



# Pressure Sensitive Adhesive Bonding Solutions

*For bond lines of 1–13 mils*



# 3M Pressure Sensitive Adhesives (PSAs) for bonding and attaching

When you want to enhance appearance, improve performance, and increase productivity to bring a better, more competitive product to market, 3M offers a wide range of solutions.

- Adhesive Transfer Tapes: free film acrylic or rubber based pressure sensitive adhesives on a release liner. The adhesive transfers from a release liner to a substrate or surface with contact and pressure.
- Double Coated Tapes: acrylic or rubber based pressure sensitive adhesives coated on each side of a carrier and on a release liner.

All 3M pressure sensitive tapes exhibit the following properties and characteristics:

- Tacky to the touch.
- Ready to use.
- Immediate grip to substrate.
- Bond with only hand pressure.
- Dwell time increases adhesion.

But these are only the beginning of the characteristics you need to consider in deciding how 3M PSA technology can improve your product quality and save production time and money.

Tape is one of the most widely recognized applications of pressure sensitive adhesives. And 3M offers the largest selection. Ongoing advances in 3M PSA tape technology continually enhances performance and process flexibility. This makes it easier for you to meet a wider variety of design, performance, and process requirements.

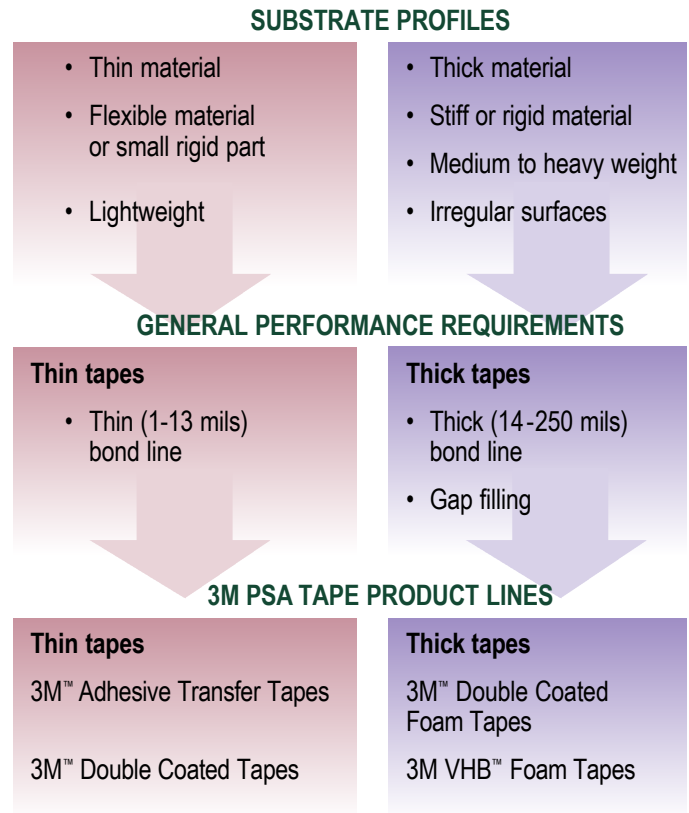
**The purpose of this guide is to help you select the right 3M PSA tape for applications requiring thin bond lines: 1-13 mils.** Selection involves a 3-step process to help you narrow choices to two or three possibilities for testing.

1. Select thin or thick tape
2. Select adhesive transfer or double coated tape
3. Select from many acrylic or rubber based formulations

(Please remember that user is responsible for determining whether a 3M product is fit for a particular purpose and suitable for user's method of application.)

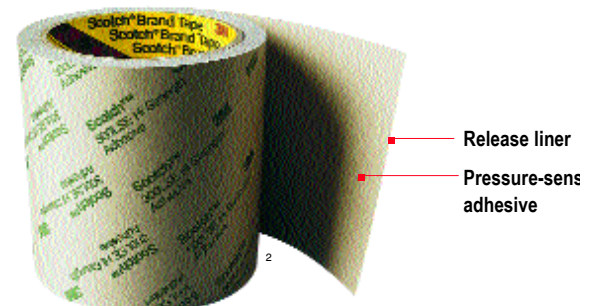
## 1 Select thin or thick tape

From steel to rubber to polystyrene, substrates have vastly different surface characteristics that determine bonding success and choice of adhesive. In the flow chart below, you can see the general performance characteristics that will guide you to a thin tape.



### 3M PSA Thin Tapes

3M™ Adhesive Transfer Tapes



## 2 Select adhesive transfer or double-coated tape

In 3M *adhesive transfer tapes*, free-film PSA is pre-applied to a release liner. PSA transfers from the liner to the substrate when the liner is removed.

In 3M *double-coated tapes*, PSA is coated onto both sides of a carrier such as foam, film, or paper and covered with a release liner. The carrier adds dimensional stability and handling ease. The liner is peeled off after the adhesive adheres to the substrate. The carrier remains as part of the bond line.

3M offers **paper and film release liners** in a number of different weights to meet various production and process requirements. See page 7.

To determine which of the two tape constructions better meet your requirements, you'll want to compare the following characteristics.

### 3M Transfer Tapes

- 1-13 mils bond lines
- More conformable
- Greater care in dispensing and handling
- No level-winding
- Higher temperature resistance
- Does not reinforce substrate

### 3M Double Coated Tapes

- 3-9 mils bond lines
- Less conformable
- Easy dispensing and handling
- Level-winding possible
- Lower temperature resistance
- Reinforces substrate

## 3 Select from many acrylic or rubber based formulations

Rubber and acrylics are the common elastomers in 3M PSA tapes offering the following general alternatives.

