





Our management system is certified according to the standards ISO 9001, ISO/TS 16949, ISO 14001, and ISO 50001.



Assortment for Converter Partners

tesa SE Phone: +49 40 88899 0 tesa.com/company/locations

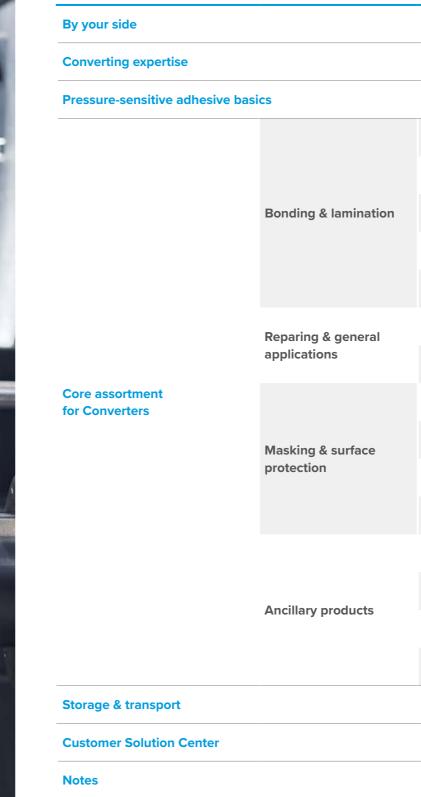
tesa.com



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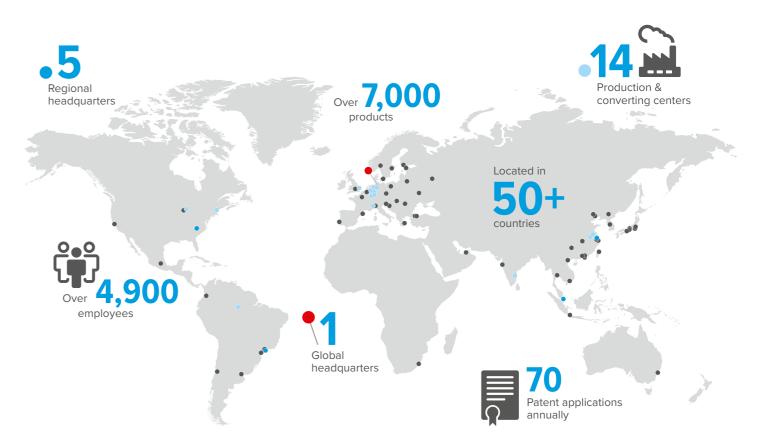
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About us



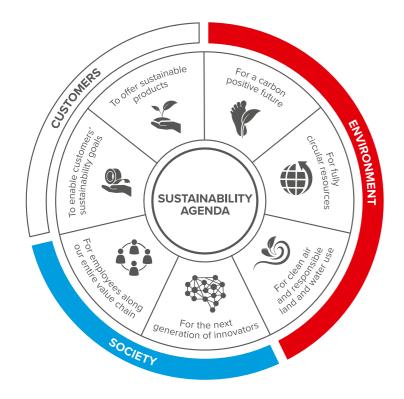
Your adhesive solutions partner

tesa's story begun in 1890 and today is that of one of the world's leading manufacturers of technical adhesive tapes and self-adhesive system solutions, with an assortment of more than 7,000 products. Our solutions prove their performance in countless sectors around the globe, also thanks to a capillary network composed of thousands of distribution and converting partners. Industrial applications - in sectors such as the automotive and transportation industries, electronics, printing and paper, building supply, healthcare and renewable energy account for about 75% of the tesa group's sales. This allowed us to build a solid expertise and market intimacy that we channel in our continuous product developments.

Sustainability agenda

A compass for a positive change

As one of the world's leading adhesive technology companies, at tesa we make an important contribution by firmly anchoring sustainability in our core business processes and decisions and driving equitable growth for the benefit of all stakeholders.



Environment

Contributing to climate protection and circular economy by reducing our environmental footprint along the product life cycle.

Customers

Expanding the range of sustainable products and enabling customers to meet their sustainability goals.

Society

Ensuring good working conditions for employees along our entire value chain and empowering the next generation of innovators.

Goals and pillars

To meet our commitments, we have defined a set of goals and indicators aligned with our Sustainability Agenda:

Environment

- Reduce energy-related CO2 emissions absolute by 30% versus 2018
- Purchase solely renewable electricity and switch to clean energy sources for electricity production
- Strive for smarter chemicals
- · Achieve zero waste to landfill

Customers

- Increase sales with sustainable products • Strive for sustainable
- packaging Increase share of recycled
 - and renewable materials

Society

STEM

- Source 80% of direct spend from responsible suppliers
- · Strive for zero accidents Empower young people through education in

Did you know?



Sustainable products We promote the transition to recycled and/or renewable material in our products.

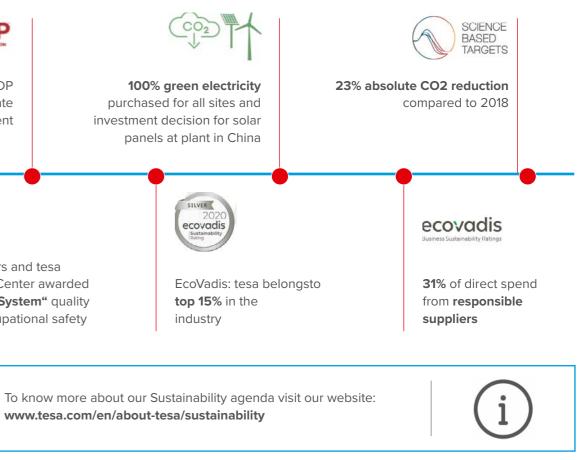
Carbon neutrality We are accelerating our work to reach a zero-carbon footprint by 2050 – focusing on efficiency, green energy and low-carbon products & solutions.

Increased share of sustainable products

Significant reduction of absolute carbon emissions

A strong track record in 2020

tesa awarded CDP "B"-rating for climate engagement









Headquarters and tesa Converting Center awarded "Sicher mit System" quality

seal for occupational safety

You want to learn more? www.tesa.com/en/about-tesa/sustainability





Responsible supply chains We monitor key suppliers' sustainability practices by using EcoVadis.

Ensure we work only with suppliers that adhere to social and environmental standards





Product excellence and market intimacy across industries

By partnering with tesa as a Converter Partner, you have decided to join our network of strategic business allies. Your company is recognized as a strong and proficient resource and working together we believe we can mutually grow our businesses.

As a Converter Partner, your company has access to the consistent high quality of the extended tesa assortment as well as to the expertise and support of our sales, supply chain, marketing, customer support and Customer Solution Center teams.

Customized solutions across industries







Automotive

Appliance







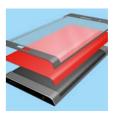


Signage

Furniture

Construction





Electronics

Doors & windows



Health & medical



Renewable



Leather & textile



Retail

From sketch to reality

Even with the most demanding requirements, we support you in finding the best possible solution. We know converting involves a variety of processes, such as:

- Die cutting
- Punching
- Lasering
- Slitting

 Laminating • Printing

Rewinding

- Spooling

By combining your converting expertise with our high-quality products and expert adhesive consultancy, you can create customized products for all market needs.



