

# **bondingsolutions** Assortment Overview of Double-Sided Tapes



### topsolutions

### Double-Sided Tapes for Varied Applica

### The World of Bonding Applications

As a leading global manufacturer of adhesive solutions, our qualified experience comes with a deep understanding for expert services. For this reason, we offer a wide range of specially developed double-sided tapes that effectively meet the application requirements of our customers.

The result: an assortment of adhesives, liners, and backings providing custom bonding solutions for a diverse field of business.

### Advantages of Double-Sided Tapes vs. Liquid Glue and Mechanical Fastening

			Double-sided tapes	Liquid glue	Mechanical fastening (e.g., rivets, screws, nails)
				1	1 CC
	~~~	Compensation of irregular or uneven surfaces – gaps between bonded surfaces are eliminated	•••	••••	•
		Compensation of tension and stress dissipation – single bonding point with mechanical fasteners can lead to material breakage	••••	••	•
Quality		Shock absorption	••••	••	•
	×	Reduced risk of corrosion	••••	••••	•
		Sealing function – tape seals and protects against dust and moisture	••••	••••	••
	$\Im$	Noise-dampening properties – sounds caused by vibration are eliminated	••••	•••	•
Assembly	٢	Fast application process – elimination of curing time and reduction of complexity	••••	•	••
Asse	×	Healthy working environment and clean production sites	••••	••	••
Design	3	Improved visual appearance – no damage to the material	••••	•••	•
Des		Invisible fastening – mounting of transparent materials	••••	•••	•
		•••	• Very good •	• Good • • I	Vledium • Low

#### Overview

- Our double-sided adhesive system
- Release liner categories
- Construction of our double-sided tape
- Test methods

### Filmic tapes

- High tensile strength
- Well suited for the production of die-co
- Suited for high-speed manufacturing p

### Non-woven tapes

- Flexible and extremely conformable
- Easily hand tearable, yet tear resistant
- Cushioning features

- **Cloth tapes** Flexible
- High temperature resistance
- Thick backings are abrasion resistant

### Differential

- Differential adhesive coating weight on both sides of the backing
- Strongly differing peel adhesion



#### Foam tapes

- Compensation of tension, gaps, and irr
- Shock absorption
- Sealing function against dust and mois

### tesa<sup>®</sup>ACX<sup>plus</sup>

- Viscoelasticity
- Bonding power
- Stress dissipation
- Temperature and weather resistance

### Application tips and storage

- Application tips for double-sided tapes
- Storage
- The right double-sided tape solution for your requirements
- Our offering

tions			
25		4 – 5	
cuts processes		6 – 9	
	<ul> <li>Paper tapes</li> <li>Flexible</li> <li>High temperature resistance</li> <li>Hand tearable</li> </ul>	10 - 11	
		12 – 13	
	<ul> <li>Transfer (without backing)</li> <li>Flexible and extremely conformable</li> </ul>	14 – 15	
regular surfaces sture		16 – 19	
		20 – 21	
S		22 – 23	

### excellentquality

Discover the Benefits of Our Double-Sided Tapes

### Our Double-Sided Adhesive Systems

Pure acrylic	Attributes
<ul> <li>Pure acrylic adhesive is especially suitable for outdoor applications and applications at elevated temperatures.</li> <li>Polymerization, compounding, and coating in-house</li> </ul>	<ul> <li>Good adhesive strength on polar and pretreated non-polar surfaces</li> <li>Very good at elevated temperatures</li> <li>Aging resistance</li> <li>Resistance against environmental conditions (e.g., UV, humidity)</li> </ul>
Tackified acrylic	Attributes
<ul> <li>Tackified acrylic is a versatile adhesive with a well-balanced performance on a wide variety of surfaces for permanent applications.</li> <li>Polymerization, compounding, and coating in-house</li> </ul>	<ul> <li>Very good adhesive strength on polar surfaces, good on non-polar surfaces</li> <li>High initial adhesion power</li> <li>Aging resistance</li> <li>Resistance against environmental conditions (e.g., UV, humidity)</li> </ul>
Synthetic rubber (SiS)	Attributes
<ul><li>SiS adhesive is suitable for a variety of surfaces but offers limited aging and temperature resistance.</li><li>Compounding and coating in-house</li></ul>	<ul> <li>High immediate adhesive bonding strength</li> <li>Good shear resistance</li> <li>Very good bonding on polar and non-polar surfaces</li> </ul>
Natural rubber	Attributes
Natural rubber adhesive is extremely sticky for use on rough	<ul> <li>High immediate adhesive bonding strength</li> </ul>

surfaces.