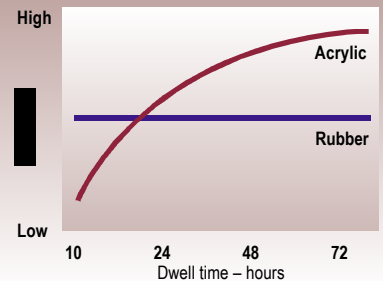
### 3M Acrylic PSAs

- Good initial tack
- Gradual adhesion build-up (72 hours)
- High shear strength
- High temperature resistance
- Excellent solvent resistance
- Excellent UV resistance
- Excellent durability
- Best for long term, harsh or outdoor environment

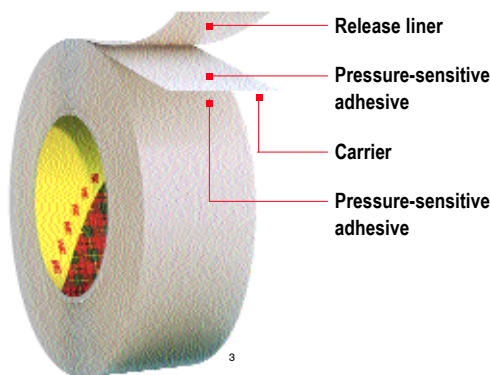
### 3M Rubber PSAs

- High initial tack
- Some adhesion build-up (24 hours)
- Good shear strength
- Moderate temperature resistance
- Good solvent resistance
- Fair UV resistance
- Moderate durability
- Best for short term, stable indoor environment

### Rubber vs. Acrylic Adhesion Build-up

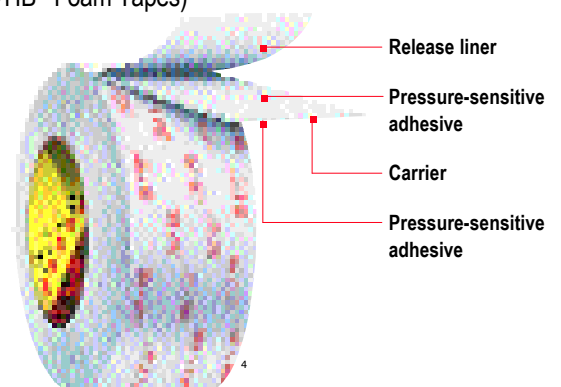


### 3M™ Double Coated Tapes



### 3M PSA Thick Tape

3M™ Double Coated Foam Tapes (includes VHB™ Foam Tapes)



## 3M Pressure Sensitive Adhesives Platforms

Building on the general characteristics of acrylic or rubber elastomer, 3M has developed a broad range of PSA technology platforms, each specially engineered with characteristics to better meet specific application criteria. Within each platform, you'll find a variety of products with even further defined characteristics, such as various liner constructions.

The platforms are presented in order of temperature and environmental resistance.

### 100MP\* Highest Performance Acrylic

- Up to 500°F short term heat resistance and outstanding solvent resistance.
- Higher peel strength than most other acrylic formulations
- Exceptional shear strength even at elevated temperatures

### 100 High Temperature Acrylic

- Up to 450°F 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.

### 200MP High Performance Acrylic

- Up to 400°F 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 Industrial Acrylic

- Up to 350°F 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.



### **200 High Performance Acrylic**

- Up to 350°F short term heat resistance and medium solvent resistance.
- Excellent peel strength on metal and HSE plastics.
- Good long term aging.

### **290 Low Outgassing Adhesive**

- Up to 450°F short term heat resistance.
- Exceeds most OEM specifications for outgassing and long term performance.

### **350 High Holding Acrylic**

- Up to 450°F short term heat resistance.
- Excellent adhesion to powder coated surfaces, and most plastics and foams.

### **300LSE High Strength Acrylic**

- Up to 300°F short term heat resistance.
- Outstanding adhesion to low surface energy plastics, powder coated paints, and oily metals.
- Good chemical and humidity resistance.

### **300 High Strength Acrylic**

- Up to 250°F 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.

### **300MP High Strength Acrylic**

- Up to 250°F short term heat resistance for automotive interior applications.
- Designed especially to bond most plastics and foams.
- Economical attachment of graphics.

### **320 High Tenacity Acrylic**

- Up to 250°F short term heat resistance.
- High bond strength to a variety of surfaces.
- Excellent flagging resistance on small diameter surfaces.

### **340 High Bond Acrylic**

- Up to 200°F short term heat resistance.
- Excellent bonding to foam and to foam and other substrates.
- High tack medium shear.

### **400 High Tack Acrylic**

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

### **420 Acrylic Adhesive**

- Up to 450°F short term heat resistance.
- High tack adhesive.
- Can be applied in temperatures as low as 32°F (0°C).

### **430 Acrylic Adhesive**

- Up to 350°F short term heat resistance.
- Ideal for high temperature splicing.

### **700 High Bond Synthetic Rubber**

- Up to 180°F heat resistance.
- High peel strength for plastics in indoor and room temperature applications.

### **700 Synthetic Rubber Adhesive**

- Up to 200°F short term heat resistance.
- 700 family of PSAs offer good adhesion to high tack LSE plastics.

### **800 Natural Rubber Adhesive**

- Up to 200°F short term heat resistance.
- Offers good adhesion to a variety of surfaces.

### **900 Miscellaneous Adhesive Group**

- Rubber or acrylic for foam laminating.
- Acrylic for higher shear strength and aging properties.

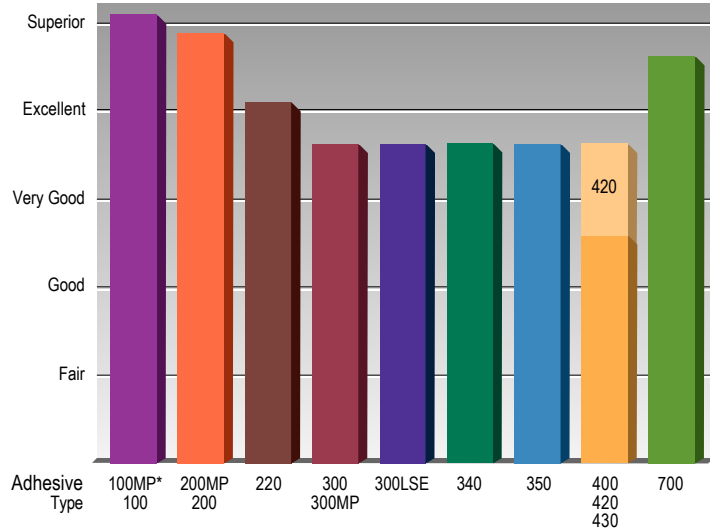
### **1000 Repositionable Acrylic**

- Good holding to many surfaces.
- Clean removal or numerous reapplications.
- Stain resistance on many surfaces.