Sample converting applications

The world of converting is one of endless opportunities, powered by technical expertise as well as the right amount of creativity. These are just some examples of die-cutting designs you can create with our broad tape assortment:

Partners beyond tape



Product excellence

Access to the broadest tesa product portfolio, including a selection of 60+ products handpicked for our Converter Partners, on which we guarantee quick sampling in different formats (mini-log, A4 sheets) and minimum order quantity of one log roll on most standard orders.



Expert support

Our Sales personnel and Converter Experts are there to assist you with any customer request. Technical experts at tesa Customer Solution Center also offer on-site and remote support and evaluation of your individual application under laboratory conditions.



Testing & benchmarking

Technical consultants will support you on-site and remotely from our labs, resorting to state-of-the-art equipment to perform:

- Comparative tests with competitor products
- Customized tests with customer substrates
- Simulations under a wide range of environmental conditions







Flatbed die and kiss cutting

Die cuts lasered onto rolls or sheets

Seperable paper layer with possible divisions







Rotary die cutting

ween objects

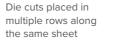
with hole punching

Finger lift with grabbing tab

Butt cutting, with or without space between objects







Sections of roll can be perforated for easy separation

Butt cutting, with or without space bet-





Temporary fixing aid, which keeps the cut out in place



Die cuts with print or tape as application aid



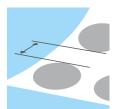
Hole punching with automatic waste removal



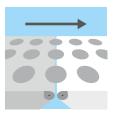
Die cuts interlaced to save material



Multi-level rotational cutting



Individually desinable gaps between die cuts



Die cut can be easilly transferred to another backing



Intermittent adhe sive zones can be produced



Family sheets (different shapes on the same sheet)



Die cuts and rolls with positioning tabs

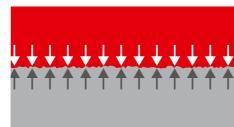


Positioniing features to aid marking

Pressure-sensitive

adhesive basics

An interplay between adhesion and cohesion



Adhesion

Adhesion refers to the sum of all forces which occur at the interfaces between two substrates, e.g. a surface to be bonded and a pressure-sensitive adhesive. The measurable bond strength of adhesion results from the combination of these physical interactions and the energy dissipation from the pressure-sensitive adhesive's viscoelastic properties.

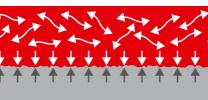
Substrate Pressure-sensitive adhesive A particular form of adhesion is the tack, which determines whether an adhesive mass can quickly wet a surface with which it comes into contact with virtually no pressure. But the tack does not ultimately correlate with the actual bond strength of a pressure-sensitive adhesive. Pressure-sensitive adhesives with a low tack are capable of withstanding high stresses when high final adhesive strength and/ or high shear strength are formed.



Cohesion

For the adhesive bond to stay intact, sufficient cohesion (internal strength) of the pressure-sensitive adhesive is required. The cohesion of a pressure-sensitive adhesive describes the elastic behaviour of the adhesive, which in turn has an impact on the shear strength or restoring forces of a bond.

Substrate Pressure-sensitive adhesive



Adhesive strength

Adhesive strength is described by the interplay of adhesion and cohesion, i.e. only through a certain combination of adhesion and internal strength is an adhesive bond able to withstand the stresses that act on it.

Substrate Pressure-sensitive adhesive

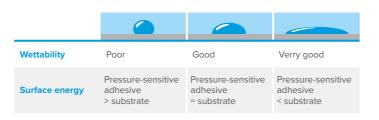


The role of polarity

Surface tension

In order to achieve sufficient contact points for the formation of high adhesion forces, the pressure-sensitive adhesive must be able to sufficiently wet the substrate to be bonded. Wetting largely depends on the surface tension or energy of the substrate and the pressure-sensitive adhesive.

A pressure-sensitive adhesive is generally able to wet-out a substrate if the substrate's surface energy is greater than or equal to that of the adhesive. The higher the wet-out, the more contact points are available to form a bond between two surfaces. As a first indication one can use a water droplet to differentiate between high and low surface energy



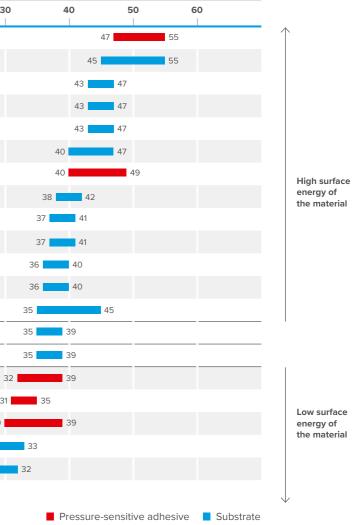
substrates. If the droplet forms a film, this points to a high surface energy. On the other hand, if it stays a droplet or drips off, it points to a lower surface energy than water. In this case, bonding to the substrate may be difficult. More accurate results are achieved with so-called test inks, which are also available in pen form. The surface energy is given in mN/m, dyn/cm or sometimes also in mJ/m², whereby: 1 mN/m = 1 dyn/cm.

The boundary between low-energy and high-energy surfaces is usually drawn in the range of a surface energy of 36 – 38 mN/m. Therefore, the bondability for surface tensions above this range is usually problem-free, whereas at values below this range a pretreatment of the surface to be bonded should be considered.

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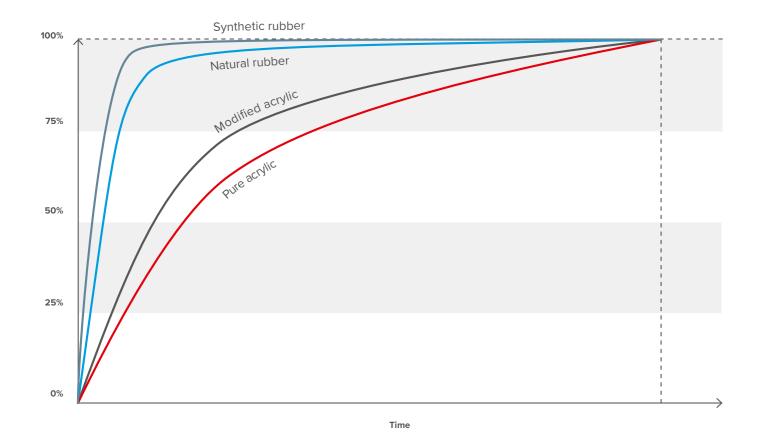
			5	unace
Material	1	I O :	20	3
Pure acrylate				
Steel				
PET (polyethylene terephthalate)				
PMMA (polymethylmethacrylate)				
PUR (polyurethane)				
Glass				
Modified acrylate				
PC (polycarbonate)				
ABS (acrylonitrile-butadiene-styrene)				
Hard PVC (polyvinyl chloride)				
PP (polypropylene), primed				
Soft PVC (polyvinyl chloride)				
Aluminium				
PS (polystyrene)				
PVA (polyvinyl acetate)				
Natural rubber				
EVA (ethylene vinyl acetate)				3
Synthetic rubber				30
PE (polyethylene)				29
PP (polypropylene)				28
PTFE (polytetrafluoroethylene, Teflon®)		16	20	





Peel adhesion and tape structure

Initial and ultimate peel adhesion



Due to the viscoelastic character of an adhesive tape the peel adhesion increases over time. The time needed to achieve the ultimate peel adhesion strongly depends on factors such as the type of adhesive mass, temperature, contact pressure and substrate. This behavior is described as the initial and ultimate peel adhesion.

