FV02490N**	Textured vinyl film is an alternative to polycarbonate for less demanding applications. High clarity adhesive with good initial tack and excellent die cutting properties.	5.0 0.9 1.5	Textured Vinyl NTC **P1212** Polyester Film
Polycarbonate Clear	**7737FL**	Used to achieve the appearance of a subsurface screen printed polycarbonate.	3.0 0.8 1.5	Velvet Clear Lexan™ **400** Polyester Film
	7738FL	Same as 7737FL, except with 5.0 mil facestock.	5.0 0.8 1.5	Velvet Clear Lexan™ **400** Polyester Film
	FL01N	Liner offers high strength and caliper control. Recommended where the clarity of the adhesive is critical.	5.0 1.1 1.5	Velvet Clear Lexan™ **P1212** Polyester Film
	FL02N	Similar to 7737FL. Designed for indoor use.	3.0 1.1 1.5	Velvet Clear Lexan™ **P1212** Polyester Film
	OFL010N	Specialty durable polycarbonate overlaminate. High performance adhesive formulated for demanding applications. Adheres to a variety of surfaces. Excellent UV resistance.	3.0 1.0 1.5	Velvet Clear Lexan™ **P1400** Polyester Film



Designed for superior label protection.
These 3M materials offer UV and high temp resistance which help to prevent color fading. The adhesive is formulated for bonding to challenging substrates. Densified and super-calendered kraft and polyester film liners make for efficient die cutting and auto dispensing. The durable facestocks resist abrasion, scuffs and weathering.

Label construction



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3M™ Specialty Label Materials

Facestock	Product	Typical Performance Characteristics	Construction		Print Method*						
			Caliper (mils)	Facestock Adhesive Type Liner	Thermal Transfer	Flexographic	UV Inkjet	Laser/Toner-Based	Screen	Solvent Inkjet	Water Inkjet
Automotive Applications: EV Battery and VIN Label Materials											
Polyester	**7871V**	High abrasion and solvent resistance. Excellent high temperature resistance and adhesion to LSE plastics and smooth powder coats. Specialty applications in automotive EV battery, GHS drum labeling. BS5609 certified durable label.	2.0 1.8 3.2	PET, Versatile Print TC **350** 55# Densified Kraft	■	■	■	■	■		
Polyethylene	**FPE06602**	Conformable film suitable alternative to vinyl label materials. Aggressive adhesive designed to adhere to both LSE and HSE surfaces.	2.5 1.1 3.2	White Polyethylene **P1480** 50# SC	■	■					
Acrylate	**7847**	Two-layered film construction designed for laser etching provides excellent long-term durability for critical information.	2.4 1.2 3.2	Matte Black/White **350** 55# Densified Kraft				■			
Specialty Healthcare Applications											
3M™ Versatile Print Polyester, Gloss White	**7331V**	High abrasion and solvent resistance. Good for indoor and outdoor use. Excellent bond to LSE plastics. Ideal for medical device applications.	2.0 0.8 3.2	PET, Versatile Print TC **300** 55# Densified Kraft	■	■	■	■	■		
3M™ Water-based Inkjet Polyester	**7882-IJ**	Excellent cold temperature performance for a wide range of applications. Ideal for freezer or pharmaceutical applications.	3.0 0.8 3.2	PET, Waterbased Inkjet TC **400** 55# Densified Kraft				■			■
Paper	**7000**	High-gloss for fine printing. Adheres well to curved surfaces. Ideal for pharmaceutical applications.	4.0 0.9 2.5	60# White High Gloss **320** 43# Densified Kraft	■	■	■				
Litho Tamper-Indicating White	**7110**	Readily fractures or delaminates. Ideal for tamper-resistant labeling. Handwritable.	2.8 1.1 2.5	40# Uncoated Paper **320** 43# Densified Kraft	■	■					
	7011	Excellent flag resistance on small diameter vials. Ideal for unit dose pharmaceutical packages.	2.3 0.9 2.5	35# Coated Paper **320** 43# Densified Kraft	■	■					
Polyolefin	**FP035402**	Offers excellent durability, conformability and moisture resistance. Ideal for blood bag applications.	3.3 1.3 3.1	Matte White Polyolefin **P1650** 50# SC	■	■					

*3M™ Durable Label Materials have been tested with various print systems with positive results. Print systems vary, so please request a sample and test in your specific application.



Excellent across a wide range of automotive labeling applications. Topcoated facestock provides a wide choice of durability and conformability, and suits specific inks and methods. Designed for applications requiring high tack, temperature performance, challenging substrates and more.



Meeting the demands of Healthcare applications. A range of adhesives makes for reliable performance without flagging on small diameter plastic vials, in autoclaves and where tamper evidence is a main concern.

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3M™ Single Coated Tapes

Everyday task masters.

High temperatures or low. Indoor or outdoor. There's a 3M tape for masking, splicing, holding, sealing, bundling and marking.

Learn more at:
3M.com/SingleCoatedTapes
3M.com/Masking

3M™ Anodizing Masking Tape 8985L
Survives chromic acid with excellent masking lines and clean one-piece removal.



Selecting the right product for the job.

To help you make sure you find the optimum 3M tape or other adhesive-backed product for your particular application, you'll want to consider several factors:

- Backing material
- Adhesive type
- Application time and temperature
- Surface characteristics (e.g., roughness, surface energy, contours, etc.)
- End use conditions (e.g., temperature, UV exposure, abrasion, etc.)

The information on these two pages integrates those factors to help you narrow your selection to fewer products for a more in-depth evaluation.

3M Backing Materials

In many applications, 3M backings add a second surface that affects how the underlying surface relates to the environment.

To optimize that relationship, 3M backings offer a wide choice of performance and handling characteristics.

3M Pressure Sensitive Adhesives

Most of the products in this section feature a 3M pressure sensitive adhesive that bonds the backing to another surface on contact. Each adhesive has different characteristics that affect production and end use performance.

Backings	Characteristics
Paper	
Crepe	Conformable, easy tear.
Flatback	Strong, smooth, good for straight line masking.
Kraft	Strong, some versions are repulpable.
Tissue	Thin, porous to allow adhesive penetration of sheet.
Plastic	
Polyester	Strong even when thin, chemical resistant, high temperature resistance.
Polypropylene	Resistant to most solvents, conformable, tear resistant.
Polyethylene	Conformable, easy to stretch, chemical/acid/moisture resistant, economical.
Polyethylene/Polypropylene Co-polymer	Conformable, chemical/acid/moisture resistant.
UHMW-PE	High abrasion resistance, low coefficient of friction, anti-stick surface easy to clean.
Polyvinyl Chloride (Vinyl)	Conformable, abrasion resistant, resistant to most chemicals.
Polyimide	High temperature resistance, excellent dimensional stability, good insulation properties.
Polyamide (Nylon)	High temperature resistance, high strength and toughness, good chemical resistance but can absorb moisture.
Polyvinyl Alcohol (PVA)	Water-soluble, organic solvent resistant, high temperature resistance.
Polyurethane	Abrasion/scratch resistant, impact/puncture resistant, UV and corrosion resistant.
Polyvinyl Fluoride	Excellent weather resistance, excellent long-term UV resistance, thin yet stiff feel.
Cloth	
Cotton	Strong, easy tear by hand, soft and drapable.
Glass Cloth	Strong, high temperature resistance, flame-resistant.
Vinyl Coated	Strong yet hand tearable, abrasion resistant, water-resistant, conformable.
Non-woven	
Fiber	Air permeable, strong enough to hold expanding foams.
Metals	
Aluminum	Heat and light reflective, moisture and chemical resistant, flame-resistant, outdoor weather resistant, conformable.
Copper	EMI/RFI shielding.
Lead	Electrically conductive, acid resistant, high conformability, x-ray opacity.
Stainless Steel	Corrosion resistant.
Rubber	
Neoprene	Abrasion resistant, die-cuttable
Combination (Laminates)	
Paper/Polyethylene	Weather and chemical resistant, hand tearable, stretch resistant.
Metalized/Polyester	Reflective, decorative.
Glass Cloth/Aluminum	Very high temperature resistance, high strength.
Non-woven/Aluminum	High heat and cold resistance.

Adhesives			
Rubber	**Standard Acrylic**	**Modified Acrylic**	**Silicone**
High initial bond	Moderate initial bond	Bonds to wider variety than standard acrylic	Fair initial bond
Softer	Firmer	Softer	Very firm
Widest variety of surfaces including low surface energy materials*	High surface energy*	Many surfaces	Fewer surfaces
Up to 350°F	Up to 450°F	Up to 300°F	Up to 600°F, excellent low temperature performance
Fair chemical resistance	Excellent chemical resistance	Good chemical resistance	Excellent chemical resistance
Fair UV resistance	Excellent UV resistance	Moderate UV resistance	Excellent UV resistance
Poor aging	Excellent aging	Durable	Excellent aging
Removable	Permanent	Various	Removable
Good solvent resistance	Excellent solvent resistance	Good solvent resistance	Excellent solvent resistance

*Surface energy ranges from high to low. The substrate must be unified, dry, and clean to maximize adhesive contact.