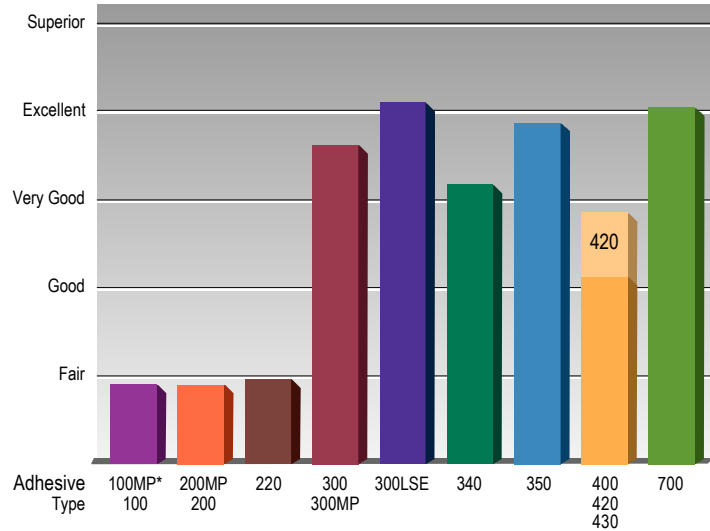
# 3M Performance Properties

## Adhesion Properties

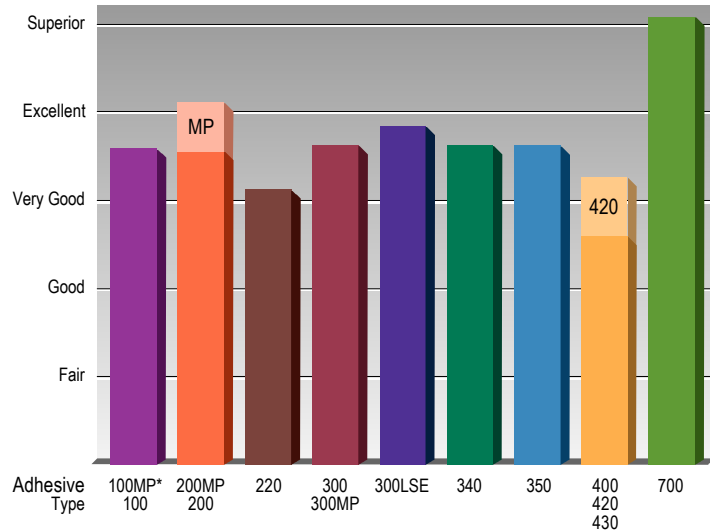
### Metal Surfaces



### Low-Surface-Energy Plastics

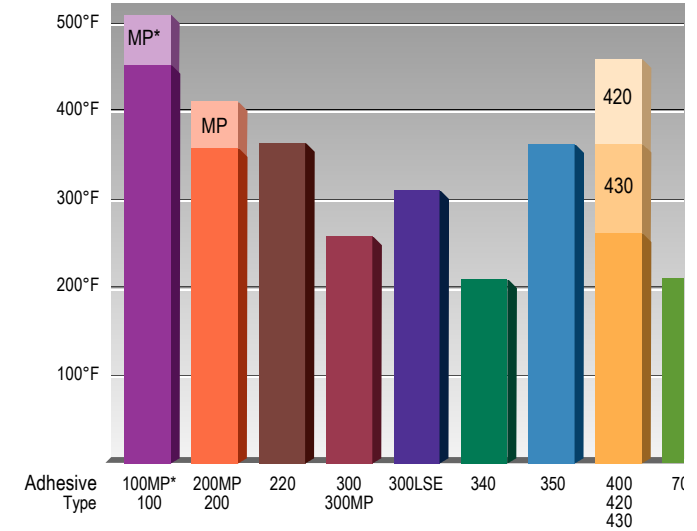


### High-Surface-Energy Plastics

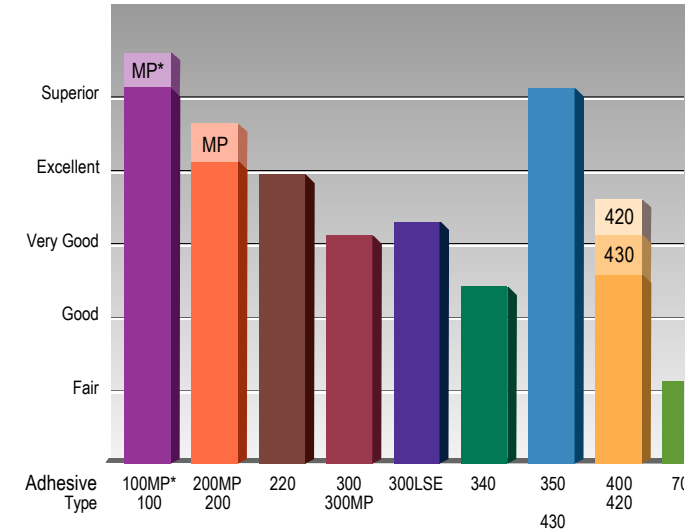


## Environmental Properties

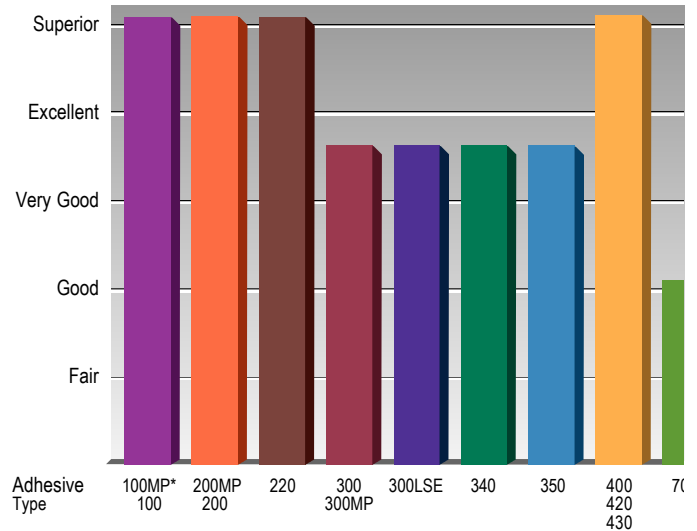
### Temperature and Shear Performance



### Chemical Resistance



### Ultraviolet Light Resistance



## 3M Liners

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

- Paper** liners include **polycoated kraft (PCK)** for moisture stability to resist wrinkling and curling; and **densified kraft (DK)** to reduce edge burr on metal plates and for rotary processing. **Extended DK liners (XL)** are also available on selected tapes. With the liner wider than the adhesive, you can more easily grip the liner edge for removal.
- 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.

### Paper Liners

#### 43# Densified Kraft – 2.5 mils

- Silicone treated on one side for use as second liner to protect adhesive during selective die-cutting.
- Printable.

#### 55# Densified Kraft – 3.2 mils

- Caliper-controlled hard liner for consistent base in rotary printing and die-cutting of labels.

#### 58# Polycoated Kraft – 4.0 mils

- 3M standard for performance.
- Moisture stability and economical edge burr during hard tool die-cutting.

#### 60# Densified Kraft – 3.5 mils

- Hard dense liner reduces edge burr in hard tool processing of metal plates.

#### 62# Densified Kraft – 3.7 mils

- Heavier version of 60#.

#### 78# Extensible Polycoated Kraft – 6.0 mils

- Extra tough liner for tear resistance.
- Conformable for EMI/RFI shielding applications.