As the chart shows, both synthetic and natural rubber pressure-sensitive adhesives require less time to reach the ultimate peel adhesion than acrylic-based pressure-sensitive adhesives. As a rule of thumb, it takes 72 hours to achieve the ultimate peel adhesion of acrylic adhesives. With the use of a bonding agent (adhesion promoter) the time needed to achieve the ultimate peel adhesion is typically reduced.

Higher temperatures also significantly reduce the time needed to achieve the ultimate peel adhesion. At lower processing temperatures, a much longer time is once again required to achieve the ultimate peel adhesion.

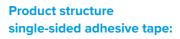
Adhesive tape structure

All adhesive tapes consist essentially of a backing material and at least one self-adhesive layer of adhesive. The product structures shown on the right are typical for single-sided and double-sided adhesive tapes.

The adhesive and backing materials are adapted to the specific application requirements of each tesa[®] adhesive tape solution. Examples of adhesive masses are acrylics, natural rubber and synthetic rubber.

Examples of backings are film, paper, tissue and foam. In order to help you choose the appropriate adhesive tape, we offer product ranges for the various fields of application. These include, for example, adhesive tapes for surface protection, masking, bundling and permanent bonding in the automotive, electronics, construction or furniture industries.





- **1** Rear surface release coating
- 2 Backing
- **3** Primer
- **4** Pressure-sensitive adhesive

Product structure double-sided adhesive tape:

- **1** Separation cover (siliconized)
- **2** Pressure-sensitive adhesive (covered side)
- **3** Primer
- **4** Backing
- **5** Primer
- 6 Pressure-sensitive adhesive (open side)

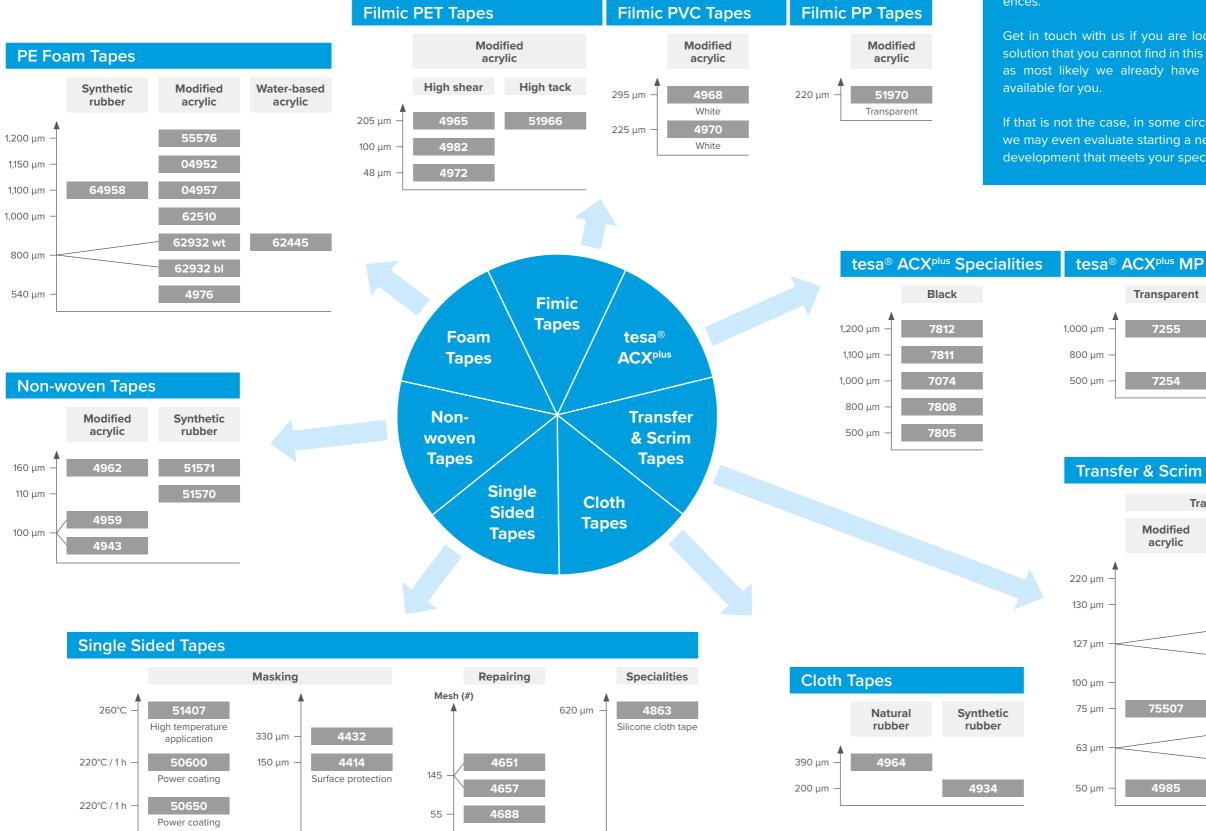
Core assortment for Converters

Product overview

Application	Category	Tapes	Page
	tesa® ACX ^{plus} acrylic core tapes	7254, 7255, 7272, 7273, 7274, 7282, 7283, 7284, 7074, 7805, 7808, 7811, 7812	29
	Double-sided foam tapes	4952, 4957, 4976, 55576, 62455, 62510, 62932, 64958, 45001	31
Bonding & lamination	Double-sided filmic tapes	4965, 4965 (59650), 4965 (59651), 4965 (59652), 4968, 4970, 4972, 4982, 51966, 51970	33
	Double-sided tissue tapes	4934, 4943, 4959, 4962, 4964, 51570, 51571	35
	Tranfer & scrim tapes	52105, 52110, 4985, 4965, 88125, 88150, 88225, 88250, 66013, 66022, 75007,	37
	Premium cloth tapes	4651, 4657	41
Repairing & general applications	Mid-grade cloth tape	4688	41
	Sandplasting tapes	4432	45
Masking & surface protection	Powder coating tapes	50600, 50650	45
	Surface protection tapes	4414, 51136	45
	Masking specialties	51407	45
Angillan	Roller wrapping	4863	49
Ancillary	Adhesion promoters, removers & cleaners	60040, 60150, 60151, 6012, 60153, 60042	50



Product overview



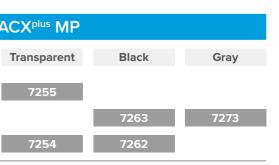
Endless possibilities

The products showcased in this brochure are just a small portion of our complete tape assortment, counting more than 7,000 refer-