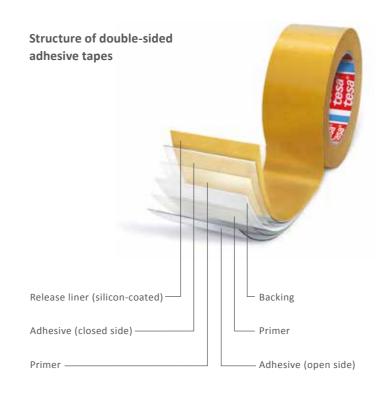
Compounding and coating in-house

- Very good bonding on polar and non-polar surfaces
- Preferred for use in indoor applications

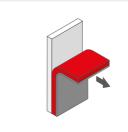
### **Release Liner Categories**

Product features/advantages	Color	Thickness [µm]	Weight [g/m <sup>2</sup> ]	Breaking force [N/cm]
Siliconized paper Low electric discharge Stable under pressure due to hard paper core	Brown	70	82	>63
PE (polyethylene) coated paper Good tensile strength Excellent die-cutting properties Excellent humidity resistance	White	122	120	>73
PP (polypropylene) release film Dust-free convertibility		80	72	>180
<ul> <li>High tear resistance</li> <li>Safe use in automated processes</li> </ul>	Red	120	108	>180
PET (polyethylene terephthalate) release film  Excellent tear strength		50	72	>70
Good thickness tolerance     Dust-free processing	Transparent	75	109	>100
<ul> <li>PE (polyethylene) release film</li> <li>Flexible and soft for easy application on curved surfaces</li> <li>No fraying during the sawing process</li> </ul>	Dark blue	100	94	>16

### Construction of Our Double-Sided Tapes



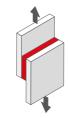
### Test Methods





### Peel adhesion

Adhesive strength describes the bonding power of the tape to steel. Hence, the value is an important parameter in any application. Its value depends significantly on the surface characteristics, the pressure, and the time exposed to the bonding materials. A tape's peel adhesion is measured in N/cm by peeling the tape at a 90° angle at a constant speed of 300 mm/min from the test substrate after 72 hours' dwell time.



### Our double-sided tapes consist of three main components:

### Backing

The backing is relevant for some of the main features of a double-sided tape. For rougher surfaces thicker foam tapes come into play. Filmic tapes can be used for transparent bonding requirements and tesa®ACX<sup>plus</sup> tapes are able to dissipate stresses thanks to their viscoelastic characteristics.

### Adhesive system

The proper choice of the adhesive system depends on how the double-sided tape is to be used: the kinds of surfaces which are to be bonded, how long the bond is supposed to last, and whether it is an indoor or an outdoor application.

### Liner

The liner covers the adhesive system and is an important element for the application and removal process. Filmic liners are usually used for automatic and paper liners for manual applications.

### Static shear resistance

Shear resistance is defined by the inner cohesiveness of an adhesive and describes the holding power of a tape in a product application. Thus, shear resistance applies when the tape encounters high stress in the product application. A tape's shear resistance is measured in minutes by loading the tape with 5 N when adhered to a steel substrate on a 2.6 cm<sup>2</sup> bonding area at a temperature environment of 23°C and 50 percent humidity.



#### **Temperature resistance**

Temperature resistance characterizes the holding power of a tape in a product application at elevated temperatures. It is divided into short term (15 minutes) and long term (three months). Subsequently, the tape's shear distance over the time is evaluated at elevated temperatures.

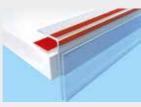
## **dimensionallystable** Filmic Tapes: Ideal for Bonding to Flat, Smooth Surfaces

### Technical Information: Filmic Tapes – Part 1

Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Steel	PVC	
tesa® 4926	Thick double-sided tape with excellent bonding power on critical surfaces. The thick coating weight supports cushioning and gap filling. tesa® 4926 is mainly used for mounting components in the consumer electronics industry.	PET	Tackified acrylic	Transparent	250	16.2	16.5	
tesa® 4965	Exceptional bonding performance on critical surfaces and rough materials. tesa® 4965 shows excellent holding power at elevated temperatures and high initial adhesion power. It is used for a broad variety of applications, for example mounting of ABS/PE/PVC parts.	PET	Tackified acrylic	Transparent	205	11.8	13.0	
tesa® 51865	tesa® 51865 Profile FIT is the first asymmetrical filmic tape designed to fit the needs of trim and profile applications. The higher coating weight is located on the closed side of the tape to work on a great variety of surfaces.	PET	Tackified acrylic	Transparent	165	13.5/10.5*	14.0/11.0*	
tesa® 4967	Well-balanced ratio of adhesive power and shear strength combined with outstanding humidity and temperature resistance. It is used in signage, splicing, and laminating trims and profiles.	PET	Tackified acrylic	Transparent	160	13.4	11.9	
tesa® 4928	For bonding of various polar (ABS, PC) and rough surfaces, for example signs, scales, or blinds. Balanced ratio between adhesion power and shear strength.	PET	Tackified acrylic	Transparent	125	12.0	10.1	
tesa® 4982	Excellent combination of high adhesion power and shear strength. Often used for bonding components in the consumer electronics industry. tesa® 4982 has an excellent temperature resistance.	PET	Tackified acrylic	Transparent	100	11.7	10.0	