#### 86# Polycoated Kraft – 6.5 mils

- Excellent moisture stability for lay flat processing.
- Thicker caliper for kiss-cutting, and steel rule die-cutting.

### Film Liners

#### Clear Polyester (PET) – 2.0 mils

- High strength reduces breakage during die-cutting and dispensing.

#### Clear HDPE (high density polyethylene) – 3.0 mils

- Silicone treated for easy release.
- Clarity for see-through applications.

#### Clear LDPE (low density polyethylene) – 4.0 mils

- Designed for embossing or thermal forming applications.
- One piece removal.

#### White LDPE (low density polyethylene) – 4.0 mils

- Designed for label gun embossing tapes.
- White for enhanced label appearance.

#### White Polypropylene (PP) – 3.5 mils

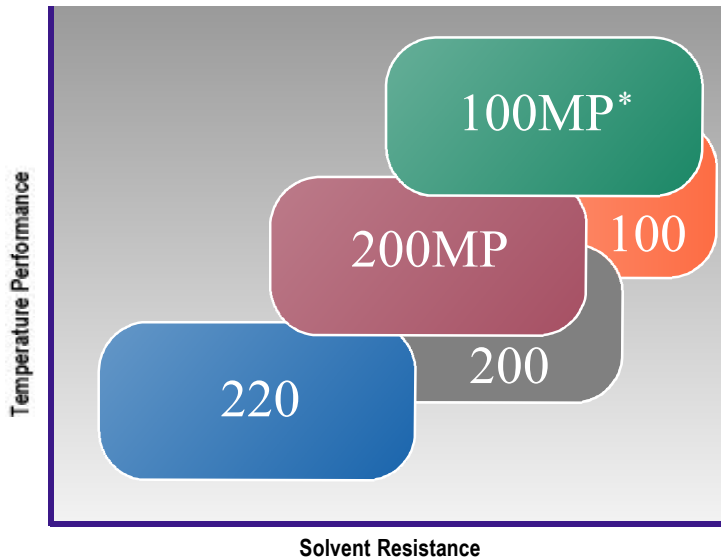
- Excellent moisture stability.
- Die-cutting properties similar to paper.
- Tough for piggy-back adhesive constructions.

### Liner Selection Chart

Liner Type	High Tensile Strength	Humidity Resistance	Rotary Processing	Kiss Cutting	Steel Rule
Film					
Densified Kraft					
Polycoated Kraft					
Extensible Kraft					

Selecting thin tapes for

## High surface energy substrates and harsh environments



\*Products in this platform are 3M™ VHB™ Tapes offering our highest strength.

### Key adhesive platforms and attributes

- **100MP\* Acrylic**  
Highest performing 3M PSA with resistance to solvent and up to 500°F.
- **100 High Temperature Acrylic**  
Up to 450°F short term heat resistance with low outgassing characteristics.
- **200MP High Performance Acrylic**  
Excellent resistance to solvents and up to 400°F.
- **220 Industrial Acrylic**  
Good resistance to chemicals and up to 350°F. Economical alternative to 200MP.
- **200 High Performance Acrylic**  
Up to 350°F short term heat resistance with good long term aging.