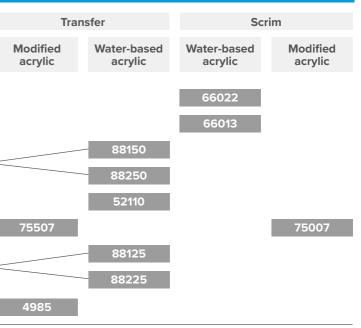
Get in touch with us if you are looking for a solution that you cannot find in this document, as most likely we already have something

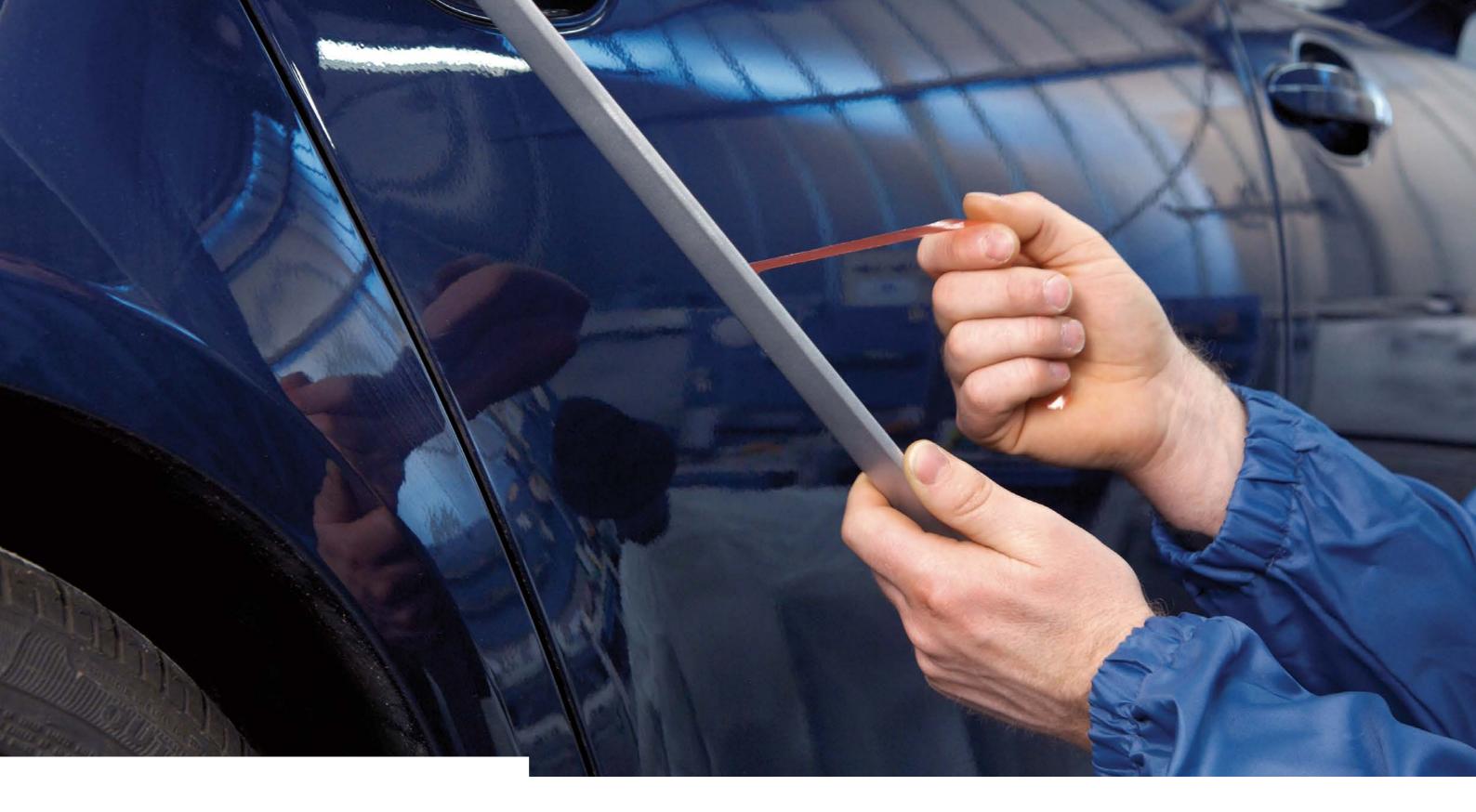
If that is not the case, in some circumstances we may even evaluate starting a new product development that meets your specific needs.





Transfer & Scrim Tapes





Bonding & lamination

The world of double-sided tapes

In many industries double-sided tapes are an important bonding solution. They are used in cars, electronic devices, household appliances, facade elements, windows and doors, glass partition walls, elevators, furniture, etc.

Depending on the tape's specific characteristics, they also dissipate stress due to their viscoelastic behavior, prevent oxidation, and are resistant to UV radiation, extreme temperatures, humidity, aging, and chemicals. Compared to other bonding technologies like welding, screws, nails, and liquid glue, double-sided adhesive tape provides many advantages.

	-	of double-sided tape e and mechanical fastening	Double-sided tape	Liquid glue	Mechanical fastening (e.g., rivets, screws, nails)
				1	
Design		Improved visual appearance – no damage to the material		•••	•
Des		Invisible fastening — mounting of transparent materials		•••	
Assembly		Fast application process – elimination of curing time and reduction of complexity		•	
Asse		Healthy working environment and clean production sites			
		Compensation of irregular or uneven surfaces – gaps between bonded surfaces are eliminated		••••	•
	X	Compensation of tension and stress dissipation – single bonding point with mechanical fasteners can lead to material breakage		••	•
Quality		Noise-dampening properties – sounds caused by vibration are eliminated		•••	•
Qué	diii	Shock absorption		••	•
	<u></u>	Sealing function – tape seals and protects against dust and moisture		••••	
	†=	Reduced risk of corrosion			•



The structure of double-sides tapes

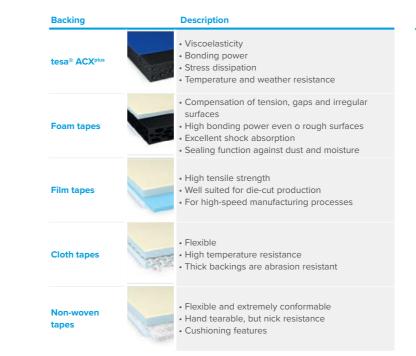
Adhesive tapes consist of various functional layers. The adhesive layer can be applied to either one or both sides of the backing (to create single- or double-sided tape). The typical structure of double-sided adhesive tapes is outlined in the following diagram. Our double-sided tapes consist of five main components:

Structure of double-sided adhesive tape:

- Release liner (silicon coated)
- **2** Adhesive (closed side)
- **3** Primer
- 4 Backing
- **5** Primer
- 6 Adhesive (open side)



Backings



Adhesive systems

	Description	Attr
Pure acrylic	Pure acrylic adhesive is especially suitable for outdoor applications and applications at elevated temperatures	• Go • Ve • Re
Tackified acrylic	Tackified acrylic is a versatile adhesive with a well- balanced performance on a wide vaiety of surfaces for permanent applications	• Ve • Hi • Re
Water-based acrylic	Water-based acrylic adhesives are solvent-free and thus feature low VOC emissions. They are quite ver- satile and perform well in lamination and lightweight mounting applications.	• Lo • Hi • Go • Go • Po
Synthetic rubber (SiS)	SiS adhesive is suitable for a variety of surfaces but offers limited aging and temperature restistance	• Hi • Go • Ve
Natural rubber	Natural rubber adhesive is extremly sticky for use on rough surfaces	• Hi • Ve • Pr

Backing

The backing is relevant for some of the main features of a double-sided tape. For rough surfaces, thicker foam tapes come into play. Thinner filmic tapes can be used for transparent bonding requirements and high-performance tapes are able to dissipate stress thanks to their viscoelastic behavior.