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Selecting the best backing and adhesive.

Backings: Each Backing is Rated in Eight Critical Categories

Key to Charts 1–8

- PVC=Polyvinylchloride
- PE=Polyethylene
- PET=Polyester
- MF=Metal Foil
- GC=Glass Cloth

Chart 1. Backings Thickness (Caliper)

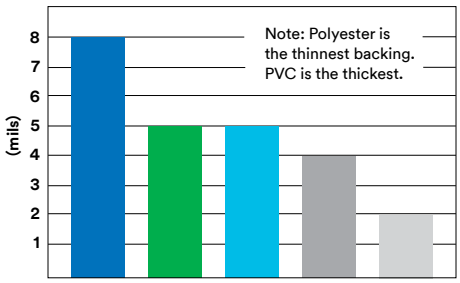


Chart 2. Temperature Range Tape Backings

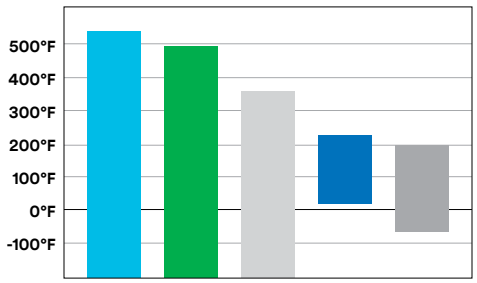


Chart 3. Conformability of Backings

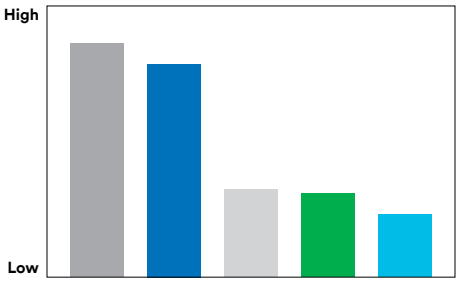


Chart 4. Backing Cost

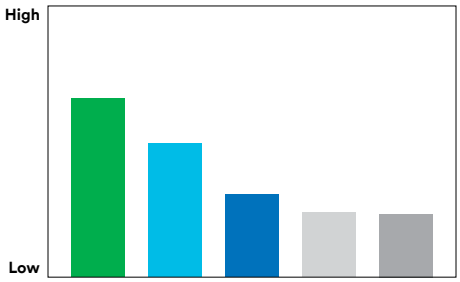


Chart 5. Backings as Moisture Barriers

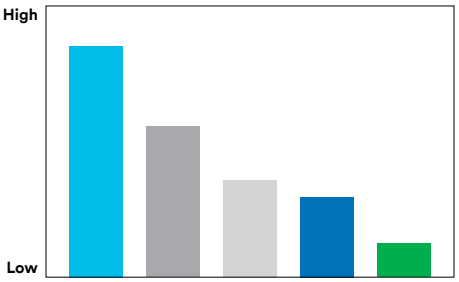


Chart 6. Chemical Resistance of Backings

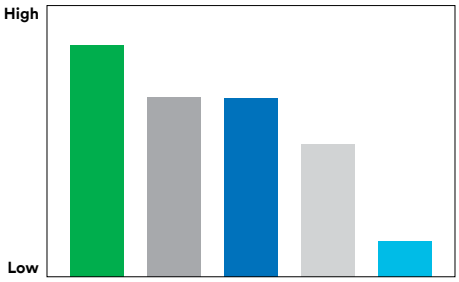


Chart 7. Solvent Resistance of Backings

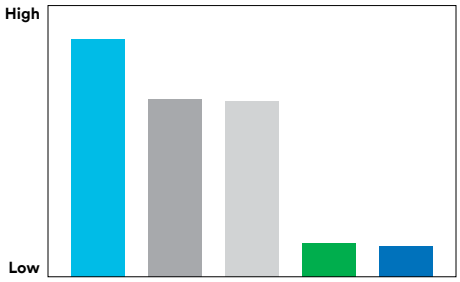
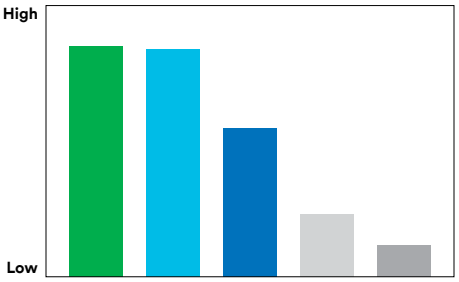


Chart 8. Resistance to Recovery (Dead Stretch)



Adhesives: Each Adhesive is Rated in Five Critical Categories

Key to Charts 9–13

- R=Rubber Adhesive
- A=Acrylic Adhesive
- S=Silicone Adhesive

Chart 9. Initial Tack

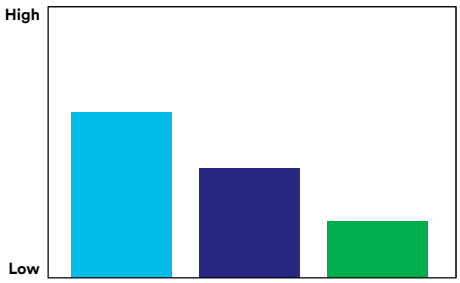


Chart 10. Ultimate Adhesion to Steel

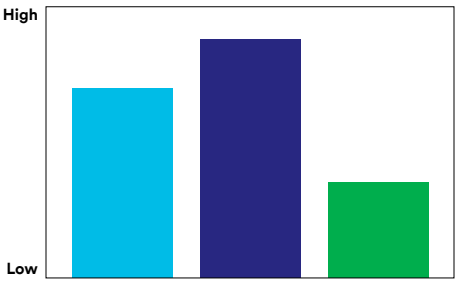


Chart 11. Temperature Ranges of Adhesives

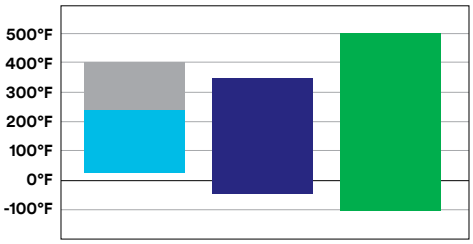


Chart 12. Long-Aging Capabilities

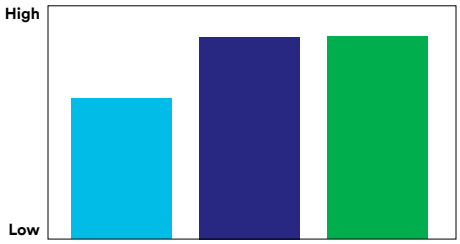
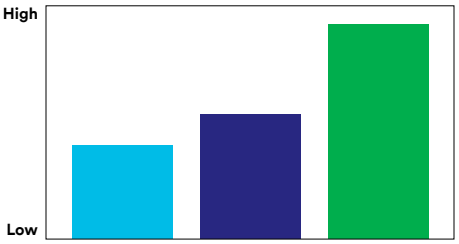