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## 3M PSA Product Listing

### Adhesive Transfer Tapes

Adhesive Family	Product	Adhesive Caliper Mils	Liner		Application Ideas	Adhesion				Chemical Resistance	Temp Range	
			Type	Caliper Mils		Metal	HSE Plastic	LSE Plastic	Foam		Low F	High F
100MP* High Perform	9460PC	2.0	61# PCK	4.1	Very High Bond industrial joining and metal fabrication.	10	7	1	2	10	-40	500
	9437	2.0	58# PET	4.0/2.0	Specialty die cut parts with VHB performance.							
	9469PC	5.0	61# PCK	4.1	Very High Bond industrial joining and metal fabrication.							
	9473PC	10.0	61# PCK	4.1	Very High Bond industrial joining and metal fabrication.							
100 High Temp	9461P	1.0	55# DK	3.2	High temperature, hard disc drive seals, low out gassing. Aerospace.	9	8	1	2	9	-40	450
	965	2.0	55# DK	3.8	Fuel line labels, excellent chemical resistance. Aerospace.							
	966	2.0	60# DK	3.8	Meets NASA low volatility specs. Flex circuit attachment. High temp.							
	9462P	2.0	55# DK	3.2	Die cut parts and port seal covers for hard disc drive market.							
	941	2.0	58# PCK	4.0	Graphic attachment for low odor appliance applications.							
	941N	2.0	86# PCK	6.5	Graphic attachment for low odor appliance applications. Easy handling.							
200MP High Perform	467MP	2.0	58#PCK	4.0	Graphic attachment and general industrial joining. Industry standard.	10	9	1	3	9	-40	400
	467MPF	2.0	PET	2.0	Polyester liner for high-speed processing of graphic and die cut parts.							
	9172MP	2.0	58#/HDPE	4.0/3.0	Automotive instrument graphics. Clear liner for backlight inspection.							
	9667MP	2.0	86#PCK	6.5	Graphic and die cut parts on heavy liner for easy removal. End tabs.							
	7952MP	2.0	58/58#PCK	4.0/4.0	Selective adhesive removal for membrane switch key pad graphics.							
	7962MP	2.0	86/58#PCK	4.0/6.5	Same as 7952MP for heavier graphics or textured surfaces.							
	9676MP	2.0	58#/PP	4.0/3.5	White polypropylene liner for automotive bar code labels.							
	468MP	5.0	58# PCK	4.0	Industry standard for graphic attachment and die cut parts.							
	468MPF	5.0	PET	2.0	Polyester liner for high-speed processing of graphic and die cut parts.							
	7955MP	5.0	58/58# PCK	4.0/4.0	Automotive instrument graphics and membrane switch faceplates.							
	7965MP	5.0	86/58# PCK	4.0/6.5	Same as 7955MP for heavier graphics or textured surfaces.							
	9188	5.0	86#/HDPE	6.5/3.0	Automotive and Electronic graphic attachment. See-through liner.							
	9185MP	5.0	58#/HDPE	4.0/3.0	Automotive and Electronic graphic attachment. See-through liner.							
	9668MP	5.0	86# PCK	6.5	Same as 9667MP for rough or textured surfaces.							
200 High Perform	467	2.0	62# DK	3.8	Metal nameplates. Electronics applications.	10	9	1	2	7	-40	350
	467MS	2.0	58# PCK	4.0	Hard disc drive, low out gassing adhesive. Seals and die cut parts.							
	9567	2.0	60# DK	3.8	Narrow width rolls for industrial joining.							
	468	5.0	62# DK	3.8	Metal nameplates on rough textured surfaces.							
	468MS	5.0	58# PCK	4.0	Same as 467MS with thicker adhesive for textured surfaces.							
	9568	5.0	62# DK	3.8	Narrow width rolls for joining mismatched surfaces.							
220 Acrylic Adhesive	9502	2.0	58# PCK	4.0	Economical attachment of graphics and industrial joining.	8	7	1	2	8	-40	350
	9502HL	2.0	86# PCK	6.5	Same as 9502 for easy handling and liner removal.							
	9552	2.0	58/58# PCK	4.0/4.0	Economical double lined adhesive for graphics with windows.							
	9522	2.0	55# PCK	3.2	For rotary processing of nameplates, label component systems.							
	9505	5.0	58#PCK	4.0	Thicker version of 9502 for textured surfaces.							
	9525	5.0	55# PCK	3.2	For rotary processing of nameplates, label component systems.							
	9505HL	5.0	86# PCK	6.5	Thicker version of 9502HL. Graphic attachment on layflat liner.							
	9555	2.0	58/58# PCK	4.0/4.0	For graphics with windows bonded to rough surfaces.							

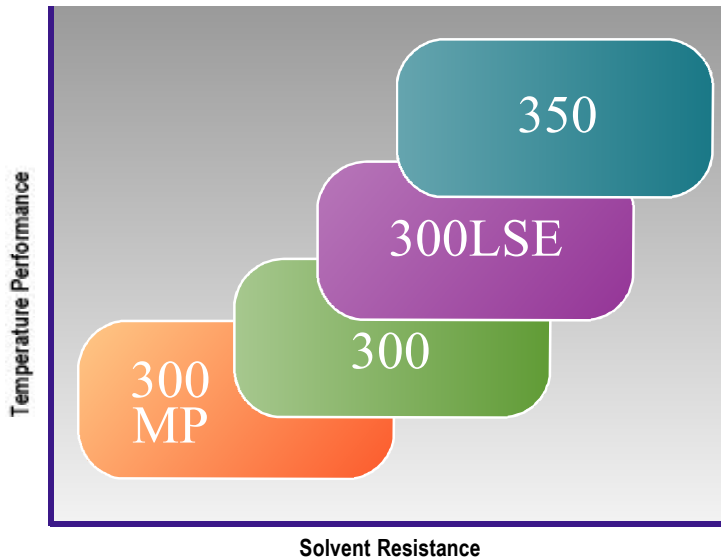
### Double Coated Tapes

Adhesive Family	Product	Tape Caliper Mils	Carrier Type	Liner		Application Ideas	Adhesion				Temp Range	
				Type	Caliper Mils		Metal	HSE Plastic	LSE Plastic	Foam	Low F	High F
200MP	9492MPF	2.5	PET	PET	2.0	Intricate die cuts, electronic applications.	10	9	1	3	-40	400
	9495MP	5.6	PET	58# PCK	4.0	Graphic attachment. High pressure laminate bonding.						
	9495B	5.6	Black PET	58# PCK	4.0	LED lens attachment for cellular phones and pagers.						
	9495BF	5.6	Black PET	PET	2.0	LED lens attachment for cellular phones and pagers.						
	9495FL	5.6	PET	58# PCK/PET	4.0/2.0	Automotive decorative trim attachment.						
	9598BF	7.5	Black PET	PET	2.0	LED lens attachment for cellular phones and pagers.						