tesa® 4980	Good bonding strength on most common smooth and even substrates. Reduced immediate contact adhesion makes initial repositioning possible. Used for mounting nameplates, badges, and light signs as well as decorative profiles in the furniture industry.	PET	Tackified acrylic	Transparent	80	9.7	10.7	
tesa® 4972	Thin product with high adhesion level relative to its thickness. tesa <sup>®</sup> 4972 allows repositioning and shows excellent resistance to demanding environmental conditions. Used to mount plastic badges and signs as well as components in the consumer electronics industry.	PET	Tackified acrylic	Transparent	48	9.6	9.4	
tesa® 4983	Very thin product with good adhesion level and excellent resistance to demanding environmental conditions. tesa® 4983 shows outstanding handling performance in converting processes and is used for bonding smaller components in the electronics industry.	PET	Tackified acrylic	Transparent	30	7.6	6.4	
tesa <sup>®</sup> 51977	Excellent initial tack and adhesion level, especially designed for carpet-laying applications and mounting of heavy decorative materials and displays.	РР	Tackified acrylic	White	240	12.5	16.0	
tesa <sup>®</sup> 51970	Exceptional bonding results on smooth and uneven surfaces. tesa® 51970 has an excellent balance between adhesion power and shear strength combined with high aging resistance. It is used for mounting solid decorative components, displays, and signs.	РР	Tackified acrylic	Transparent	220	13.5	17.5	
tesa <sup>®</sup> 64620	Very high initial bonding power, even on hard-to-bond and non-polar surfaces. Limited aging and temperature resistance. Applicable for example for mounting of building and furniture components and lamination of magnets.	РР	Synthetic rubber	White	185	14.5	10.0	
tesa <sup>®</sup> 64624	Exceptional high initial bonding power and high adhesion power on critical surfaces such as PE or PP. tesa® 64624 is used for example for temporary fixing of trims and profiles under normal temperature conditions.	РР	Synthetic rubber	Transparent	170	15.9	15.1	



tesa<sup>®</sup> 64624



Shelf edge strips, for example: tesa<sup>®</sup> 4965 tesa<sup>®</sup> 51865



Magnetic strips, for example: tesa<sup>®</sup> 51865\* tesa<sup>®</sup> 4967



signs and displays, for example:

tesa<sup>®</sup> 4965

tesa<sup>®</sup> 51970



Mounting of profiles on various surfaces, for example skirtings and wall edging strips, for example: tesa<sup>®</sup> 4970

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\*side with lower coating weight

Adhesive Backing •••• Very good ••• Good •• Medium • Low

Ultimate peel adhesion [N/cm]

]								
PE	Shear resistance 23°C	Temperature resistance [°C] short/long term						
6.5	•••	200/100						
6.9	•••	200/100						
8.0/7.0*	•••	200/100						
5.7	•••	200/100						
5.4	•••	200/100						
5.1	•••	200/100						
4.6	•••	200/100						
3.5	•••	200/100						
3.3	•••	200/100						
8.5	•••	110/50						
8.0	•••	120/60						
8.0	••••	80/40						
9.3	••••	80/40						
Decorative trims, • tesa® 5197(	Decention trips: for example:							
<ul> <li>tesa® 51970</li> <li>tesa® 51865</li> </ul>								
	-							

### Technical Information: Filmic Tapes – Part 2

Technical Information: Filmic Tapes – Part 2								Ultimate peel adhesion [N/cm]		
	Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Steel	PVC	PE	Shea
	tesa® 51908	High bonding power combined with aging and humidity resistance. tesa <sup>®</sup> 51908 is used for permanent bag sealing. Tape can be easily cut with common hot wire systems.	РР	Tackified acrylic	Transparent	100	13.7	11.5	4.3	
	tesa® 64621	Very high initial bonding power, even on non-polar surfaces. Limited aging and temperature resistance. Applicable for example for mounting of decorative trims and profiles or bonding of metal, cloth, paper, and synthetic materials.	РР	Synthetic rubber	Transparent	90	15.0	9.5	6.5	
	tesa® 4968	Flexible backing with excellent initial bonding strength. tesa <sup>®</sup> 4968 is to a large extent plasticizer resistant and has outstanding converting properties. Applicable for example for car mirror mounting.	PVC	Tackified acrylic	White	295	28.2	23.0	8.8	
	tesa® 4970	Exceptional bonding performance on smooth and rough surfaces. The tape shows very good plasticizer and aging resistance and is used for mounting of heavy signs and point of sale displays.	PVC	Tackified acrylic	White	225	13.6	16.6	9.1	
	tesa® 4963	Product with good shear strength and humidity resistance. tesa® 4963 features a creped, non-siliconized liner. Applicable for example for sealing of synthetic and paper bags and splicing applications.	PVC	Natural rubber	Transparent	110	6.1	5.9	4.5	
	Adhesive								Nerv goo	d

Fingerlift

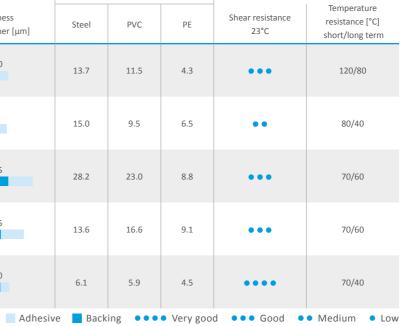


### Fingerlift benefits

- Overlapping liner for convenient release
- Clean and easy mounting
- Available as single- and double-sided fingerlift



Benefits of our high-quality cross-wound spools Proven performance in automated processes Less downtime, higher • production output Less material waste .