Chart 13. Cost of Adhesives



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3M™ Single Coated Tapes

Material (alphabetical order)	Product	Typical Performance Characteristics/ Application Ideas	Color	Total Caliper mils (mm)	Backing		Adhesive Type	Specs	Temperature Range °F (°C)
					Material	Caliper mils (mm)			
Premium Performance Aluminum Foil Tape	**363/ 363L**	An aluminum foil/glass cloth tape that can be used as a high temperature, heat reflective, protective wrap for certain cables and other components in aerospace and industrial applications. 363L is linered version.	Silver	7.3 (0.19)	Aluminum Foil Laminated to Glass Cloth	3.4 (0.09)	Silicone	F.A.R. 25.853(a)	-65 to 600 (-54 to 316)
	425	Dead-soft aluminum foil tape. Masking of sensitive components to protect from damage during aircraft paint stripping. In white goods appliances, tape provides an excellent moisture barrier, helps reflect and dissipate heat.	Silver	4.6 (0.12)	Aluminum Foil	2.8 (0.07)	Acrylic	F.A.R. 25.853(a); SAE AMS T-23397; UL 723; UL 746C; LT-80 C	-65 to 300 (-54 to 149)
	427	Dead-soft aluminum foil tape. Linered version of 425 that can be easily die-cut into special sizes or shapes. Mask sensitive components to protect from damage during paint stripping or reflect and dissipate heat.	Silver	4.6 (0.12)	Aluminum Foil	2.8 (0.07)	Acrylic	F.A.R. 25.853(a); UL 723; UL 746C; LT-80 C	-65 to 300 (-54 to 149)
	431	Dead-soft aluminum foil with transparent acrylic adhesive for many permanent sealing, holding, splicing or masking applications requiring the protection offered by a foil backing.	Silver	3.1 (0.08)	Aluminum Foil	1.9 (0.05)	Acrylic	F.A.R. 25.853(a)	-65 to 300 (-54 to 149)
	433	Dead-soft aluminum foil backing with silicone adhesive that can be used in many high temperature applications.	Silver	3.6 (0.09)	Aluminum Foil	2.0 (0.05)	Silicone	F.A.R. 25.853(a); US Gov A-A-59258; MIL-T-47014	-65 to 600 (-54 to 316)
	433L	Linered version of 433.	Silver	3.5 (0.09)	Aluminum Foil	2.0 (0.05)	Silicone	F.A.R. 25.853(a)	-65 to 600 (-54 to 316)
	437	Dead-soft aluminum foil tape. Aggressive acrylic adhesive. Developed with Poly-coated kraft paper liner.	Silver	8.0 (0.20)	Aluminum Foil	2.8 (0.07)	Acrylic	—	-40 to 212 (-40 to 100)
	438	Thickest aluminum tape.	Silver	7.2 (0.18)	Aluminum Foil	5.0 (0.13)	Acrylic	F.A.R. 25.853(a) UL 723	-65 to 300 (-54 to 149)
	439	Linered version of 431.	Silver	3.1 (0.08)	Aluminum Foil	1.9 (0.05)	Acrylic	F.A.R. 25.853(a)	-65 to 300 (-54 to 149)
	3302	Aluminum foil tape. EMI/RFI shielding. Perforated.	Silver	3.5 (0.09)	Aluminum Foil	2.0 (0.05)	Conductive Acrylic	UL 510	-40 to 250 (-40 to 12)
Aluminum Sound Damping Foil	**434**	Aluminum foil constraining layer coated with a 2.0 mil (0.05mm) pressure sensitive viscoelastic polymer on a blue polyethylene easy-release liner. Controls resonant vibrations from -76°F to 68°F (-60°C to 20°C).	Silver	7.5 (0.19)	Aluminum	5.5 (0.14)	Viscoelastic Polymer	F.A.R. 25.853(a)	—
	435	Thicker version of 434. Controls resonant vibrations from -76°F to 68°F (-60°C to 20°C).	Silver	13.5 (0.34)	Aluminum	8.0 (0.2)	Viscoelastic Polymer	F.A.R. 25.853(a)	—
	436	Aluminum foil constraining layer coated with a 5.5 mil (0.14mm) pressure sensitive viscoelastic polymer on a blue polyethylene easy-release liner. Controls resonant vibrations from -76°F to 68°F (-60°C to 20°C).	Silver	17.5 (0.45)	Aluminum	12.0 (0.31)	Viscoelastic Polymer	F.A.R. 25.853(a)	—
	2552	Aluminum foil constraining layer coated with a 5.0 mil (0.13mm) pressure sensitive viscoelastic polymer on a polycoated paper easy-release liner. Controls resonant vibrations from -25°F to 175°F (-32°C to 80°C).	Silver	15.0 (0.38)	Aluminum	10.0 (0.25)	Viscoelastic Polymer	F.A.R. 25.853(a)	—
	4014	Foil/foam sheet laminate.	Silver	250.0 (6.35)	Aluminum-Urethane	3.0 (0.08)	Viscoelastic Polymer	F.A.R. 25.853(a)	—

Go-To Product

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3M™ Single Coated Tapes (cont.)

Material (alphabetical order)	Product	Typical Performance Characteristics/ Application Ideas	Color	Total Caliper mils (mm)	Backing		Adhesive Type	Specs
					Material	Caliper mils (mm)		
Fiberglass Cloth	★ 361	Glass cloth tape coated with a silicone adhesive for many applications requiring high temperature resistance, high adhesion and a very strong abrasion-resistant backing.	White	6.4 (0.16)	Glass Cloth	5.0 (0.13)	Silicone	F.A.R. 25.853
	3615	An easy unwind glass tape for many applications requiring high temperature resistance, high adhesion, and a very strong abrasion-resistant backing.	White	7.0 (0.18)	Glass Cloth	5.0 (0.13)	Silicone	—
	365	Splicing textured surfaces/thermosetting adhesive.	White	8.3 (0.20)	Glass Cloth	4.8 (0.12)	Thermoset Rubber	—
	3650	Splicing textured surfaces/thermosetting adhesive. Film linered version of 365.	White	8.3 (0.20)	Glass Cloth	4.8 (0.12)	Thermoset Rubber	—
	398FR	Glass cloth film tape with acrylic adhesive. Used for sealing seams on aircraft ducting and cargo area panels. Flame retardant. Skip-slit liner for ease of application.	White	7.0 (0.18)	Glass Cloth	5.0 (0.13)	Acrylic	BMS 5-146; F.A.R. 25.853(a); F.A.R. 25.855(d)
	398FRP	Printed backing version of 398FR.	White	7.0 (0.18)	Glass Cloth	5.0 (0.13)	Acrylic	BMS 5-146; F.A.R. 25.853(a); F.A.R. 25.855(d)
Lead Foil	420	Lead foil backing with rubber adhesive and a white, easy-release film liner.	Dark Silver	7.6 (0.19)	Lead Foil	5.0 (0.13)	Rubber	—
	421	Self-wound plating tape.	Dark Silver	7.6 (0.19)	Lead Foil	5.0 (0.13)	Rubber	—
Non-Woven	394	Air-permeable backing.	White	5.0 (0.13)	Non-Woven	4.5 (0.11)	Acrylic	—
	3294	Most permeable venting tape. Adhesive is strip coated.	Pink	5.0 (0.13)	Non-Woven	4.5 (0.11)	Acrylic	—
Paper	101+	Indoor use. Light-duty applications.	Tan	5.1 (0.13)	Crepe Paper	—	Rubber	—
	201+	General indoor use. Light-to-medium duty. Clean removal.	Tan	4.4 (0.11)	Crepe Paper	—	Solvent-Free Rubber	—
	203	Low temperature tape. General purpose masking tape for holding, bundling, sealing and more.	Beige	4.7 (0.12)	Crepe Paper	—	Rubber	—
	231	Best all-purpose paint masking tape. Good for aerospace applications.	Tan	7.6 (0.19)	Crepe Paper	—	Rubber	ASTM D 6123; D 6123M-97
	253	Silicone butt splicing tape.	Tan	7.6 (0.19)	Treated Flatstock Paper	5.0 (0.13)	Silicone	—
	256*	Printable, accepts marking inks.	White, Red, Green	6.7 (0.17)	Flatback Paper	—	Rubber	ASTM D 6123; D 6123M-97

*Scotch® brand.

★ **Go-To Product**

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3M™ Single Coated Tapes (cont.)

Material (alphabetical order)	Product	Typical Performance Characteristics/ Application Ideas	Color	Total Caliper mils (mm)	Backing		Adhesive Type	Specs
					Material	Caliper mils (mm)		
Paper (cont.)	**301+**	Good conformability to irregular surfaces. Great paint lines.	Yellow	6.3 (0.16)	Crepe Paper	—	Solvent-Free Rubber	—
	401+	Highly conformable to many surfaces. Superior adhesion to metal, rubber, glass and plastic. Great paint lines.	Green	6.7 (0.17)	Crepe Paper	—	Solvent-Free Rubber	—
	501+	Exceptionally conformable to irregular surfaces. Superior adhesion to metal, rubber, glass and plastic. Removes cleanly in one piece with no residue. Great paint lines.	Tan	7.3 (0.19)	Crepe Paper Treated with a Heat Resistant Saturant	—	High Temp Rubber	ASTM D 6123
	2364	High temperature, crepe paper masking tape for general masking application. Good holding power.	Tan	6.5 (0.17)	Crepe Paper	—	Synthetic Rubber	ASTM D 6123; D 6123M-97
	2380	High temperature. Best holding to widest variety of surfaces.	Tan	7.2 (0.18)	Crepe Paper	—	Synthetic Rubber	ASTM D 6123; D 6123M-97
	2460	For paint bake operations at temperatures up to 300°F (149°C). 14 days outdoor.	Gold	3.3 (0.08)	Flatback Paper	—	Acrylic	—
	2510	General purpose masking tape for holding, bundling, sealing and general paint masking where a dark colored tape is required.	Black	5.6 (0.14)	Crepe Paper	—	Rubber	ASTM D 6123; D 6123M-97
	2517*	Excellent splicing, holding and bundling applications.	Medium Brown	6.5 (0.15)	Kraft Paper	—	Rubber	ASTM D 6123; D 6123M-97
	2693	Very aggressive holding; excellent for multi-bake paint cycles.	Tan	7.9 (0.20)	Crepe Paper	—	Synthetic Rubber	ASTM D 6123; D 6123M-97
Polyimide	**8997/ 8997L**	Transparent film. High temperature applications. 8997L is lined version.	Amber	2.2 (0.06)	Polyimide	1.0 (0.02)	Silicone	—
	8998/ 8998L	Transparent film. High temperature applications. 8998L is lined version.	Amber	3.3 (0.08)	Polyimide	2.0 (0.05)	Silicone	—

*Scotch® brand.

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3M™ Single Coated Tapes (cont.)