Liner

Some adhesive tapes have special separating layers, the so-called release coating and the release liner, on the top side, so that the adhesive tape on the roll does not stick to the layer above it. Siliconized papers or films are the main types of release liners. The optimal liner choice depends on the application. If die-cut ability is required, polyester liners are preferable. If the tape is exposed to humidity, poly-coated papers are mainly used due to their dimensional stability. For most applications, paper liners are the liners of choice.

Adhesive System

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

Primer

Often, the backing consists of plastic, for example, because that is the most sensible solution for this area of use. However, there are plastics and other materials which adhesive does not stick well to. Polyethylene (PE), polypropylene (PP), Teflon, rubber and silicone are some of these. Experts speak of "very low surface energy." The actually "exciting" thing about a primer is: it increases this surface tension, which lets the backing and the adhesive stick to each other more strongly.

Liners

Product features/advantages	Color	Thick- ness	Weight [g/m²]	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	Red	80	72	> 180
High tear resistanceSafe use in automated processes		120	108	> 180
PET (polyethylene terephthalate) release film	Trans-	50	72	> 70
Excellent tear strengthGood thickness toleranceDust-free processing	parent	75	109	> 100
 PE (polyethylene) release film Flexible and soft for easy application on curved surfaces No fraying during the sawing process 	Dark blue	100	94	> 16

tributes

Good adhesive strength on polar and pretreated non-polar surfaces Very good performance -at elevated temperatures Restistance against environmental conditions (e.g. UV, humidity) and aging

Very good adhesive strength on polar surfaces, good on non-polar surfaces High initial adhesion power

Restistance against environmental conditions (e.g. UV, humidity) and aging

ow VOC

ligh tack

Good adhesion to polar substrates

Good heat and aging resistance

Poor adhesion to non-polar substrates

Preferred for indoor use or temporary outdoors applications

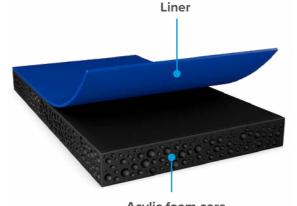
High immediate adhesive bonding strength Good shear resistance

/ery good bonding on polar and non-polar surfaces

High immediate adhesive bonding strength /ery good bonding on polar and non-polar surfaces Preferred for use in indoor applications

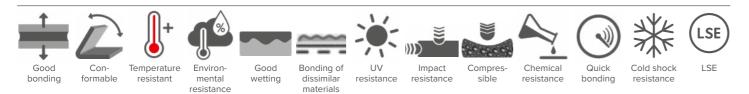
tesa® ACX^{plus} acrylic core tapes

Constructive bonding is a key element in every industry and can be very challenging. Traditional mechanical fasteners like rivets, welds, screws, or liquid glue may not be suitable or can even damage the substrates. That is where our high-performance bonding tapes come into play. tesa®ACX^{plus} is an acrylic foam tape with very special bonding capabilities based on its viscoelasticity: this leads to elastic and viscous characteristics, providing inner strength as well as relaxation of mechanical stresses. tesa® ACX^{plus} bonding solutions can outperform conventional fastening methods by optimizing our customers' production processes and the quality and aesthetics of their products.



Acylic foam core

Main features



plastics, as well as impressive cold shock,

humidity and UV resistance.

Foamed acrylic

Foamed acrylic

Thickness Standard Core Adhesion to steel Temperature resistence Product Description Backing Adhesive Liner Color log roll width [mm] material / diameter Ultimate [N/cm] short / long term [°C] [um] tesa[®] ACX^{plus} Multi Purpose tesa® ACX PF / 3" 19 200 / 100 PE-coated paper white w/logo 500 900 Solid acrvlic Pure acrvlic 7254 Multi Purpose Transparent acrylic foam tape suitable for a wide range of general bonding applications tesa® ACX^{pl} between transparent or translucent surfaces. Solid acrylic Pure acrylic PE-coated paper white w/logo 1000 900 PE / 3" 24 200 / 100 7255 Multi Purpose tesa® ACX^{plu} Foamed acrylic Pure acrylic Filmic white w/logo 600 900 PE / 3" 28 200 / 100 7272 Multi Purpose Acrylic foam tape suitable for a wide range of tesa® ACX^p 28 general bonding applications, such as moun-Foamed acrylic Pure acrylic Filmic white w/logo 800 900 PE / 3" 200 / 100 7273 Multi Purpose ting of emblems, decorative parts and signs, tesa[®] ACX^{plus} 1000 PE / 3" 28 200 / 100 Filmic white w/logo 900 Foamed acrylic Pure acrylic 7274 Multi Purpos tesa® ACXplus 640 PE / 3" 26 Foamed acrylic Modified acrylic Filmic white w/logo 630 200 (short) 7282 Multi Purpose Acrylic foam tape suitable for a wide range of general bonding applications, such as mountesa® ACX^{pl} Modified acrylic ting of emblems, decorative parts and signs. Foamed acrylic Filmic white w/logo 800 630 PE / 3" 27 200 (short) 7283 Multi Purpose Shows good adhesion on surfaces with low surface energy, e.g. plastics/PE. tesa® ACX^{plus} 29 1100 630 PE / 3" 200 (short) Foamed acrylic Modified acrylic Filmic white w/logo 7284 Multi Purpose tesa[®] ACX^{plus} Specialties Acrylic foam tape for permanent demanding tesa[®] ACX^{plus} 7074 outdoor bonding applications, showing outs-1000 1240 PE / 3" 30 200 / 100 HDPE blue Foamed acrvlic Pure acrvlic tanding cold shock, UV, chemicals, salt water **High Resista** and cleaning agent resistance. tesa® ACX^{plus} 7805 Tackified acrylic HDPE blue 500 1260 PE / 3" 21 80 Foamed acrylic Black Line tesa® ACX^{pl} 780 Closed cell acrylic foam tape showing high Foamed acrylic Tackified acrylic HDPE blue 800 1260 PE / 3" 26 80 **Black Line** bonding power on MSE clear coats and