Tapes

# **easilytearable** Non-Woven and Paper Tapes: Conform to Slightly Irregular Surfaces

### Technical Information: Non-Woven and Paper Tapes

Technical	ical Information: Non-Woven and Paper Tapes						Ultimate peel adhesion [N/cm]		
Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Steel	PVC	PE	
tesa® 4962	Excellent bonding results on smooth and rough surfaces combined with high initial adhesion power and outstanding aging resistance. tesa® 4962 is used for example for mounting of automotive interior components and flying splice applications.	Non-woven	Tackified acrylic	Translucent	160	12.0	15.0	7.0	
tesa® 4987	Good ratio of high initial tack and ultimate adhesion level even on rough surfaces. tesa® 4987 shows good shear resistance and resistance against environmental conditions. Used for example for fixing of furniture parts and lamination of foam and rubber substrates.	Non-woven	Tackified acrylic	Translucent	125	11.2	11.4	4.8	
tesa® 4959	Product with highly flexible backing, high initial bonding power and well-balanced ratio of shear strength and adhesive power. tesa® 4959 is extremely age resistant and especially designed to bond flexible materials.	Non-woven	Tackified acrylic	Translucent	100	8.5	14.0	5.0	
tesa® 4960	Product with good shear strength and humidity resistance. tesa® 4960 features a creped, non-siliconized liner. Applicable for example for sealing of synthetic and paper bags and splicing applications.	Non-woven	Tackified acrylic	Translucent	100	4.7	3.8	0.5	
tesa® 4943	High initial bonding power and a good shear resistance make this product suitable for splicing applications. The flexible backing is applicable for the lamination of leather, textiles, and foams.	Non-woven	Tackified acrylic	Translucent	100	8.1	10.8	1.6	
tesa® 51571	Flexible product with high bonding and shear strength, even on non-polar surfaces. Applicable for example for lamination of foams, film bags, posters, and displays.	Non-woven	Synthetic rubber	Translucent	160	13.0	13.0	8.5	
tesa® 51570	High initial bonding power, also on non-polar surfaces. Very flexible for processing of elastic material, for example the closure of film and plastic bags, and splicing in the paper and carton industry.	Non-woven	Synthetic rubber	Translucent	110	13.0	12.5	7.0	
tesa® 68644	Very good balance of adhesion and cohesion, and excellent temperature resistance. tesa <sup>®</sup> 68644 is used for the mounting on various kinds of plastic and metal surfaces.	Non-woven	Tackified acrylic	Translucent	100	9.4	11.8	3.8	
tesa® 68645	High peel adhesion level and good shear resistance. tesa® 68645 is recommended for deco panel mounting in elevators and also for some general-purpose mounting.	Non-woven	Tackified acrylic	Translucent	120	12.0	11.0	3.5	
tesa® 68626	Excellent initial tack performance and peel adhesion level. tesa <sup>®</sup> 68626 is recommended for the permanent bonding in appliance products and packaging box closure applications.	Non-woven	Tackified acrylic	Translucent	140	14.0	12.0	3.5	
tesa® 4940	Very good anti-repulsion performance and high adhesion level on various kinds of surfaces. tesa <sup>®</sup> 4940 is used for the mounting of plastics, foam parts, felt, and cardboard.	Non-woven	Tackified acrylic	Translucent	160	11.3	12.2	3.8	
tesa® 4961	Product with very high shear strength, but removable from firm surfaces. Applicable for example for mounting of synthetic materials and splicing of paper and film.	Paper	Natural rubber	White	205	8.0	6.3	4.1	
	Mounting of evaporators in the appliance industry, for example: • tesa® 4959 • tesa® 51571	Sewing aid for lea manufacturing of (prefixation), for • tesa® 4962 • tesa® 5157:	f shoes and bags example:		corruș for ex	apping splicing gated business, ample: tesa® 4962 tesa® 4959 tesa® 4943			

Adhesive Backing •••• Very good ••• Good •• Medium • Low

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Shear resistance 23°C	Temperature resistance [°C] short/long term
	200/80
•••	200/80
	200/80
•	200/80
••••	100/70
••••	80/40
•••	80/40
••••	200/80
••	150/80
••	150/80
•••	150/80
••••	110/40
	olation, for example: esa® 51571



### Technical Information: Cloth Tapes

Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [µm]	Steel	PVC	PE	
tesa® 4954	Product with high shear strength and very good tack, for example for bonding of leather, PVC, and aluminum during manufacturing. Product has a creped silicone paper liner.	Cloth	Natural rubber	White	430	5.7	4.9	3.5	
tesa® 4964	Product with high shear strength and high adhesive coating weight for use on rough and non-polar surfaces (PP/PE). Removable from clean and firm surfaces.	Cloth	Natural rubber	White	390	7.6	7.0	5.4	
tesa® 4974	Very good bonding results on rough and fibrous substrates due to high adhesive coating weight, for example carpets.	Cloth	Natural rubber	White	380	6.1	5.0	3.6	
tesa® 4934	Product with high tack for bonding of rough and fibrous surfaces, for example carpet laying. Product is hand tearable.	Cloth	Synthetic rubber	White	200	24.0	22.5	8.5	
						aying, for exan tesa® 4964 tesa® 4934	nple:		

Adhesive Backing •••• Very good ••• Good •• Medium • Low

Ultimate peel adhesion [N/cm]



Tapes

### **practical effectiveness** Differential and Transfer Tapes: High Quality in Practice

### Technical Information: Differential Tapes

							p		
Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [µm]	Steel	PVC	PE	1