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

Selecting thin tapes for

## Low surface energy substrates and challenging surfaces



### Key adhesive platforms and attributes

- **350 High Holding Acrylic**  
Up to 450°F short term heat resistance with adhesion to powder coated surfaces and most plastics.
- **300LSE High Strength Acrylic**  
Higher peel strength than 300MP. Bonds low surface energy plastics and resists heat up to 300°F.
- **300 High Strength Acrylic**  
Up to 250°F short term heat resistance with high initial adhesion to low surface energy plastics, foams and fabrics.
- **300MP High Strength Acrylic**  
Bonds low surface energy plastics and foams; resists heat up to 250°F.



### 3M PSA Product Listing

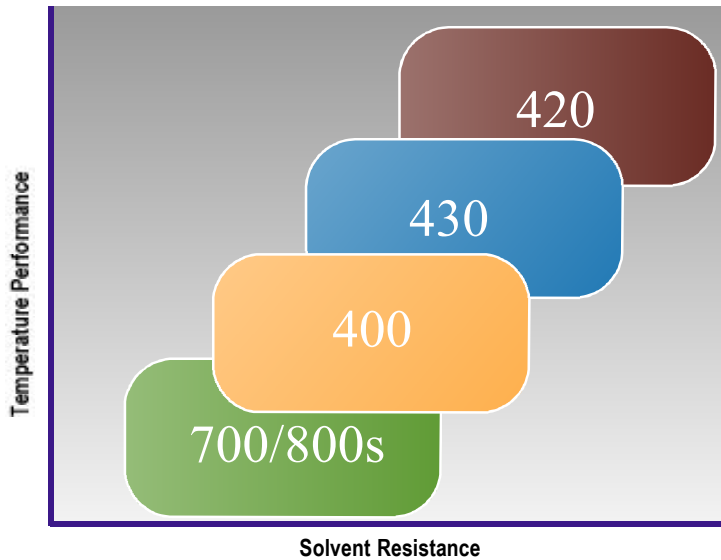
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Adhesive Family	Product	Adhesive Caliper Mils	Liner		Application Ideas	Adhesion				Chemical Resistance	Temp Range	
			Type	Caliper Mils		Metal	HSE Plastic	LSE Plastic	Foam		Low F	High F
350 High Holding	9482PC	2.0	PC Kraft	4.0	Laminate high performance plastics.9	10	10	9	8	-40	450	
	9442	2.0	55# DK	3.2	Bond steel, plastic, and wood veneer trim.							
	922XL	2.0	60# DK	3.7	Extended liner version of 350 adhesive for easy removal & dispensing.							
	9485PC	5.0	PC Kraft	4.0	Splice metal coils.							
	9445	5.0	55# DK	3.2	Attach gaskets and foams. Performance label for textured surfaces.							
	9485EK	5.0	78# EK+D28	6.0	Extra tough lined version of 9485PC for increased tear resistance.							
	9675	5.0	86# PCK	6.5	Heavy lined version of 9485PC for easy handling, layflat properties.							
9445	5.0	55# DK	3.2	Attach gaskets and foams. Performance label for textured surfaces.								
300LSE High Strength	9471LE	2.0	58# PCK	4.0	Bonds graphics to powder coatings, LSE plastics and oily materials.	9	10	10	1	7	-40	300
	9471FL	2.0	PET	2.0	Film lined version of 9471LE for rotary processing.							
	8132LE	2.0	58/86# PCK	4.0/6.5	Double lined for graphics with windows without adhesives.							
	9671LE	2.0	86# PCK	6.5	Heavy lined 9471LE for easy handling and layflat properties.							
	9453LE	3.5	58# PCK	4.0	Intermediate thickness for bonding to embossed surfaces.							
	9453FL	3.5	PET	2.0	Film lined version of 9453LE for rotary processing.							
	9653LE	3.5	86# PCK	6.5	Heavy lined 9453LE for easy handling and layflat properties.							
	8153LE	3.5	58/86# PCK	4.0/6.5	Intermediate thickness of 8132LE for embossed surfaces.							
	9472LE	5.0	58# PCK	4.0	Thicker adhesive for textured LSE plastics and powder coatings.							
9672LE	5.0	86# PCK	6.5	Heavy lined 9671LE for easy handling and layflat properties.								
300 High Strength	9458	1.0	55# DK	3.1	High tack excellent adhesion to LSE plastics. Automotive label bonding.	7	9	9	9	6	-40	250
	9459S	1.5	55# DK	3.1	Silver adhesive for durable fire extenquisher label opacity.							
	9459W	1.5	55# DK	3.1	White adhesive for increased opacity of Automotive underhood labels.							
	927	2.0	60# DK	3.8	Attach gaskets and a variety of industrial foam materials.							
	992	2.0	55# DK	3.1	Automotive labels bonded to fabrics.							
	992U	2.0	55# DK	3.1	UV footprint adhesive for automotive application verification.							
	9471	2.0	60# DK	3.5	Bonds graphics, plastics, foam and fabric to window blinds.							
	9671	2.0	86# PCK	6.5	Heavier lined version of 9471 for easy handling, layflat properties.							
	9653	3.5	86# PCK	6.5	Seal pipe insulation.							
	9472	5.0	60# DK	3.5	Bonds to polyurethane foam and a variety of fabrics.							
	950	5.0	60# DK	3.8	Foam lamination to various surfaces. Industrial bonding.							
	950EK	5.0	78# EK	6.0	EMI/RFI shielding.							
	9672	5.0	85# PCK	6.5	Heavier lined version of 9472 for easy handling, layflat properties.							
300MP	9770	2.0	58# PCK	4.0	Economical attachment of graphics and industrial joining.	7	7	8	8	7	-40	250
	7951	2.0	58/58# PCK	4.0/4.0	Graphic attachment where adhesive is removed in window area.							
	6032PC	2.0	58# PCK	4.0	Resists fogging for automotive interior joining applications.							
	6032PL	2.0	86# PCK	6.5	Heavy lined version of 6032PC for easy handling, layflat properties.							
	9692	2.0	86# PCK	6.5	Attachment of graphics and industrial joining. Foam bonding.							
	9774	4.0	58# PCK	4.0	Heavier adhesive coating for rough or textured surfaces.							
	9784	4.0	58#/HDPE	4.0/3.0	Backlite bonding when applied to LSE plastics.							
	6035PC	5.0	58# PCK	4.0	Resists fogging for automotive interior fabric joining applications.							
	6035PL	5.0	86# PCK	6.5	Heavy lined version of 6035PC for easy handling, layflat properties.							
	9695	5.0	86# PCK	6.5	Industrial joining/foam lamination. Sound control in computers.							
	6038PC	8.0	58# PCK	4.0	Low fogging. Automotive fabric and carpet attachment.							
	6038PL	8.0	86# PCK	6.5	Heavy lined version of 6038PC for easy handling, layflat properties.							
964	13.0	86# PCK	6.5	Automotive carpet attachment.								
320 Adhesive	9447	1.0	55# DK	3.1	Economical for protected graphics and label components.	7	7	7	2	6	-40	250
340 Adhesive	466XL	2.0	62# DK	4.0	Print finishing applications.	7	7	7	2	7	-40	200