HDPE blue

HDPE blue

Tackified acrylic

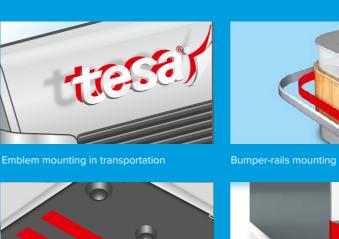
Tackified acrylic

1100

1200

tesa® ACX^{plus} 7811 Black Line

tesa® ACX^{plus} 7812 Black Line



Interior mounting in transportation

PE / 3"

PE / 3"

1260

1260

32

32

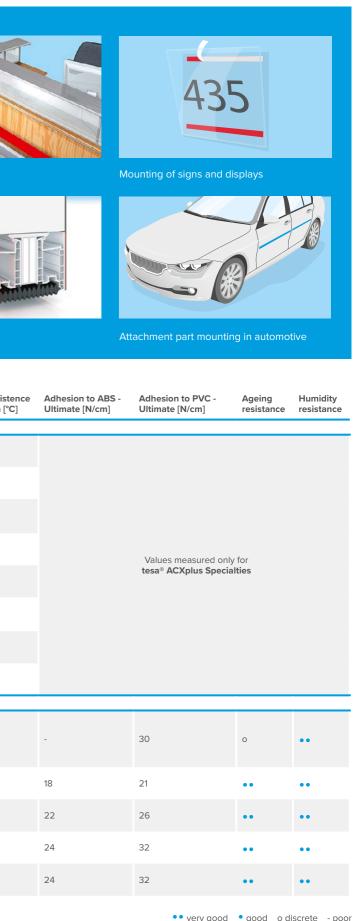
Application examples

Door panel mounting

70

80

Check out more details by clicking on the product name.

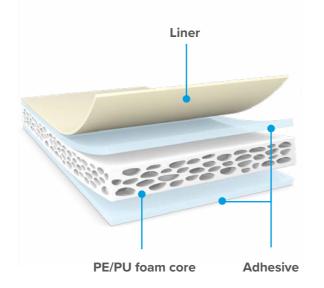


Bonding & lamination 30

Double-sided foam tapes

Double-sided foam tapes are a broad category which includes products that, thanks to the characteristics of their backing, can be used to compensate for gaps, bond different substrates, and dampen unwanted noises or vibrations.

Depending on the foam and adhesive composition, they can be suitable for lightweight or more demanding mounting applications, permanent or temporary, even on LSE surfaces. Some may also be used for outdoors applications, thanks to their resistance against UV, humidity and ageing.



Application examples





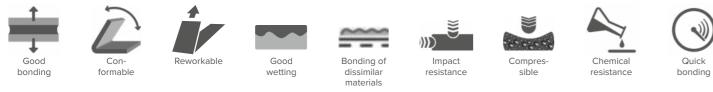
Mounting of signs and displays

Deco panel mounting in furniture

Deco glass mounting in appliances



Main features

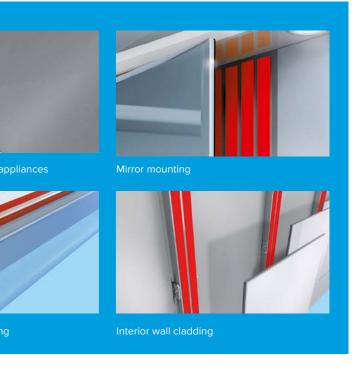


Quick

Store shelf edge mounting

Product		Description	Backing	Adhesive	Liner	Thickness [µm]	Color	Standard log roll width [mm]	Core material / diameter	Adhesion to steel - Ultimate [N/cm]	Adhesion to PE - Ultimate [N/cm]	Adhesion to PVC - Ultimate [N/cm]
★ tesa® 4952	, O	Double-sided PE foam tape for mounting applications, resistant against UV, humidity, water, chemicals, and aging. Suitable for fixing flat objects such as mirrors, signs, and decorative materials	PE foam	Tackified acrylic	Glassine brown	1150	0	1360	cardboard / 3"	8	2.8	8
tesa [®] 4957	<u>,</u>	Double sided PE foam tape for general mounting applications indoors and outdoors: resistant against UV, water, chemicals, and aging. Certified for furniture mirror mounting and window bar mounting.	PE foam	Tackified acrylic	Glassine brown	1100	•	1360	cardboard / 3"	4	2.2	4
tesa [®] 4976	O	Conformable double sided open-cell PU foam tape for general mounting ap- plications. Shows high short term temperature resistance and good sealing fuctions.	PE foam	Tackified acrylic	Glassine brown	540	•	1360	cardboard / 3"	12	4.3	12
tesa [®] 55576		Double sided PE foam tape for light duty mounting of trims & profiles, POS signs, advertising material and mirror pre-mounting.	PE foam	Tackified acrylic	PE red	1200	0	1060	cardboard / 3"	5.5**	1.4**	3**
tesa [®] 62455		Double-sided PE foam tape with good peel adhesion even on critical surfa- ces, suitable for basic indoor and outdoor applications. Designed mainly for trims & profiles mounting.	PE foam	Water-based acrylic	Glassine white	1000	\bigcirc	9, 12, 19	cardboard / 3"	6*		6
tesa [®] 62510	Ø	Conformable double sided highly-compressed PE foam tape for general mounting applications. Fully outdoor suitable: resistant against UV, water and aging.	PE foam	Tackified acrylic	Glassine brown	1000	•	1360	cardboard / 3"	13.5	0.9	13.5
tesa® 62932	QO	Thin double sided PE foam tape for a variety of constructive mounting applications. Fully outdoor suitable: resistant against UV, water, ageing and cold shocks.	PE foam	Tackified acrylic	Glassine brown	500	ullet	1360	cardboard / 3"	17	3	17
tesa® 64958	JO	Conformable double sided PE foam tape for general mounting applications, showing immediate bonding strength even on rough, uneven surfaces and LSE surfaces.	PE foam	Synthetic rubber	Glassine paper	1050	\bigcirc	1400	cardboard / 3"	4	4	4
tesa® 45001	Q	PE-foam tape for permanent mounting in demanding applications, flame-re- tardant according to FAR 25.853(a) and UL 94 HBF–HF1. Highly conformable and lightweight.	PE foam	Pure acrylic	MOPP red	1000	0	1360	cardboard / 3"	22		

Check out more details **F** by clicking on the product name.



Temperature Static shear resistence Ageing Humidity Tack resistence short / long resistance resistance at 23 °C term [°C] 80 / 80 •• 80 / 80 •• 200 / 80 •• 80 / 60 80 / 80 80 / 80 •• 80 / 80 •• 60 / 40 ... 100 / 80 •• •• •• •• very good • good o discrete - poor ** Initial peel adhesion * to Aluminum

Double-sided filmic tapes

Double-sided filmic tapes are relatively thin, dimensionally stable, and are ideal for bonding to flat, smooth surfaces such as glass, metal, and non-embossed plastics. Nevertheless, thicker tapes offer good performance also on rough, hard to stick surfaces and generally offer a good temperature resistance.

The wide range of thicknesses from 48 μ m to 300 μ m offer multiple performance and design to cost options. Selected tapes for lamination and converting applications also offer very low VOC emissions.