Material (alphabetical order)	Product	Typical Performance Characteristics/ Application Ideas	Color	Total Caliper mils (mm)	Backing		Adhesive Type	Specs
					Material	Caliper mils (mm)		
Polyester	396	Adhesion to low energy surfaces.	Transparent	4.1 (0.10)	Polyester	1.4 (0.04)	Rubber	—
	★ 850	Polyester film tape with acrylic adhesive. Used for splicing, holding, decorating, color-coding and sealing.	Transparent, Red, Black, White, Silver	1.9 (0.05)	Polyester	1.0 (0.03)	Acrylic	Transparent: L-T-100
	853	Transparent polyester film tape with solvent-resistant adhesive. Used for butt splicing and tabbing applications.	Transparent	1.9 (0.05)	Polyester	1.0 (0.03)	Acrylic	L-T-100 F.A.R. 25.853(a)
	875	High-temperature, non-silicone, composite bonding.	Seafoam Green	2.0 (0.05)	Polyester	1.0 (0.03)	Rubber	—
	876	High-temperature, non-silicone, composite bonding.	Seafoam Green	3.1 (0.08)	Polyester	2.0 (0.05)	Rubber	—
	8402	Splicing tape. Adheres well to silicone.	Translucent Green	1.9 (0.05)	Polyester	1.0 (0.03)	Silicone	—
	8403/ 8403L	Splicing tape. Adheres well to silicone. 8403L is a linered version of 8403.	Translucent Green	2.4 (0.06)	Polyester	1.5 (0.04)	Silicone	—
	8412	Heavy-duty edge and hole reinforcing.	Transparent	6.3 (0.16)	Polyester	4.7 (0.12)	Acrylic	—
	8422	Photo film splicing.	Black	2.3 (0.06)	Polyester	1.4 (0.04)	Rubber	—
	8437	Low emissivity, reflective tape. Metalized coating on both sides of the film.	Silver	1.9 (0.05)	Polyester	1.0 (0.03)	Acrylic	—
	8901	High temperature masking	Blue	2.6 (0.07)	Polyester	1.0 (0.03)	Silicone	—
	8902	High temperature masking	Blue	3.4 (0.09)	Polyester	2.0 (0.05)	Silicone	—
	8905	High temperature masking	Blue	6.5 (0.17)	Polyester	5.0 (0.12)	Silicone	—
	8911	High temperature label protection.	Transparent	2.7 (0.07)	Polyester	1.0 (0.03)	Silicone	—
	8985L	Survives chromic acid with excellent masking lines and clean one-piece removal.	Purple	3.9 (0.10)	Polyester	3.0 (0.08)	Rubber	—
	8991/ 8991L	Thin tapes, powder coat masking, high temperature applications. 8991L is linered version.	Blue	2.4 (0.06)	Polyester	1.0 (0.03)	Silicone	—
	★ 8992/ 8992L	Powder coat and anodized masking, high temperature applications. 8992L is linered version.	Green	3.2 (0.08)	Polyester	2.0 (0.05)	Silicone	—
	8993LC	Protects finished surfaces from light abrasion, nicks and scratches during production, packaging and installation, process agent, rolls up products tape with deliver and assembly. Temporary holding tape.	Transparent	3.2 (0.08)	Polyester	3.0 (0.08)	Silicone	—
Polypropylene	218/ 218L	Polypropylene plastic film tape with rubber adhesive. A high performance film backed tape with low profile and high adhesion to achieve excellent paint line and for other masking and holding applications. 218L is linered version.	Green	5.0 (0.13)	Polypropylene	—	Rubber	—
	265	Composite masking where sharp, clean, gel-coat color separation lines are desired.	Green	5.1 (0.13)	Polypropylene	—	Rubber/ Silicone	—
	8087	Construction seaming tape.	Red	3.0 (0.08)	Biaxially Oriented Polypropylene Film	1.5 (0.04)	Acrylic	—

*Scotch® brand.

★ **Go-To Product**

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3M™ Single Coated Tapes (cont.)

Material (alphabetical order)	Product	Typical Performance Characteristics/ Application Ideas	Color	Total Caliper mils (mm)	Backing		Adhesive Type	Specs
					Material	Caliper mils (mm)		
Polyethylene	480	Good chemical and solvent resistance, conformable, abrasion resistant.	Transparent	5.1 (0.13)	Polyethylene	4.0 (0.10)	Acrylic	—
	481	Preservation sealing tape. Clean removal up to 2 years.	Black	9.5 (0.24)	Polyethylene	7.5 (0.19)	Rubber	SAE-AMS-T-22085, Type II
	4811	Preservation sealing tape. Clean removal up to 1 year.	White	9.5 (0.24)	Polyethylene	7.5 (0.19)	Rubber	—
	★ 483	Conformability, UV resistance, and clean removal for sealing end cap on metal pipes stored outdoors.	Black, Blue, Green, Red, White, Yellow, Transparent	5.0 (0.13)	Polyethylene	3.9 (0.10)	Rubber	MIL-STD 2041D (SH)
Ultra High Molecular Weight (UHMW-PE) – Slick Surface	5421	General purpose tape to protect plastic and metal chutes, guide rails and containers from wear.	Transparent	6.7 (0.17)	UHMW-PE	5.0 (0.13)	Rubber	—
	★ 5423	Excellent abrasion resistance and low coefficient of friction makes this an effective solution for noise and vibration problems.	Transparent	11.7 (0.30)	UHMW-PE	10.0 (0.25)	Rubber	—
	5425	Solvent resistant adhesive with low coefficient of friction and abrasion resistance.	Transparent	5.0 (0.13)	UHMW-PE	3.0 (0.08)	Acrylic	—
	5430	Transparent UHMW-PE film tape with high-tack acrylic adhesive.	Transparent	7.0 (0.18)	UHMW-PE	5.0 (0.13)	Acrylic	—
	9325	Thin version of 5430.	Transparent	5.0 (0.13)	UHMW-PE	3.0 (0.08)	Acrylic	—

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3M™ Single Coated Tapes (cont.)

Material (alphabetical order)	Product	Typical Performance Characteristics/ Application Ideas	Color	Total Caliper mils (mm)	Backing		Adhesive Type	Specs
					Material	Caliper mils (mm)		
Vinyl	**470**	Conformable and abrasion resistant for masking various surfaces during electroplating and anodizing.	Tan	7.1 (0.18)	Vinyl	6.3 (0.16)	Rubber	—
	471/ 4712	Vinyl plastic tape ideal for color-coding, abrasion protection, decoration, sealing, patching, splicing, wrapping, and general purpose. Available in 7 colors and transparent. 4712 is a linered version of 471 for die-cutting applications.	Yellow, White, Red, Black, Green, Orange, Blue, Transparent	5.2 (0.13)	Vinyl	4.1 (0.10)	Rubber	MIL-STD 2041D (SH)
	471+	Superior conformability, sharp paint lines, clean removal.	Indigo	5.3 (0.13)	Vinyl	4.1 (0.10)	Rubber	—
	472	Abrasion resistant, high temperature resistant.	Black	10 (0.25)	Vinyl	9.0 (0.23)	Rubber	—
	477	Abrasion resistant.	Transparent	7.2 (0.18)	Vinyl	6.0 (0.15)	Rubber	—
	764	A general purpose vinyl tape for use in non-critical applications such as color-coding, bundling and safety marking.	Yellow, Red, White, Black, Blue, Green, Orange, Gray, Purple, Brown, Transparent	5.0 (0.13)	Vinyl	4.0 (0.10)	Rubber	—
	766	A general purpose hazard marking vinyl tape for use in non-critical applications.	Black & Yellow Stripes	5.0 (0.13)	Vinyl	4.0 (0.10)	Rubber	—
	767	A general purpose hazard marking vinyl tape for use in non-critical applications.	Red & White Stripes	5.0 (0.13)	Vinyl	4.0 (0.10)	Rubber	—
	971/ 971L	Designed to withstand scuffing from pallets and heavy equipment found in high traffic areas. Its unique adhesive provides a strong bond to the floor yet promotes one piece clean removal. Ideal for 5S lean manufacturing initiatives.	Yellow, White, Red, Blue, Orange, Green	17 (0.43)	Vinyl	15 (0.38)	Rubber	—
	4735	Highly conformable, high temperature vinyl fine line tape for fascia panels, two-tone and other multiple color applications where critical paint break lines are required.	Orange	5.4 (0.14)	Vinyl	—	Rubber	—
	4737S	Highly visible backing version of 4737T.	Solid Blue	5.4 (0.14)	Vinyl	—	Rubber	—
	4737T	Conformable, high temperature vinyl fine line tape for fascia panels, two-tone and other multiple color applications where critical paint break lines are required.	Translucent Blue	5.4 (0.14)	Vinyl	—	Rubber	—
	4737TL	Linered version of 4737T.	Blue	5.4 (0.14)	Vinyl	—	Rubber	—
	5700	Critical applications. Adhesive side printing. For lane and safety marking.	Black & White Stripes	5.5 (0.14)	Vinyl	4.2 (0.11)	Rubber	—
	5702	Critical applications. Adhesive side printing. For lane and safety marking.	Black & Yellow Stripes	5.5 (0.14)	Vinyl	4.2 (0.11)	Rubber	—

Go-To Product

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3M™ Single Coated Tapes (cont.)