#### Double Coated Tapes

Adhesive Family	Product	Tape Caliper Mils	Carrier Type	Liner		Application Ideas	Adhesion				Temp Range	
				Type	Caliper Mils		Metal	HSE Plastic	LSE Plastic	Foam	Low F	High F
350	9500PC	5.5	PET	58# PCK	4.5	LED lens attachment for cellular phones and pagers.	9	10	10	9	-40	450
	9731	5.5	PET	PET/PCK	4.0/4.5	Silicone keypad attachment, printer toner cartridge refurbishing.						
300LSE	9490LE	6.7	PET	58# PCK	4.0	Foam lamination. Gasket attachment to LSE plastics.	9	10	10	1	-40	300
	9495LE	6.7	PET	58# PCK	4.0	LSE plastic attachment.						
300	444	4.0	PET	60# K	4.0	Foam lamination. Gasket attachment.	7	9	9	9	-40	250
	444PC	4.0	PET	58# PCK	4.0	Foam lamination. Gasket attachment.						
300MP	9690	5.6	PET	86# PCK	6.4	Foam lamination. Gasket attachment.	7	7	7	7	-40	250
	9690B	5.6	Black PET	86# PCK	6.4	LED lens attachment for cellular phones and pagers.						
340	9456	4.0	Tissue	80# DK	4.0	Bond fabric to window blind valances.	6	6	5	3	-40	200
	9573	10.0	UPVC	58# DK	3.0	Attach vinyl.						
	9586F	9.4	Polyprop.	Polyethylene	3.9	Plastic extrusion attachment.						
	9824	3.0	PET	55# DK	4.0	Foam lamination. Gasket attachment.						

## General purpose bonding, splicing, and paper



### Key adhesive platforms and attributes

- **400 High Tack Acrylic**

Proven performance for paper web splicing. Good low temperature performance with clarity and UV resistance

- **420 Acrylic Adhesive**

High tack adhesive with up to 450°F short term heat resistance.

- **430 Acrylic Adhesive**

Up to 350°F short term heat resistance for high temperature splicing.

- **700 High Bond Synthetic Rubber**

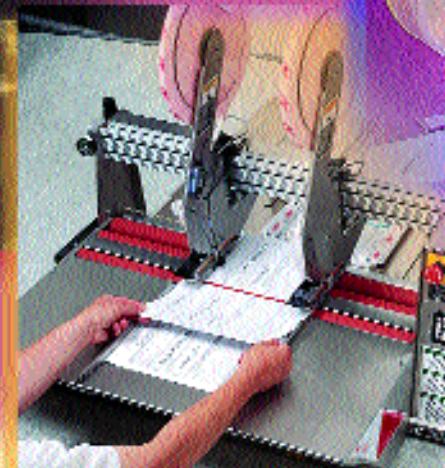
High peel strength for indoor applications.

- **700 Synthetic Rubber Adhesive**

Up to 250°F short term heat resistance for high tack LSE plastics.

- **800 Natural Rubber Adhesive**

Up to 200°F short term heat resistance for a variety of surfaces.



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## 3M PSA Product Listing

### Adhesive Transfer Tapes

Adhesive Family	Product	Adhesive Caliper Mils	Liner		Application Ideas	Adhesion				Chemical Resistance	Temp Range	
			Type	Caliper Mils		Metal	HSE Plastic	LSE Plastic	Foam		Low F	High F
400 High Tack	9457	1.0	55# DK	3.2	Validation labels and parking permits on car windows.	5	5	5	4	5	-60	250
	450XL	1.0	60# DK	3.7	Extended liner version of 400 adhesive for easy removal & dispensing.							
	920XL	1.0	40# DK	2.5	Similar to 450XL with thinner liner.							
	463	2.0	60# DK	3.7	Seals flaps on polybags and envelopes.							
	465	2.0	60# DK	3.8	Paper web splicing.							
	465XL	2.0	62# DK	3.7	Extended liner version of 465.							
	9665	2.0	58# PCK	4.0	Moisture stable lined 465 for specialty graphic bonding.							
420 Acrylic	F9752PC	2.0	68# PCK	4.0	General industrial joining.	5	6	5	4	5	-40	450
	F9755PC	2.0	58# PCK	4.0	Heavy adhesive for textured surfaces.							
430 Acrylic	9497	2.0	60# DK	3.8	Pink tinted high temperature splicing tape.	6	6	5	4	5	-40	350
	9499	2.0	58# PCK	4.0	Transparent version of 9497.							
760 Rubber	476XL	6.0	60# DK	3.8	High tack, extended liner tape to seal boxes and tubes for shipping.	9	10	10	4	2	-40	150
770 Rubber	9925XL	2.5	42# DK	2.5	Tissue reinforced for bonding paper to paper; extended liner tape.	9	10	10	4	2	-40	150
	464XL	3.0	42# DK	2.5	Tissue reinforced; general purpose.							
1000 Repos	9449	0.3	55#/43#	2.5	Laminates to various substrates to make them repositionable.	3	1	1	N/A	2	-20	250
	921XL	1.0	40# DK	2.5	Thicker version of 9449 with extended liner.							