tesa® 4720	Double-sided self-adhesive tape with differential acrylic adhesive. Open side: high adhesion level/secure bond of different substrates. Covered side: low adhesion level, residue-free removability.	PET	Tackified acrylic/ pure acrylic	Transparent	100	12.9/5.7	6.8/2.8	4.9/1.1	
tesa® 4917	Differential adhesive tape with high aging and humidity resistance. Suitable for example for reversible and non-permanent sealing of plastic bags and production support in the manufacturing of compounds.	РР	Tackified acrylic	Transparent	90	11.4/5.1	11.0/7.0	4.1/2.3	
tesa® 51960	Differential adhesive coating weight for residue-free removal on one side and high bonding strength on the other. Very resistant to aging and plasticizers. Applicable for example for floor laying, even for PVC and CV floors.	PP film reinforced fabric	Tackified acrylic/ pure acrylic	Transparent	250	6.6/13.7	6.2/13.8	3.5/5.1	
tesa® 51903	Differential adhesive makes the product especially suitable for the closure systems of bags and mounting in the lithographic industry. Supplied without liner.	PVC	Tackified acrylic	Transparent	86	3.0/4.6	2.5/5.2	1.8/0.7	
tesa® 4914	This differential tape shows excellent initial tack and high temperature resistance. Due to a specially foamed adhesive on the closed side, it is highly conformable to rough surfaces. It is used for example for cable mounting in the automotive industry.	Non-woven	Tackified acrylic	Translucent	250	7.8/9.3	7.7/7.8	3.4/5.3	
tesa® 4939	Specially formulated adhesive on the open side combines a high bonding power with residue-free removability for up to 14 days from most common surfaces. Applications include temporary floor laying during fairs and exhibitions. tesa® 4939 is hand tearable.	Cloth	Synthetic rubber	White	235	5.5/8.0	5.9/11.2	2.0/5.0	
	for example: floors,	ating PVC and CV for example: esa® 51960			plastic	able closing of bags, for exan tesa® 4917		Į	

#### Adhesive Backing •••• Very good ••• Good •• Medium • Low

Ultimate peel adhesion [N/cm]

Ultimate peel adhesion [N/cm]

### Technical Information: Transfer Tapes (without Backing)

Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Steel	PVC	PE	
tesa® 68105	tesa® 68105 is a transparent transfer tape suitable for demanding lamination jobs. Main applications are lamination of overlays on touch switches, fastening of printed nameplates, and label stock.	Without backing	Pure acrylic	Transparent	50	6.7	6.7	1.6	
tesa® 4900	tesa® 4900 consists of a transparent pure acrylic adhesive which is aging resistant and has a high initial tack. tesa® 4900 also withstands elevated temperatures.	Without backing	Pure acrylic, fiber reinforced	Transparent	50	3.8	2.7	1.0	
tesa® 4985	tesa® 4985 is a transparent transfer tape using a modified acrylic adhesive. Main applications: mounting of posters and photos, mounting of fabric for pattern books, splicing of paper.	Without backing	Tackified acrylic, fiber reinforced	Transparent	50	11.1	9.4	4.9	

Adhesive Backing •••• Very goo





Shear resistance 23°C	Temperature resistance [°C] short/long term
••••	200/150
••	200/80
••	200/80
od ••• Good	• Medium • Low

## **Optimumperformance** Foam Tapes: Bond Different Substrates, Absorb Shocks, Seal Gaps

lechnica	l Information: Foam Tapes – Part 1						Ultimat	e peel adhesic	on [N/cm]		
Product	Product description and application	Backing	Foam strength	Adhesive	Color	Thickness without liner [μm]	Steel	PVC	PE	Shear resistance 23°C	Temperature resistance [°C short/long terr
tesa® 62939	Particularly thick and soft product that features excellent filling and sealing properties for larger gaps and is able to compensate for construction tolerances.	PE foam	Low	Tackified acrylic	White	3,000	6.0*	6.0*	2.0	•••	80/80
esa® 62938	Particularly thick and soft product that features excellent filling and sealing properties for larger gaps and is able to compensate for construction tolerances.	PE foam	Medium	Tackified acrylic	White/black	2,000	6.0*	6.0*	2.0	•••	80/80
sa® 62516	The special balance of foam strength and density makes this a high-performing foam tape for general mounting applications indoors and outdoors.	PE foam	Medium	Tackified acrylic	White/black	1,600	13.5*	13.5*	1.2	•••	80/80
sa® 62512		PE foam	Medium	Tackified acrylic	White/black	1,200	13.5*	13.5*	0.9	•••	80/80
sa® 62510	The special balance of foam strength and density makes this a high-performing foam tape for general mounting applications indoors and outdoors, for example solar frame and trim mounting.	PE foam	Medium	Tackified acrylic	White/black	1,000	13.5*	13.5*	0.9	•••	80/80
esa® 62508		PE foam	Medium	Tackified acrylic	White/black	800	13.5*	13.5*	0.9	•••	80/80
esa® 62906	The special balance of foam strength and density makes this a high-performing foam tape for mounting applications indoors and outdoors. Due to its excellent die-cuttability, tesa® 62906 is a preferred choice for mounting emblems and nameplates.	PE foam	Medium	Tackified acrylic	Black	600	19.0*	>19.0*	1.7	•••	80/80
esa® 62505	The special balance of foam strength and density makes this a high-performing foam tape for general mounting applications indoors and outdoors. Due to its thin design, tesa® 62505 is a preferred choice for mounting filigree profiles in the furniture industry.	PE foam	Medium	Tackified acrylic	White/black	500	9.5*	9.5*	1.2	•••	80/80
esa® 62904	The special balance of foam strength and density makes this a high-performing foam tape for mounting applications indoors and outdoors. Due to its excellent die-cuttability, tesa® 62904 is a preferred choice for mounting emblems and nameplates.	EVA foam	Medium	Tackified acrylic	Black	400	21.0*	>19.0*	1.7	•••	80/80