Material (alphabetical order)	Product	Typical Performance Characteristics/ Application Ideas	Color	Total Caliper mils (mm)	Backing		Adhesive Type	Specs
					Material	Caliper mils (mm)		
Miscellaneous Tapes	215	Medium temperature. Fine line masking tape. Excellent conformability.	Blue	4.8 (0.12)	Copolymer Plastic Film	—	Rubber	—
	616	UPVC tape.	Ruby Red	2.4 (0.06)	UPVC	1.6 (0.04)	Rubber	—
	695	Polyethylene film with a rubber-strip coated along edges of tape only and tack-free center. Riveters tape.	Yellow	3.0 (0.08)	Polyethylene	2.0 (0.05)	Acrylic*	—
	838	Weather-resistant film.	White	3.4 (0.09)	PVF	2.1 (0.05)	Acrylic	SAE-AMS-T-22085, Type IV
	855	Composite bonding tape.	White	3.6 (0.09)	Nylon	2.0 (0.05)	Rubber	—
	8555	Thicker version of 855, composite bonding tape.	White	7.0 (0.18)	Nylon	5.0 (0.13)	Rubber	—
	5401	High coefficient of friction for traction.	Tan	9.3 (0.24)	Fiberglass Reinforced Silicone	8.0 (0.20)	Silicone	—
	5461	High friction roller tape.	White	9.1 (0.23)	Silicone Rubber	7.8 (0.19)	Rubber	—
	IS1	Industrial tape for water and air sealing.	White	10.0 (0.25)	Multilayer film	5.0 (0.13)	Acrylic	—

*Strip coated along edges of tape only.

3M™ Single Coated Foam Tapes

Product Number	Color	Description	Adhesive	Approximate Thickness in. (mm)	Density lbs./cu. ft. (kg/cu m)	Tensile Strength psi (kPa)	Compression Deflection 25% psi (kPa)	Compression Set % Loss	Temperature Tolerance	
									Short-Term	Long-Term
Urethane										
4104*	Natural White	Firm, rigid, open cell urethane foam for cushioning. Allows air or gas vapors to pass through. Not recommended for outdoor use.	350 Acrylic	0.250 (6)	12 (192)	115 (795)	4 (27.6)	8	350°F (176°C)	200°F (93°C)
4108	Natural White		350 Acrylic	0.125 (3)	16 (256)	130 (895)	6 (82.8)	8	350°F (176°C)	200°F (93°C)
4116	Natural White		350 Acrylic	0.062 (1.5)	18 (288)	115 (795)	12 (82.8)	12	350°F (176°C)	200°F (93°C)
4314	Charcoal Gray	Soft conformable, low density open-cell urethane foam can help seal out air, dust and light when compressed 50%. Used to help damp sound and absorb vibration in electronics.	430 Acrylic	0.250 (6)	2 (32)	25 (170)	0.3 (2.1)	5	250°F (121°C)	150°F (66°C)
4317*	Charcoal Gray		430 Acrylic	0.375 (9.5)	2 (32)	25 (170)	0.3 (2.1)	5	250°F (121°C)	150°F (66°C)
4318	Charcoal Gray		430 Acrylic	0.125 (3)	2 (32)	25 (170)	0.3 (2.1)	5	250°F (121°C)	150°F (66°C)
Vinyl Foam Tapes										
4504*	Black	Durable, flexible, closed cell vinyl foams with excellent aging characteristics. Weather resistant. Can help to seal out dust, light and moisture when placed under 30% compression. Liner over PSA.	430 Acrylic	0.250 (6)	20 (320)	90 (620)	4 (27.6)	15	250°F (121°C)	150°F (66°C)
4508*	Black		430 Acrylic	0.125 (3)	20 (320)	100 (690)	4 (27.6)	15	250°F (121°C)	150°F (66°C)
4516*	Black		430 Acrylic	0.062 (1.5)	25 (400)	130 (895)	4 (27.6)	15	250°F (121°C)	150°F (66°C)
4714*	Black		430 Acrylic	0.250 (6)	14 (225)	75 (515)	2 (13.8)	15	250°F (121°C)	150°F (66°C)
4718*	Black		430 Acrylic	0.125 (3)	20 (320)	100 (690)	4 (27.6)	15	250°F (121°C)	150°F (66°C)
4726*	Black		430 Acrylic	0.062 (1.5)	20 (320)	130 (895)	3 (20.7)	15	250°F (121°C)	150°F (66°C)

*Meets requirements of UL 94HBF.

3M™ Single Coated Foil/Foam Sheets

Product Master	Description	Material	Sheets Per Case	Sheet Size (in.)
4014	Absorbs and dissipates vibration and reduces noise in metal and plastic panels. Sheets make for excellent per-pound installed cost ratios on larger jobs.	250 mil open cell polyurethane foam with durable aluminum backing to resist aging and moisture.	50	6 × 48
			25	12 × 48
			15	18 × 48

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Extreme Sealing Tapes

Product	Color	Tape Thickness	Description	Temperature Resistance		Solvent Resistance	Relative Adhesion		Application Ideas
				Minutes/ Hours	Days/ Weeks		HSE	LSE	
4410G+	Grey	25 mil (0.6 mm)	3M™ Extreme Sealing Tapes are single-coated, pressure-sensitive adhesive tapes designed for sealing applications, featuring a flexible TPO backing that conforms to various surfaces, providing reliable water intrusion protection and durable bonding to multiple substrates.	300 °F (149 °C)	200 °F (93 °C)	High	High	Med	3M™ Extreme Sealing Tape can be used for sealing around roof edges, gutters, and downspouts; providing a seal around window and door frames; sealing joints and seams in boats and vehicles; sealing ductwork in HVAC systems; and sealing joints and seams in building panels and facades.
4410B+	Black	25 mil (0.6 mm)							
4410W+	White	25 mil (0.6 mm)							
4411G+	Grey	40 mil (1.0 mm)							
4411B+	Black	40 mil (1.0 mm)							
4411W+	White	40 mil (1.0 mm)							
4412G+	Grey	80 mil (2.0 mm)							
4412W+	White	80 mil (2.0 mm)							

3M™ Splicing Tapes

Adhesive Family[1]	Product	Description/Application Ideas	Tape Cal. (mils)	Carrier Type	Liner[2]		Master Size	Specs	Adhesion				Chem. Resist.	Temp. Range	
					Type	Caliper (mils)			Metal	HSE Plastic	LSE Plastic	Foam		Low (°F)	High (°F)
900 Miscellaneous	**9737**	Clear, thin PET carrier. Aggressive and versatile splicing tape.	3.5	PET	55# DK White	3.5	54" x 180 yd	—	5	5	2	5	7	-10	300
	9737R	Red, thin PET carrier. Aggressive and versatile splicing tape.	3.5	PET	55# DK White	3.5	54" x 180 yd	—	5	5	2	5	7	-10	300
	9738	Clear, non-woven tissue carrier. Aggressive and versatile splicing tape.	4.3	Non-Woven Tissue	55# DK White	4.3	54" x 180 yd	—	5	5	2	5	7	-10	300
	9738R	Red, non-woven tissue carrier. Aggressive and versatile splicing tape.	4.3	Non-Woven Tissue	55# DK White	4.3	54" x 180 yd	—	5	5	2	5	7	-10	300
	9740	Clear, high peel, tack and shear strength. Performance grade splicing tape for corrugators.	3.5	PET	55# DK	3.5	54" x 180 yd	—	6	6	2	3	6	10	425
	9741	Clear, thick, super aggressive tape. Adheres to a wide variety of substrates for splicing applications.	6.5	PET	55# Glassine	6.5	54" x 180 yd	—	7	7	3	7	5	-40	200

3M™ Industrial Protective Films

Product	Typical Performance Characteristics/ Application Ideas	Color	Total Caliper mils (mm)	Backing		Adhesive Type	Specs
				Material	Caliper mils (mm)		
7070UV	Durable, abrasion resistant, UV resistance surface protection. Excellent aerospace tape.	Clear	8.0 (0.2)	Polyurethane	6.5 (0.17)	Acrylic	—
7071UV	Durable, abrasion resistant, UV resistance surface protection. Excellent aerospace tape.	Clear	14 (0.34)	Polyurethane	12.0 (0.31)	Acrylic	—