Liner Filmic backing Adhesive









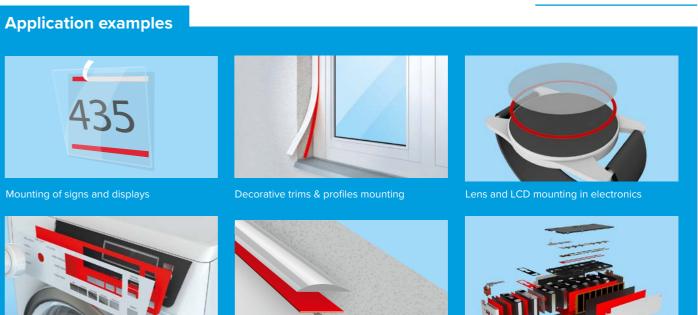






bonding









Mounting of displays and LCD panels in appliance

Floor laying solutions

	Product	Description	Backing	Adhesive	Liner	Thickness [µm]	Color	Standard log roll width [mm]	Core material / diameter	Adhesion to steel - Ultimate [N/cm]	Adhesion to PE - Ultimate [N/cm]	Adhesion to PVC - Ultimate [N/cm]
1	r tesa® 4965 Original	High performance transparent PET double-sided tape based on a patented product formulation, showing reliable bond even on hard to stick surfaces and under critical conditions.	PET film	Tackified acrylic	MOPP red	205	\otimes	1372	Cardboard / 3"	11.8	6.9	13
	tesa® 4965 Thin (59650)	Thin transparent double-sided PET tape equipped with our proven tesa® 4965 adhesive. Shows high holding power even at high temperatures and on LSE surfaces, superior converting performance and reduced adhesive mass flow.	PET film	Tackified acrylic	Glassine brown	160	\otimes	1372	PE / 3"	13.4	5.7	11.9
	tesa® 4965 Thick (59651)	Thick transparent double-sided PET tape equipped with our proven tesa [®] 4965 adhesive. Shows high holding power even under demanding environmental conditions and good converting performance.	PET film	Tackified acrylic	Glassine brown w/logo	300	\otimes	1372	PE / 3"	12.9	6.4	14.3*
	tesa® 4965 Black (59652)	Black double-sided PET tape equipped with our proven tesa® 4965 ad- hesive. Shows outstanding holding power even to LSE surfaces and powder painted substrates. The black color optimizes automatic pick and place processes.	PET film	Tackified acrylic	Glassine brown w/logo	205	•	1372	Cardboard / 3"	14	6.6	12.8
	tesa® 4968	PVC double-sided tape showing high UV-stability, chemical resistence and flame retardancy. Proves exceptional bonding to low energy or rough substrates, for general mounting applications.	PVC film	Tackified acrylic	Glassine brown	295	\bigcirc	1372	Cardboard / 3"	21.2	14.1**	24.6*
	tesa® 4970	Thick PVC double-sided tape showing high tack, immediate adhesion and good performance on rough or dusty surfaces. Suitable for long term mounting of signage, POS materials and trims.	PVC film	Tackified acrylic	Glassine brown	225	\bigcirc	1372	Cardboard / 3"	13.6	9.1	16.6
	tesa® 4972	Transparent PET double-sided tape with high initial tack and adhesion. Suitable for long term mounting applications and designed for converter and tape specialist business.	PET film	Tackified acrylic	Glassine brown w/logo	48	\otimes	1240	Cardboard / 3"	9.6	3.5	9.4
	tesa® 4982	Transparent PET double-sided tape with excellent bonding strength/thick- ness ratio and temperature resistence. Good for mounting of LCD panels and battery packs.	PET film	Tackified acrylic	Glassine brown w/logo	100	\otimes	1372	PE / 3"	11.7	5.1	10
	tesa® 51966	Transparent PET double-sided tape with high initial tack and adhesion. Suitable for long term mounting applications and designed for converter and tape specialist business.	PET film	Tackified acrylic	Glassine brown w/logo	200	\otimes	1372	Cardboard / 3"	11	7.5	13
	tesa® 51970	Transparent PP double-sided tape showing high tack and adhesion, secure bond even on critical materials such as PP, PE and rough surfaces, good temperature resistance and outdoor suitability.	PE film	Tackified acrylic	Glassine brown	220	\otimes	1372	Cardboard / 3"	13.5	6.8	17

Check out more details 🛛 🛹 by clicking on the product name.

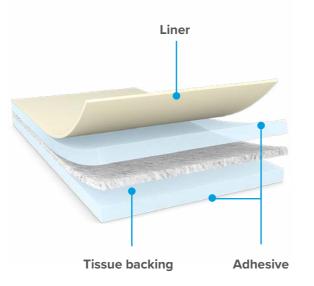
Battery pack mounting in EVs

Temperature resistence short / long term [°C]	Static shear resistence at 23 °C	Tack	Ageing resistance	Humidity resistance
200 / 100	•	•	•	••
200 / 100	•	•	••	••
200 / 100	•	•		••
200 / 100	•	•	••	••
70 (short)	•	•	•	••
70 / 60	•	•	•	••
200 / 100	•	0	0	••
200 / 100	•	0	0	••
130 / 80	•			•
130 / 80	•	•	•	••
	•• very go	ood • good O	discrete - poor	* to PC * to PP

Double-sided tissue tapes

Tissue double-sided tapes, thanks to their non-woven or cloth backings, are conformable and flexible, allowing them to stick to irregular surfaces as needed. They are made to be easily die-cut and to be tearable by hand whilst being tear resistant.

They are in many cases suitable to quite demanding and permanent mounting applications in a variety of industries and offer a very good initial tack on most surfaces. Thanks to their flexibility, they can also be used for lamination and splicing of foams, textiles, leather and heavy papers, as well as floor laying applications.