esa® 4952	The acrylic adhesive combines a durable holding power with good adhesion on many substrates. The product has already been used in mirror mounting for over 20 years.	PE foam	Medium	Tackified acrylic	White	1,150	8.0*	8.0*	2.8	•••	80/80
esa® 4957	Consists of a gap-filling PE foam backing and is used as a general mounting tape for trims and profiles.	PE foam	Low	Tackified acrylic	White/black	1,100	4.0*	4.0*	3.2	•••	80/80
esa® 62957	Due to its special adhesive system, this tape can be applied at low temperatures down to $-10^{\circ}$ C. Common applications can be found in the window industry, for example window skirting trims.	PE foam	Low	Acrylic	White	1,150	4.0*	4.0*	3.5	••	80/60
esa® 4976	Consists of a PUR foam and features especially high short-term temperature resistance. It is commonly used for the bonding of components in electronic devices.	PUR foam	High	Tackified acrylic	Black	540	12.0*	12.0*	4.3	•••	200/80
sa® 64958	Can be used for indoor applications that require high immediate adhesion even on difficult substrates. It is typically used in the corrugated board industry, for POS trims, and for indoor signs and posters.	PE foam	Low	Synthetic rubber	White	1,050	4.0*	4.0*	4.0*	•••	60/40
	Mirror mounting, for example: • tesa <sup>®</sup> 4952			rame mounting, for exan esa® 62510	nple:				Dry glazing, fo tesa® 6		







\*foam split Adhesive Backing •••• Very good ••• Good •• Medium • Low

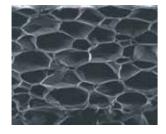
e C] rm	Test reports
	ift directive MO-01/1: 2007-01 (structure connection of windows)
	UL file number E334507 TÜV Rheinland test report (solar)
	UL file number E334507 TÜV Rheinland test report (solar)
	UL file number E334507 TÜV Rheinland test report (solar)
	TÜV Rheinland LGA (mirror mounting)
	UL file number E334507 TÜV Rheinland test report (solar)
	ift directive MO-01/1: 2007-01 (structure connection of windows)
1	Mounting of decorative trims on furniture, for example: • tesa <sup>®</sup> 62505

### Technical Information: Foam Tapes – Part 2

Technical Information: Foam Tapes – Part 2									n [N/cm]			
Product	Product description and application	Backing	Foam strength	Adhesive	Color	Thickness without liner [µm]	Steel	PVC	PE	Shear resistance 23°C	Temperature resistance [°C] short/long term	Test report
tesa® 62936	The adhesive coating offers a high bonding strength together with a good immediate adhesion on numerous substrates. It features excellent gap-filling properties due to its thickness.	PE foam	High	Tackified acrylic	White/black	1,600	19.0*	19.0*	2.2	•••	80/80	
tesa® 62934	The adhesive coating offers a high bonding strength together with a good immediate adhesion on numerous substrates. Main applications are decorative profiles and elements on white and brown goods.	PE foam	High	Tackified acrylic	White/black	800	17.0*	17.0*	2.8	•••	80/80	
tesa <sup>®</sup> 62932	The adhesive coating offers a high bonding strength together with a good immediate adhesion on numerous substrates. It is commonly used for the mounting of decorative panels and elements.	PE/EVA foam	High	Tackified acrylic	White/black	500	17.0*	17.0*	3.0	•••	80/80	TÜV Rheinland LGA (mirror mounting)
tesa <sup>®</sup> 62612	The product features an especially high ultimate adhesion level for a secure bonding performance. The product has been designed for dry window glazing.	PE foam	High	Pure acrylic	Black	1,600	19.0*	19.0*	1.0	••••	90/80	ift directive VE-08/2 part 1 (bonded glazing systems)
tesa® 62856	Thick version for gap filling and thickness compensation, also usable for large emblems.	PE foam	High	Pure acrylic	Black	1,200	17.0*	>9.0*	2.0	••••	100/90	
tesa® 62855	High-density foam which provides excellent cohesive strength and ultimate bonding power. Applicable in exterior applications such as small trims or candy bar emblems.	PE/EVA foam	Very high	Pure acrylic	Black	900	23.0*	>9.0	2.0	••••	100/90	
tesa® 62854	Suitable for various demanding applications such as solar panel edging due to its conformable backing which increases the adhesive wetting and provides excellent dampening properties.	PE foam	High	Pure acrylic	Black	800	17.0*	>9.0	2.0	••••	100/90	
tesa® 62852	Thin tape version which can be used for holding single letters or small nameplates in place with a less visible gap. It offers excellent die-cutting properties.	PE/EVA foam	High	Pure acrylic	Black	510	20.0*	>7.0	1.5	••••	100/90	
tesa <sup>®</sup> 62712	Providing excellent temperature resistance and converting properties, the tesa® 627XX series ensures a permanent bond of emblems and single letters for classification of car model or engine data.	PE foam	Low	Pure acrylic	Black	1,200	14.0*	>6.0	1.5	••••	100/90	
tesa® 62708	Conformable foam backing to compensate for design tolerances, uneven surfaces, and different thermal expansion of bonded parts.	PE foam	Medium	Pure acrylic	Black	800	15.0*	>9.0	1.5	••••	100/90	
	*foam split 📃 Adhesive 📘 Backing •••• Very good ••• Good •• Medium • Low											d •• Medium • Low

### The Foam System

### PE foam and major features

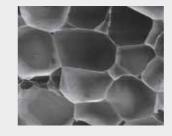


The backing material of our double-sided foam tapes is composed of closed-cell PE foam. Through the targeted variation of the polymer, thickness, and density of the foam, each tape achieves the optimum properties for its specific tasks.