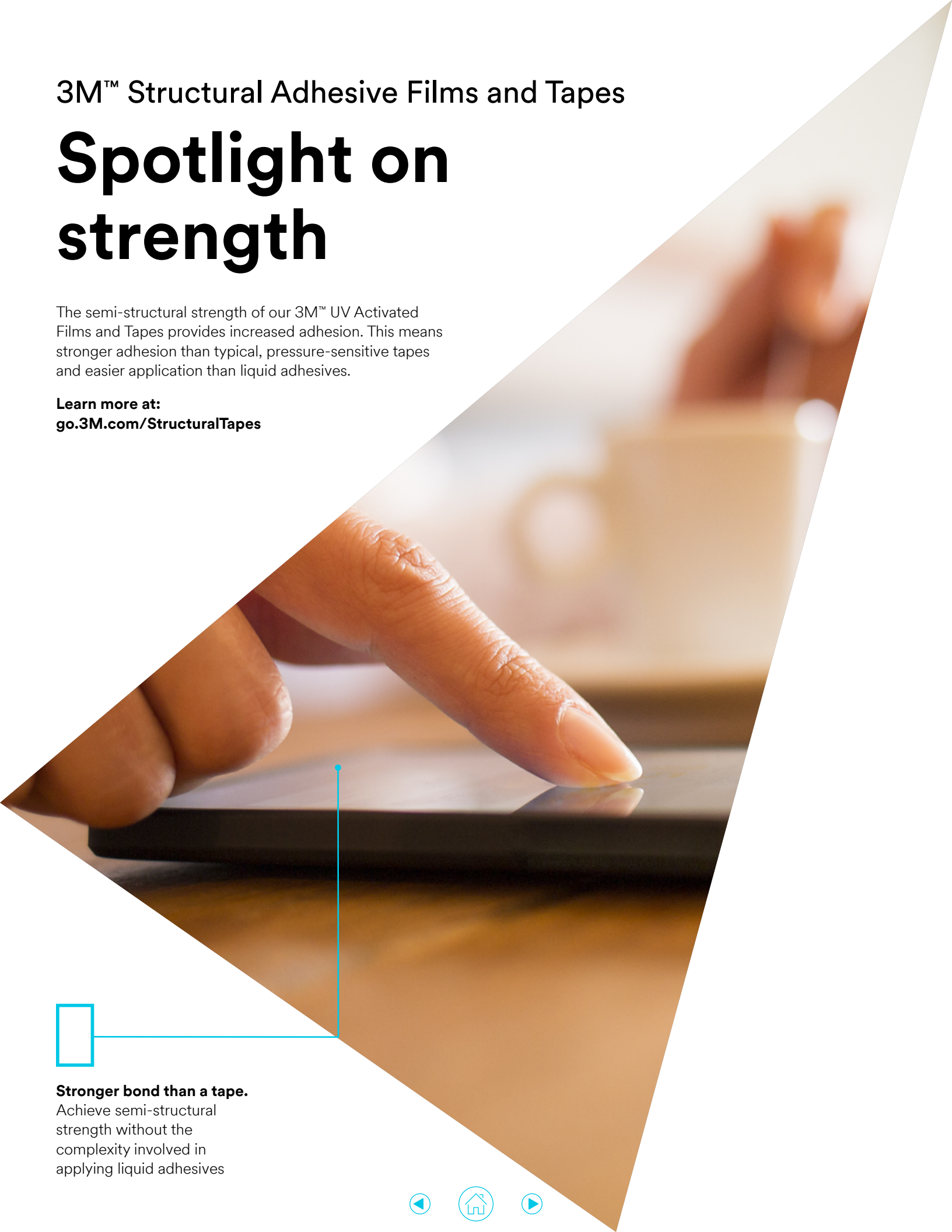
Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Structural Adhesive Films and Tapes

Spotlight on strength

The semi-structural strength of our 3M™ UV Activated Films and Tapes provides increased adhesion. This means stronger adhesion than typical, pressure-sensitive tapes and easier application than liquid adhesives.

Learn more at:
go.3M.com/StructuralTapes



Stronger bond than a tape.
Achieve semi-structural strength without the complexity involved in applying liquid adhesives



Thin tapes ideal for bonding small components, that work well in applications where high temperatures and pressure are of concern.



3M™ Structural Adhesive Films and Tapes

Introducing a new adhesive on the 3M bonding continuum. 3M™ Structural Adhesives and Tapes have semi-structural strength but handle like pressure-sensitive adhesives (PSAs). They provide stronger bonds than tapes and they're easier to apply than liquid adhesives. Our newest bonding solutions have excellent overlap shear/push-out adhesion and low shrinkage when bond develops. Allows for precise die-cutting, enabling accurate placement.

Product	Primary feature	Thickness (µm)	Activated Condition	Open Time[1]	Colour	Adhesive	Modulus 1 Hz, 25°C (MPa)[2]	180° Peel, SUS (N/mm)	Overlap Shear Al[3] (Mpa)	Push-out (Mpa)	Static Shear @ RT (min)	Static Shear @ 70°C (min)	Tensile Strength (kPa)	Tensile Impact (J)	Other features
3M™ UV Activated Films – Adhesive Transfer Tapes															
81010	Stronger bonding than PSAs	10	3 J/cm2 (365 nm)	10 min	Trans-parent Yellow	Specialty Adhesive	1,300	0.5	4.7	8.0	10,000+	10,000+	990	0.1	Calipers as low as 10 micron
81025		25						0.6	6.1	13.8			1,100	0.2	
81050		50						0.7	8.0	12.1			1,300	0.3	
81075		75						1.0	10.8	18.3			1,150	0.5	
81100		100						1.1	11.3	12.4			1,250	0.7	

[1]: After UV Activation
[2]: Measured after fully cured
[3]: Aluminum – anodized

Product	Primary feature	Thickness (µm)	Face Liner Thickness (mm)	Back Liner Thickness (mm)	Colour	Carrier Type	Other features
3M™ UV Activated Films – Double Coated Tapes							
82100	Stronger bonding than PSAs	100	0.038	0.05	Transparent Yellow	50-75 um PET Carrier	Initial tack for positioning Cure at room temperature High modulus
82150		150					
82175		175					
3M™ UV Activated Tapes							
30020	Stronger bonding than PSAs	200	0.075	0.04	Translucent	13 um PVB Carrier	Good impact resistance Allows for reworkability
30025		250		N/A			
30030		300					
30035		350					
30040		400					

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Reclosable Fasteners

Hold tight. Remove easily.

The lightweight alternative to metal fasteners offering easy attachment and detachment.Reclosable Fasteners join dissimilar materials without corrosion or contamination. Plus, they offer vibration absorption, durability and security.

Learn more at:
3M.com/Fasteners

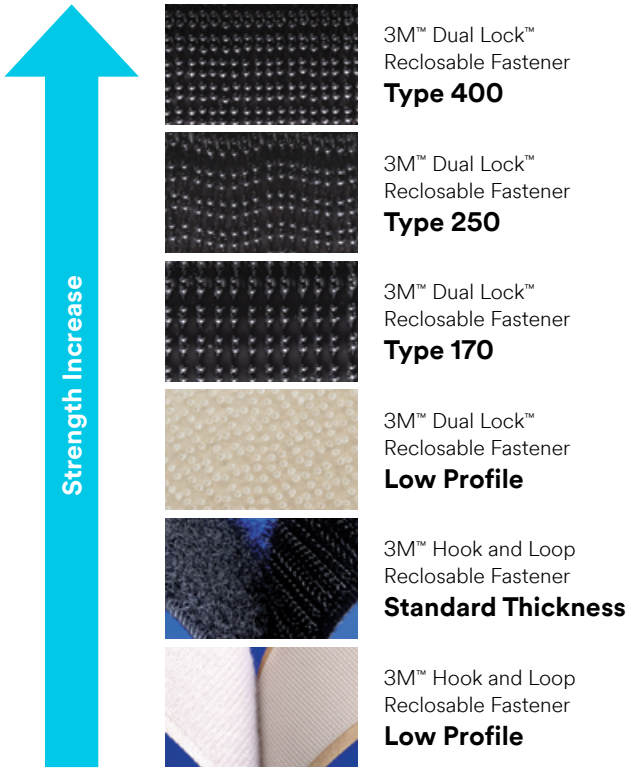


3M™ Dual Lock™ Reclosable Fasteners
Fastening power and flexibility.

Fastening power and flexibility.

You have options. Check out the large 3M portfolio of solutions that offer these solutions:

- Clean, smooth “behind the scenes” hold for aesthetic improvements
- Lightweight alternatives to metal fasteners
- Simple to apply, use and maintain
- Variety of strengths to fit your project needs
- Flexibility to fit your designs, even the most constricted areas
- Ability to join dissimilar materials without corrosion and contamination
- Vibration absorption and security — no loosening or failing attachments
- Durable for repeated opening and closings — hundreds of reattachments



Holding strength increases as you move up from 3M™ Hook and Loop through 3M™ Dual Lock™ Reclosable Fasteners.

3M™ Dual Lock™ Reclosable Fasteners



Stem Density (per sq/in) Combinations

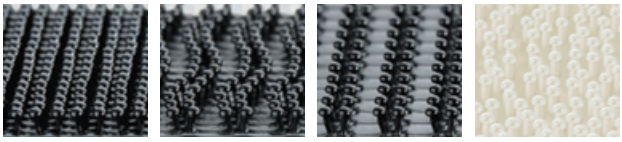
Strongest
250:400

Stronger
250:250 or 170:400

Strong
170:250

Not Recommended
170:170 or 400:400

Interchangeable Strength Combinations



Type 400 | Type 250 | Type 170 | Low Profile

3M™ Hook and Loop Reclosable Fasteners



Hooks on one side, loops on the other for secure, repeated closures.

- Up to 5,000 closures for our standard Hook and Loop
- Low profile options available, as much as 75% thinner than standard product

3M™ Dual Lock™ Reclosable Fasteners

Holding power to replace screws, bolts and rivets.