### Double Coated Tapes

Adhesive Family	Product	Tape Caliper Mils	Carrier Type	Liner		Application Ideas	Adhesion				Temp Range	
				Type	Caliper Mils		Metal	HSE Plastic	LSE Plastic	Foam	Low F	High F
400	415	4.0	PET	60# DK	4.0	Splice papers, films, and foils.	5	5	5	4	-60	250
	9420	4.0	Red PET	60# DK	4.0	Splice papers, films, and foils.						
	9576	4.0	Polyprop	60# DK	4.0	Splice papers, films, and foils.						
700	443	4.0	PET	62# PCK	4.0	Bond styrene extrusions. Attach point-of-purchase displays.	9	10	10	4	-40	200
	919	5.0	Tissue	58# PCK	4.0	Assemble computer ink cartridges.						
	9443	6.0	Polyprop	60# DK	4.0	Assemble computer ink cartridges.						
	9579	9.0	Polyprop	60# DK	4.0	Core starting on metal cores.						
	9589	9.0	Polyprop	60# DK	4.0	Carpet attachment.						
800	400	5.0	Paper	54# DK	3.0	Bond grips on racquets and tools. 8	8	8	5	-40	250	
	401	9.0	Paper	54# DK	3.0	Mount printing plates.						
	404	5.0	Paper	54# DK	3.0	Mount printing plates.						
	406	5.0	Paper	54# DK	3.0	Approved tape for Scott Bond Paper Test.						
	410	5.0	Paper	54# DK	3.0	Core starting/end tabbing of papers, films, and foils.						
	442	4.0	PET	58# PCK	4.0	Mount pads to polishing disks.						
	464	3.0	Tissue		2.5	Mount nameplates.						
1000	9415	3.0	PET	60# DK	3.5	Repositionable High Tack/Low Tack for core start, reclosable envelopes.	1	1	1	1	-40	150
	9425	5.5	UPVC	58# PCK	4.0	High Tack/Med Tack for repositionable parts.	3	3	3	3	-40	125

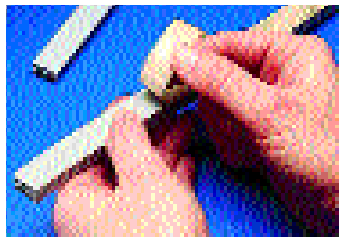
Note: This technical information and data should be considered representative only and should not be used for specification purposes.

## Specialty Tapes

With in-depth resources for adhesive research and development, 3M has engineered unique tapes for specialty applications.



Differential silicone/acrylic adhesive tape for silicone keypad assembly.  
Plasticizer-resistant tape for bonding flexible vinyl gaskets.



## In folder at right – additional 3M technologies for product and production enhancements

With more than 50 years experience in adhesive resin and polymer technologies, 3M has developed many innovations customer requirements ranging from see-through bonding to vibration/sound damping. Details on the following can be found on product literature in the folder at right.

- 3M™ Optically Clear Adhesives
- 3M™ Ultra-clean Laminating Adhesives
- 3M™ Membrane Switch Adhesives and Spacers
- 3M™ Thermally Conductive Tapes
- 3M™ XYZ-Axis Electrically Conductive Tape
- Scotch® ATG (Adhesive Transfer Gun) Systems
- 3M™ Tape Application Systems
- 3M™ Label Components
- 3M™ Viscoelastic Damping Polymers

*If literature is not included that you want to review:*

- Ask your 3M Bonding Solutions representative
- Ask your 3M Converter Markets representative for availability of products in converter formats.
- Visit [www.3M.com/bonding](http://www.3M.com/bonding)
- Visit [www.3M.com/converter](http://www.3M.com/converter)
- Call 1-800-362-3550

## Specialty Tapes

Adhesive Family	Product	Tape Thickness w/o liner Mils	Liner Type	Description	Temperature Resistance		Solvent Resistance	Relative Adhesion	
					Minutes Hours	Days Weeks		HSE	LS
Specialty Adhesives	F9466PC	5.0	58# PCK	Medium tack PSA with <b>plasticizer resistance</b> for bonding plasticized vinyl gaskets, decals and moldings.	200° F (93° C)	160° F (71° C)	Medium	Medium	Low
	9731	5.5	PET/58# PCK	High performance differential tape with <b>acrylic adhesive/silicone adhesive</b> for such applications as silicone keyboard attachment and toner cartridge refurbishing.	350° F (177° C)	250° F (121° C)	Medium	High	High
	8056	5.0	60# DK	High tack, <b>high performance splicing</b> tape for hard-to-bond surfaces such as photographic papers.	150° F (65° C)	120° F (49° C)	Low	High	Medium
	909	1.4	60# DK	<b>Assembly aid</b> tape for pick and place.	180° F (65° C)	150° F (65° C)	Medium	Medium	Medium

## Bonding Solutions in a Click...

- Complete product selection guide.
- Product data pages that you can download.
- Product sample request.

[www.3M.com/bonding](http://www.3M.com/bonding)  
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## For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550. Address correspondence to: 3M Bonding Systems Division, 3M Center, Building 220-7E-01, St. Paul, MN 55144-1000. Our number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-809-750-3000. In Mexico, phone: 5-728-2180.

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