- Mechanical resistance
- Service temperature between -40°C and +70°C
- UV resistance (no yellowing or degrading) •
- Shock absorbing even at low temperatures of -40°C
- High dielectric strength •
- Water resistant and vapor barrier

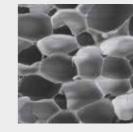
### Double-Sided Foam Tape Backing Categories

### **REM pictures**



Low strength Big cells with a thin membrane:

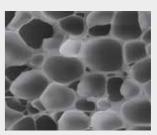
- Sealing
- Gap filling



Medium strength Medium-sized cells and membranes:

 Optimally balanced strength and conformability





High strength Small cells with a thick membrane: Highest mechanical strength

## tesa®ACX<sup>plus</sup>: For Permanent and Constructive Bonding

### Technical Information

Technical Information						Ultimate peel adhesion [N/cm]					
Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Steel	PMMA	Aluminum	Glass	Shear resistance 23°C	Temperature resistance [°C] short/long term
GRAY AND WHI	TE										
tesa®ACX <sup>plus</sup> 7042	High-performance acrylic foam tape, primarily characterized by its bonding power, stress dissipation, and temperature and weather resistance. The	Foamed acrylic	Pure acrylic	Gray/white	500	23	18	24	21	••••	200/110
tesa®ACX <sup>plus</sup> 7044	tesa®ACX <sup>plus</sup> 704x series is specially designed to allow invisible bonding of decorative elements.	Foamed acrylic	Pure acrylic	Gray/white	1,000	33	24	35	32	••••	200/110
HIGH TRANSPA	RENCY				·						
tesa <sup>®</sup> ACX <sup>plus</sup> 7054		Solid acrylic	Pure acrylic	Transparent	500	19	12	19	17	••••	200/100
tesa®ACX <sup>plus</sup> 7055	Ultra-transparent pure acrylic tape for bonding of transparent and trans- lucent materials such as decorative glass panels, PMMA plates, extruded	Solid acrylic	Pure acrylic	Transparent	1,000	24	17	24	24	••••	200/100
tesa®ACX <sup>plus</sup> 7056	profiles, and glass partition walls. High UV, temperature, and solvent resistance. Recommended for outdoor applications. Due to its viscoelastic properties, tesa®ACX <sup>plus</sup> can compensate for varying substrate thermal	Solid acrylic	Pure acrylic	Transparent	1,500	27	19	24	26	••••	200/100
tesa®ACX <sup>plus</sup> 7058	elongations.	Solid acrylic	Pure acrylic	Transparent	2,000	29	22	24	28	••••	200/100
tesa®ACX <sup>plus</sup> 75530		Solid acrylic	Pure acrylic	Transparent	2,900	27	20	26	32	••••	200/100
HIGH ADHESIO	N										
tesa®ACX <sup>plus</sup> 7062		Foamed acrylic	Modified acrylic	Black	500	24	20	27	27	••••	170/70
tesa®ACX <sup>plus</sup> 7063	Black acrylic foam tape with excellent immediate adhesion even on substrates with a low surface energy such as PP and powder-coated materials. Also resistant to plasticizers. Excellent hand on long length parts	Foamed acrylic	Modified acrylic	Black	800	30	27	32	32	••••	170/70
tesa®ACX <sup>plus</sup> 7065	materials. Also resistant to plasticizers. Excellent bond on long-length parts such as bumper rails, as well as powder-coated signs, reinforcement bars in elevators, and decorative parts on white goods.	Foamed acrylic	Modified acrylic	Black	1,200	40	35	35	36	••••	170/70
tesa®ACX <sup>plus</sup> 7066		Foamed acrylic	Modified acrylic	Black	1,500	45	41	40	39	••••	170/70
HIGH RESISTAN	CE										
tesa®ACX <sup>plus</sup> 7072		Foamed acrylic	Pure acrylic	Black	500	20	12	18	20	••••	220/120
tesa®ACX <sup>plus</sup> 7074		Foamed acrylic	Pure acrylic	Black	1,000	30	15	25	32	••••	220/120
tesa®ACX <sup>plus</sup> 7076	Black acrylic foam tape which combines a very good temperature	Foamed acrylic	Pure acrylic	Black	1,500	35	19	28	36	••••	220/120
tesa <sup>®</sup> ACX <sup>plus</sup> 7078	resistance with an outstanding cold shock resistance. It is suitable for demanding outdoor applications and exposure to extreme temperatures, UV, chemicals salt water and cleaning agents. Recommended for reinforce-	Foamed acrylic	Pure acrylic	Black	2,000	40	23	32	40	••••	220/120
tesa <sup>®</sup> ACX <sup>plus</sup> 70725	chemicals, salt water, and cleaning agents. Recommended for reinforce- ment bar mounting, wall cladding, back rails, and decorative elements.	Foamed acrylic	Pure acrylic	Black	2,400	31	17	28	30	••••	220/120
tesa®ACX <sup>plus</sup> 70730		Foamed acrylic	Pure acrylic	Black	2,900	44	22	39	38	••••	220/120
tesa®ACX <sup>plus</sup> 70740		Foamed acrylic	Pure acrylic	Black	3,900	45	24	40	39	••••	220/120
	Glass-to-glass bonding, for exam • tesa®ACX <sup>alus</sup> 7058	ple:	system	er mounting in cassette s, for example: esa®ACX <sup>plus</sup> 7078		Deco panel m for example: tesa®A(				for example	deco panels on doors, 2: ACX <sup>elus</sup> 7078