Durable enough to last through repeated opening and closing. Unique, interlocking mushroom-shaped heads snap shut and stay locked.

- Durable — up to 1,000 openings and closings before losing 50% of original tensile strength
- Helps reduce vibration
- Temperature, moisture and UV resistant
- Strong, pressure-sensitive adhesive bonds on contact
- Mushroom-shaped heads have 5X the tensile strength of hook-and-loop products

■ **Best Suggested Product**
● **Performance Dependent on Selected Attachment Method**
▲ **Primer Recommended**

Product	Stem Density (per sq./in.)	Adhesive	Color	3M Liner	Engaged Thickness	Temperature Resistance °F (°C)	Substrates					Use	Markets						
							Metals (Al & SS)	Glass	Plastics (Acrylic, PC, ABS)	Powder Coated Paints	Low Surface Energy (PP, PE)	Indoor/Outdoor	Aerospace & Rail	Appliance & Electronics	Design & Construction	Furniture & Upholstery	General Industrial	Marine & Specialty Vehicle	POP, Display & Signage
SJ3540	250	Rubber	Black	White, 5 mil (0.13mm) Polyolefin	0.23" (5.7mm)	120 (49)	■		■	■	■	Indoor				■	■	■	■
SJ3541	400	Rubber	Black																
SJ3542	170	Rubber	Black																
SJ3560	250	Clear Acrylic	Clear	Clear, 3 mil (0.08mm) Polyolefin	0.23" (5.7mm)	200 (93)	■	■	■	▲	▲	Indoor/ Outdoor		■	■	■	■	■	■
SJ3561	400	Clear Acrylic	Clear																
SJ3562	170	Clear Acrylic	Clear																
SJ3550CF ★	250	Clear Acrylic	Black	Clear, 3 mil (0.08mm) Polyolefin	0.23" (5.7mm)	200 (93)	■	■	■	▲	▲	Indoor/ Outdoor		■	■	■	■	■	■
SJ3551CF ★	400	Clear Acrylic	Black																
SJ3552CF ★	170	Clear Acrylic	Black																
SJ3870	250	Modified Acrylic	Black	Clear, 4.5 mil (0.11mm) Polyolefin	0.24" (6.1mm)	140 (60)	■		■	■	▲	Indoor/ Outdoor				■	■		■
SJ3871	400	Modified Acrylic	Black																
SJ3872	170	Modified Acrylic	Black																
SJ3782	250	Low Surface Energy Acrylic	Black	Brown, 83# Polykraft	0.16" (4.1mm)	120 (49)	■		■	■	■	Indoor/ Outdoor		■		■	■		■
SJ3440	250	None	Black	No Liner	0.15" (3.86mm)	220 (104)	●	●	●	●	●	Indoor/ Outdoor		●	●	●	●	●	●
SJ3441	400	None	Black																
SJ3442	170	None	Black																
SJ3443	400	Non-woven backing with no adhesive	Black	No Liner	0.28" (7.1mm)	220 (104)	●	●	●	●	●	Indoor/ Outdoor		●	●	●	●	●	●
SJ3444	170	Non-woven backing with no adhesive	Black	No Liner	0.28" (7.1mm)	220 (104)	●	●	●	●	●	Indoor/ Outdoor		●	●	●	●	●	●
SJ3445	250	Non-woven backing with no adhesive	Black	No Liner	0.28" (7.1mm)	220 (104)	●	●	●	●	●	Indoor/ Outdoor		●	●	●	●	●	●
SJ3460	250	None	Clear	No Liner	0.15" (3.86mm)	220 (104)	●	●	●	●	●	Indoor/ Outdoor		●	●	●	●	●	●
SJ3463	400	Piece Part Circle†	Black	No Liner	0.20 in.* (5.1mm)	220 (104)	■		■	■	■	Indoor/ Outdoor		■	■	■	■	■	■
SJ3481	400	Rigid Strip†	Black	No Liner	0.20 in.* (5.1mm)	220 (104)	●	●	●	●	●	Indoor/ Outdoor		●	●	●	●	●	●
SJ4570 ★	Low Profile/ Thin	Low Surface Energy Acrylic	Clear	Brown, 83# Polykraft	0.098" (2.489mm)	158 (70)	■		■	■	■	Indoor/ Outdoor		■	■	■	■		■
SJ4575	Low Profile/ Thin	Low Surface Energy Acrylic	Black	Brown, 83# Polykraft	0.098" (2.489mm)	158 (70)	■		■	■	■	Indoor/ Outdoor		■	■	■	■		■
SJ4580	Low Profile/ Thin	Clear Acrylic	Clear	Red, 4.5 mil (0.11mm) Polyolefin	0.12" (3.0mm)	200 (93)	■	■	■	▲	▲	Indoor/ Outdoor		■	■	■	■	■	■

*Single thickness; not engaged. †No adhesive

★ **Go-To Product**

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3M™ Hook and Loop Reclosable Fasteners

Hooks on one side, loops on the other for secure, repeated closures.

- Reliable PSA hold on contact with a variety of materials
- Available in black, white and beige
- Low profile options, as much as 75% thinner than standard product
- Up to 5,000 closures for standard Hook and Loop



Product	Type	Adhesive	Closure Life	Product Material	Liner Description	Engaged Thickness	Temperature Resistance °F (°C)	Substrates					Use	Markets				
								Metals (Al & SS)	Glass	Plastics(Acrylic, PC, ABS)	Powder Coated Paints	Low Surface Energy (PP, PE)	Indoor/Outdoor	Aerospace & Rail	Furniture & Upholstery	General Industrial	Marine & Specialty Vehicle	POP, Display & Signage
High Performance																		
SJ3526N	Hook	High Performance Rubber	5,000	Nylon	White, 3 mil (0.08mm) Polyethylene film 3M Red Print	0.14 in. (3.6mm)	120 (49)	■		■	■	■	Indoor		■	■		■
SJ3527N	Loop	High Performance Rubber	5,000	Nylon		0.14 in. (3.6mm)	120 (49)	■		■	■	■	Indoor		■	■		■
SJ3572	Hook	High Performance Acrylic	5,000	Nylon	Clear, 4 mil (0.10mm) Polypropylene film Embossed 3M logo	0.14 in. (3.6mm)	200 (93)	■	■	■	▲	▲	Indoor/ Outdoor		■	■	■	■
SJ3571	Loop	High Performance Acrylic	5,000	Nylon		0.14 in. (3.6mm)	200 (93)	■	■	■	▲	▲	Indoor/ Outdoor		■	■	■	■
General Purpose																		
SJ3522	Hook	Plasticizer Resistant Acrylic	5,000	Nylon	Clear, 3.5 mil (0.08mm) Polyolefin film No print	0.14 in. (3.6mm)	158 (70)	■		■			Indoor/ Outdoor		■	■	■	■
SJ3523	Loop	Plasticizer Resistant Acrylic	5,000	Nylon		0.14 in. (3.6mm)	158 (70)	■		■			Indoor/ Outdoor		■	■	■	■
SJ3530	Hook	High-tack Rubber	5,000	Nylon	Yellow, 3 mil (mm) Polyethylene film No Print	0.14 in. (3.6mm)	90 (32)	■		■	■	■	Indoor		■	■		■
SJ3531	Loop	High-tack Rubber	5,000	Nylon		0.14 in. (3.6mm)	90 (32)	■		■	■	■	Indoor		■	■		■
Without Adhesive																		
SJ3401	Loop	None	5,000	Nylon	None	0.12 in. (3.0mm)	200 (93)	●	●	●	●	●	Indoor/ Outdoor		●	●		●
SJ3402	Hook	None	5,000	Nylon	None	0.12 in. (3.0mm)	200 (93)	●	●	●	●	●	Indoor/ Outdoor		●	●		●
Low Profile/Thin																		
SJ3506	Hook	Acrylic	25	Polypropylene	Brown #83 Polykraft Green Print	0.034 in. (0.84mm)	158 (70)	■	■	■	▲	▲	Indoor/ Outdoor			■		■
SJ3507	Loop	Acrylic	25	Polyester		0.034 in. (0.84mm)	158 (70)	■	■	■	▲	▲	Indoor/ Outdoor			■		■
Flame Resistant																		
SJ3519FR	Hook	Flame Resistant	5,000	FR Nylon	White, 3 mil (0.08mm) Polyethylene film 3M Red Print	0.14 in. (3.6mm)	158 (70)	■		■	■	■	Indoor	■	■	■	■	
SJ3518FR	Loop	Flame Resistant	5,000	FR Nylon		0.14 in. (3.6mm)	158 (70)	■		■	■	■	Indoor	■	■	■	■	
SJ3419FR	Hook	None	5,000	FR Nylon	None	0.12 in. (3.0mm)	200 (93)	●	●	●	●	●	Indoor/ Outdoor	●	●	●		
SJ3418FR	Loop	None	5,000	FR Nylon	None	0.12 in. (3.0mm)	200 (93)	●	●	●	●	●	Indoor/ Outdoor	●	●	●		

■ **Best Suggested Product** ▲ **Primer Recommended**
● **Performance Dependent on Selected Attachment Method** □ **Back-to-Back Fastener Which Can Wrap Around Any Type of Surface or Substrate**

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

Specialty Products

Protective products for life's mishaps.

Life is full of risks, but you can offer your customers protection against some of them. 3M specialty products feature pressure-sensitive adhesives for long-lasting and fast-bonding protection where and when you need it.

3M™ Premium Polyurethane Foam Tapes

Product	Color	Adhesive	Approximate Thickness in. (mm)	Roll Size	Density lbs./cu. ft. (kg/cu m)	Tensile Strength (psi (kPa)	Tensile Elongation % Min.	Tear Strength Min. pli (kN/m)	Compression Deflection @23°C, psi (kPa)	Temperature Tolerance	
										Short-Term	Long-Term
Medium Density Series											
12026	Black	With* or without**	1/16 (1.6)	54" x 300 ft.	15 (239)	50 (345)	90	4.0 (0.7)	305–6.5 (24–45)	250°F (121°C)	150°F (66°C)
12032	Black	With* or without**	3/32 (2.4)	54" x 225 ft.	15 (239)	50 (345)	90	4.0 (0.7)	305–6.5 (24–45)	250°F (121°C)	150°F (66°C)
12028	Black	With* or without**	1/8 (3.2)	54" x 160 ft.	15 (239)	50 (345)	90	4.0 (0.7)	305–6.5 (24–45)	250°F (121°C)	150°F (66°C)
12036	Black	With* or without**	3/16 (4.8)	54" x 100 ft.	15 (239)	50 (345)	90	4.0 (0.7)	305–6.5 (24–45)	250°F (121°C)	150°F (66°C)
12034	Black	With* or without**	1/4 (6.4)	54" x 80 ft.	15 (239)	50 (345)	90	4.0 (0.7)	305–6.5 (24–45)	250°F (121°C)	150°F (66°C)
12038	Black	With* or without**	3/8 (9.5)	54" x 60 ft.	15 (239)	50 (345)	90	4.0 (0.7)	305–6.5 (24–45)	250°F (121°C)	150°F (66°C)
12030	Black	With* or without**	1/2 (12.7)	54" x 40 ft.	15 (239)	50 (345)	90	4.0 (0.7)	305–6.5 (24–45)	250°F (121°C)	150°F (66°C)
High Density Series											
12046	Black	With* or without**	1/16 (1.6)	54" x 300 ft.	20 (320)	75 (517)	100	7.0 (1.2)	8–12 (55–83)	250°F (121°C)	150°F (66°C)
12062	Black	With* or without**	3/32 (2.4)	54" x 225 ft.	20 (320)	75 (517)	100	7.0 (1.2)	8–12 (55–83)	250°F (121°C)	150°F (66°C)
12048	Black	With* or without**	1/8 (3.2)	54" x 160 ft.	20 (320)	75 (517)	100	7.0 (1.2)	8–12 (55–83)	250°F (121°C)	150°F (66°C)
12056	Black	With* or without**	3/16 (4.8)	54" x 100 ft.	20 (320)	75 (517)	100	7.0 (1.2)	8–12 (55–83)	250°F (121°C)	150°F (66°C)
12054	Black	With* or without**	1/4 (6.4)	54" x 80 ft.	20 (320)	75 (517)	100	7.0 (1.2)	8–12 (55–83)	250°F (121°C)	150°F (66°C)
12049	Black	With* or without**	3/8 (9.5)	54" x 60 ft.	20 (320)	75 (517)	100	7.0 (1.2)	8–12 (55–83)	250°F (121°C)	150°F (66°C)
12050	Black	With* or without**	1/2 (12.7)	54" x 40 ft.	20 (320)	75 (517)	100	7.0 (1.2)	8–12 (55–83)	250°F (121°C)	150°F (66°C)

*Adhesive Selection.
**Non Adhesive foams are UL 94HBF, File E61941 Recognized Components.

Construction Availability

Polymer	Thickness	Liner	Typical Performance Characteristics
Standard Viscoelastic Damping Polymer			
110	2 and 5 mil	Paper	Good damping performance at higher temperature: 40–105°C (104–221°F). Heat and pressure needed for bonding.
112	1, 2 and 5 mil	Paper	Good damping performance at 0–65°C (32–142°F). Pressure only for adequate bonding at room temperature (21°C/70°F) for many applications.
130	2 and 5 mil	Polyester	Good damping performance at moderate temperature range of 20–90°C (68–194°F). Pressure only for adequate bonding at room temperature (21°C/70°F) for some applications.
Ultra-Pure Viscoelastic Damping Polymer			
242	1 and 2 mil	Polyester	Good damping performance at 0–65°C (32–142°F). Low outgassing by GC/MS (Modified ASTM 4526). Low ionics.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

3M™ Thin Tapes (cont.)

Product	Tape Thickness Inch (mm)	Description	Compressible Sleeves	Corrugated	Rotary Letterpress	Make Ready	Features
2205	0.005 (0.13)	Double coated film tape with differential acrylic adhesive with a polyester film carrier on a kraft paper liner.	■	■			For the corrugated printing industry to hold flexographic print plates to PVC saddles/ carriers. Removes cleanly.
2205FL	0.005 (0.13)	Double coated film tape with differential acrylic adhesive with a polyester film carrier on a film liner.	■	■			Adhesives designed specifically for corrugated flexo mounting. Removes cleanly and easy to reposition.
9500PC	0.005 (0.13)	High performance acrylic adhesive on each side of a polyester carrier.	■		■		Thin tape plate mounting applications requiring higher performance than 442KW Tape.

All tapes listed on this chart have been used successfully on non-compressible sleeves.

3M™ Flexographic Mounting Aids

Product	Description
3M™ AP86A	Helps hold the leading and trailing edges of the plate to prevent edge lifting.
3M™ Aluminum Foil Tape 425	Seals plate edges against ink and solvent penetration that can cause edge lifting.
3M™ Vinyl Tape 471	Seals plate edges against ink and solvent penetration that can cause edge lifting.
3M™ Polyester Film Tape 850	Seals plate edges against ink and solvent penetration that can cause edge lifting.
Scotch® Magic Tape 810	Secures proofing paper to a proofer/mounter with good adhesion but simple removal from the proofing cylinder.

3M™ Non-Repulpable Splicing Tapes

Go To Products	Description	Tape Thickness mil (mm)	Carrier Thickness mil (mm)	Carrier Type	Color	Adhesion oz./in. (N/25 mm)	High Temp (Short-Term) °F (°C)	Go-To Application*	
								Zero Speed	Flying Speed
Based on ASTM Test Method:		**D-3652**	**D-3652**			**D-3330**			
Adhesive Transfer Tapes									
465	High-tack. Excellent adhesion to most paper stocks. Flexible to -60°F (-51°C).	2.0 (0.05)	—	No Carrier	Clear	25 (6.8)	250 (121)		
9498	Low temperature splicing.	2.0 (0.05)	—	No Carrier	Clear	20 (6.0)	250 (121)	■	
9499	High temperature splicing.	2.0 (0.05)	—	No Carrier	Clear	45 (12.5)	350 (177)	■	
Double Coated Tapes									
415/ 9420	High-tack adhesion to paper and many other surfaces.	4.0 (0.10)	0.5 (0.01)	Polyester	Clear/Red	25 (6.8)	180 (82)		
469	High temperature, high-tack.	5.5 (0.14)	1.0 (0.02)	Tissue	Red	60 (16.7)	350 (177)		■
9576	Medium tack for general splicing and roll closing.	4.0 (0.10)	1.0 (0.02)	Polypropylene	Red/Black/ Yellow	30 (13.5)	165 (75)		
9737/ 9737R	Thin PET carrier. Aggressive and versatile tape for many surfaces.	3.5 (0.09)	0.5 (0.01)	Polyester	Clear/Red	60 (16.7)	300 (150)	■	■
9738/ 9738R	Non-woven tissue carrier. Aggressive and versatile tape for many surfaces.	4.3 (0.11)	1.3 (0.03)	Non Woven Tissue	Clear/Red	60 (16.7)	300 (150)	■	■
9740	High temperature with extremely wide range. High peel, tack, and shear properties. Performance grade splicing for corrugators.	3.5 (0.09)	0.5 (0.01)	Polyester	Clear	70 (21.2)	425 (218)		■
9741/ 9741R	Thick tape adheres to a wide variety of substrates. Super aggressive for low surface energy substrates.	6.5 (0.17)	0.5 (0.01)	Polyester	Clear/Red	120 (34.0)	200 (93)		
Splittable Flying Splice Tape									
8387	Splice even the most challenging substrates: cast and biaxially oriented polypropylene, polyester, and aluminum foil.	7.0 (0.19) without liner	3.0 (0.09)	Film	Pink/Black	60 (16.7)	175 (79)		■

*All tapes in this chart can be considered for zero speed or flying speed splices.

Note: This technical information and data should be considered representative or typical only and should not be used for specification purposes.

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