### versatilepossibilities

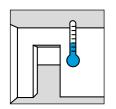
Made to Meet the Requirements of Our Customers

### Application Tips for Double-Sided Tapes



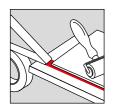
### Surface preparation and cleaning

The surface should be free of dust, grease, oil, moisture, and other contaminants as they will decrease the level of bonding power significantly.



### Temperature

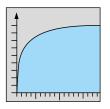
Recommended optimal application temperature is from 20°C to 30°C in dry rooms. If possible, tapes should not be applied at temperatures below 10°C unless the tape is designed for application at low temperatures.



### Application

The tape should be applied to the surface at constant speed and pressure. For optimal results we recommend a uniform pressure, applied with an automatic or manual roller.

After the final position is reached and both parts are mounted together, we recommend a uniform pressure at 20 N/cm<sup>2</sup> over the complete area of the mounted components.



### Bond build rate

The bond strength will increase over time until full strength is reached after approximately 72 hours.

### Storage



Adhesive tapes should be stored at temperatures between 15°C and 35°C avoiding high humidity (optimal: 18°C and 55 percent humidity).



Especially for tesa®ACX<sup>plus</sup>: all slit edges should be covered with suitable separators made of siliconized film. If several rolls are stacked use two sheets per roll.



Ensuring no dust, dirt, or contamination during transportation and storage will prevent any damage or deformation of the packaging.

### The Right Double-Sided Tape Solution for Your Requirements



vour business.

materials and surfaces.

In our application laboratories, we analyze customers' materials in combination with several adhesive tape solutions. Depending on the customer-specific demands, the analysis includes tests on the resistance to UV light and high and low temperatures, peel adhesion, shock and tension absorption, and much more. The result: adhesive tape solutions that are perfect for any technical application.

Benefit: the best customer-specific solution that meets all requirements.

### **Our Offering**

No matter what industry, no matter what your production process or how you want to apply your tape: whether die-cuts, pancake rolls, or spools and logs, we deliver the tape in the format you need for your application.

Together with our adhesive tapes, we offer dispensing and application tools for high-quality application results regardless of whether your production process is manual or highly automated. Our solutions allow you to implement a fast, simple, and clean assembly process, while reducing your total production costs. Our consultants and engineers are just a phone call away to support you with a proper dispensing solution and to make your production more efficient with the use of a double-sided tape solution.





Choose us and benefit from a strong partnership.

Our products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All information and recommendations are provided to the best of our knowledge on the basis of our practical experience. Nevertheless, we do not make any warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. Product characteristics, usability, and durability of the product can be taken solely and exclusively from the instruction manual and depend on proper usage and expert realization in its respective application. Therefore, the user is responsible for determining whether our product is fit for a particular purpose and suitable for the user's method of application. If you are in any doubt, our technical staff will be glad to support you.

### We offer you a wide range of different products, supporting you in all areas of

At tesa, mutual trust and cooperation goes far beyond the implementation of adhesive tape solutions. Our consultants and application engineers guide the way to the efficient and economic use of our products in all manufacturing steps. Our laboratories provide the means and tools necessary for extensive application testing to simulate a wide range of extreme requirements and analyze critical











Our management system is certified according to the standards ISO 9001, ISO/TS 16949, and ISO 14001.



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