Application examples





Floor laying



Membrane switch mounting in appliances

Main features



Good for Handlamination tearable

Good die-cutting

Good wetting

Adhesion Adhesion Adhesion Standard Core Thickness to steel to PE to PVC -Product Description Backing Liner Color log roll width material / Adhesive [µm] Ultimate Ultimate Ultimate [mm] diameter [N/cm] [N/cm] [N/cm] Solvent-free double-sided cloth tape with high tack, humidity resistence and Synthetic Glassin tesa® 4934 suitable for rough surfaces. Performs best in indoor applications such as 200 1400 Cardboard / 3" 24 8.5 22.5 cloth rubber white carpet laying and can be torn by hand. Double-sided non-woven tape providing high initial tack and good shear Tackified Glassine white \bigcirc tesa® **4943** 100 1220 Cardboard / 3" 8.1 0 10.8 resistance. Optimal for lamination, lightweight mounting, splicing and bag non-woven acrylic w/logo sealina. Double-sided non-woven tape providing high initial tack and good shear, Tackified Glassine 1372 14 tesa® 4959 UV and plasticizer resistance. Optimal for lamination, lightweight mounting, non-woven 100 Cardboard / 3" 8.5 4.5 acrylic brown splicing and bag sealing. High-adhesion double-sided non-woven tape proving excellent wetting Tackified Glassine \bigcirc tesa® 4962 160 1372 Cardboard / 3" 12 15 power on rough surfaces and temperature resistance. Optimal for mounting non-woven 7 acrylic brown of plastic and foam parts, heavy papers, textiles and leather Strong and flexible double-sided cloth tape created to adhere to rough and Glassine tesa® 4964 non-polar surfaces with residue-free removability. Suitable for laminations, cloth Natural rubber 390 1550 Cardboard / 3" 7.6 5.4 7 brown splicing and applications in the carpentry and leather industry. Double-sided non-woven tape for permanent mounting of metal and plastic Tackified Glassine \bigcirc tesa® 51570 materials. The thick adhesive bonds well on uneven surfaces and shows a 110 1400 Cardboard / 3" 13 12.5 non-wover 7 acrylic brown very high initial tack. Double-sided non-woven tape for permanent mounting of metal and plastic Tackified Glassine tesa® **51571** 160 1400 Cardboard / 3" 13 8.5 13 materials. The thick adhesive bonds well on uneven surfaces and shows a non-woven acrylic brown very high initial tack.

Check out more details 7 by clicking on the product name

Temperature resistence short / long term [°C]	Static shear resistence at 23 °C	Tack	Ageing resistance	Humidity resistance
60 / 40	••	••	••	•
100 / 70	••	•	•	•
200 / 80	•	••	••	•
200 / 80	•	••	••	••
110 / 30	0	••	••	0
80 / 40	•	••	••	•
80 / 40	••	•	•	•
	•• very go	od • good O	discrete - poor	* to PC * to PP

Transfer & scrim tapes

Double-sided transfer tapes differ from other double-sided tapes in that they have no backing. Scrim tapes are similar in structure, with the only difference that the adhesive mass is reinforced by a scrim.

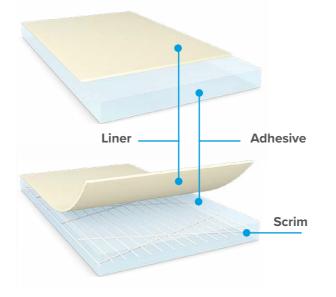
They are transparent and extremely conformable, but do not allow repositioning. Being thin but strong products, they also ensure an efficient converting and laminating process. They can be used in a variety of lamination, splicing and lightweight mounting, especially when extreme thinness and/or adhesion to flexible substrates is requested. Solvent-free production results in an environmentally friendly application process, with Low VOC features.

Quick

bonding

Chemical

resistance



Transparent

bonding

Good for

lamination





Signage mounting



Splicing of heavy papers

Product		Description	Backing	Adhesive	Liner	Thicknes [µm]	^S Color	Standard log roll width [mm]	Core material / diameter	Adhesion to steel - Ultimate [N/cm]	Adhesion to PE - Ultimate [N/cm]	Adhesion to PVC - Ultimate [N/cm]	Temperature resistence short / long term [°C]	Tack	Ageing resistance
Transfer tapes															
tesa® 52105 Ultra Low VOC		Conformable, water-based acrylic adhesive transfer tape with low VOC pro- perties, suitable for laminating flexible substrates and lightweight mounting. Good die cutting properties and LSE performance.	None	Water-based acrylic	Glassine yellow	50	\otimes	1500	Cardboard / 3"	9.5	1,5*	8,5**	170	••	••
tesa® 52110 Ultra Low VOC		Conformable, water-based acrylic adhesive transfer tape with low VOC pro- perties, suitable for laminating flexible substrates and lightweight mounting. Good die cutting properties and LSE performance.	None	Water-based acrylic	Glassine yellow	100	\otimes	1500	Cardboard / 3"	13	9,5*	11**	180	••	••
tesa® 4985		Transparent transfer tape with a modified acrylic adhesive. It offers good immediate grab to uneven surfaces. Used for mounting of posters, photos, fabrics and paper splicing.	None	Tackified acrylic	Glassine brown	50	\otimes	1270	Cardboard / 3"	11.1	4.9	9.4	200	••	••
tesa® 4965 Transfer (75507)		Conformable, tackified acrylic transfer tape equipped with our proven tesa® 4965 adhesive. Shows excellent die-cutting properties. Suitable for a variety of lamination, splicing and lightweigt mounting applications.	None	Tackified acrylic	Glassine brown	75	\otimes	1372	PE / 3"	11			100	•	••
tesa® 88125		Conformable, transparent water-based acrylic transfer tape developed for lamination of flexible substrates (NVH, BSR, rubber, fabrics). Good die cutting properties.	None	Water-based acrylic	PE-coated paper white w/logo	63	\otimes	1524	Cardboard / 3"	6	1	13.4***	200	•	•
tesa® 88150		Conformable, transparent water-based acrylic transfer tape developed for lamination of flexible substrates (NVH, BSR, rubber, fabrics). Good die cutting properties.	None	Water-based acrylic	PE-coated paper white w/logo	127	\otimes	1524	Cardboard / 3"	8	1.5	14***	200	•	•
tesa® 88225	A	Conformable, transparent water-based acrylic transfer tape developed for lamination of flexible substrates (NVH, BSR, rubber, fabrics). Good die cutting properties and LSE performance.	None	Water-based acrylic	PE-coated paper white w/logo	63	\otimes	1524	Cardboard / 3"	10	3	9***	180	••	••
tesa® 88250		Conformable, transparent water-based acrylic transfer tape developed for lamination of flexible substrates (NVH, BSR, rubber, fabrics). Good die cutting properties and LSE performance.	None	Water-based acrylic	PE-coated paper white w/logo	127	\otimes	1524	Cardboard / 3"	10	5	12***	180		
Scrim tapes															
tesa® 66013 Ultra Low VOC		Conformable, water-based acrylic adhesive tape reinforced by a PET scrim and low VOC properties, suitable for laminating all kinds of flexible substrates and lightweight mounting. Good die cutting properties and LSE performance.	None	Water-based acrylic w/ PET scrim	Glassine brown w/ logo	130	\otimes	1150	Cardboard / 3"	16.5	7.2	14.3	180	••	••
tesa® 66022 Ultra Low VOC		Conformable water-based acrylic adhesive tape reinforced by a PET scrim, with low VOC properties. Suitable for laminating all kinds of flexible substra- tes and lightweight mounting. Good die cutting properties.	None	Water-based acrylic w/ PET scrim	Glassine brown w/ logo	220	\otimes	1150	Cardboard / 3"	17.3	9	19.3	200	••	••
tesa® 75007 Low VOC		Conformable, tackified acrylic adhesive tape reinforced by a PET scrim, with low VOC properties. Suitable for demanding lamination and mounting appli- cations, even on low surface energy substrates.	None	Tackified acrylic w/ PET scrim	Glassine brown w/ logo	75	\otimes	1372	Cardboard / 3"	8.6	4.9	8.8	170	••	••
												• very good • goo	d O discrete - poor * to	PP, initial ** to	PC, initial * to

LOW

Low and Ultralow VOC

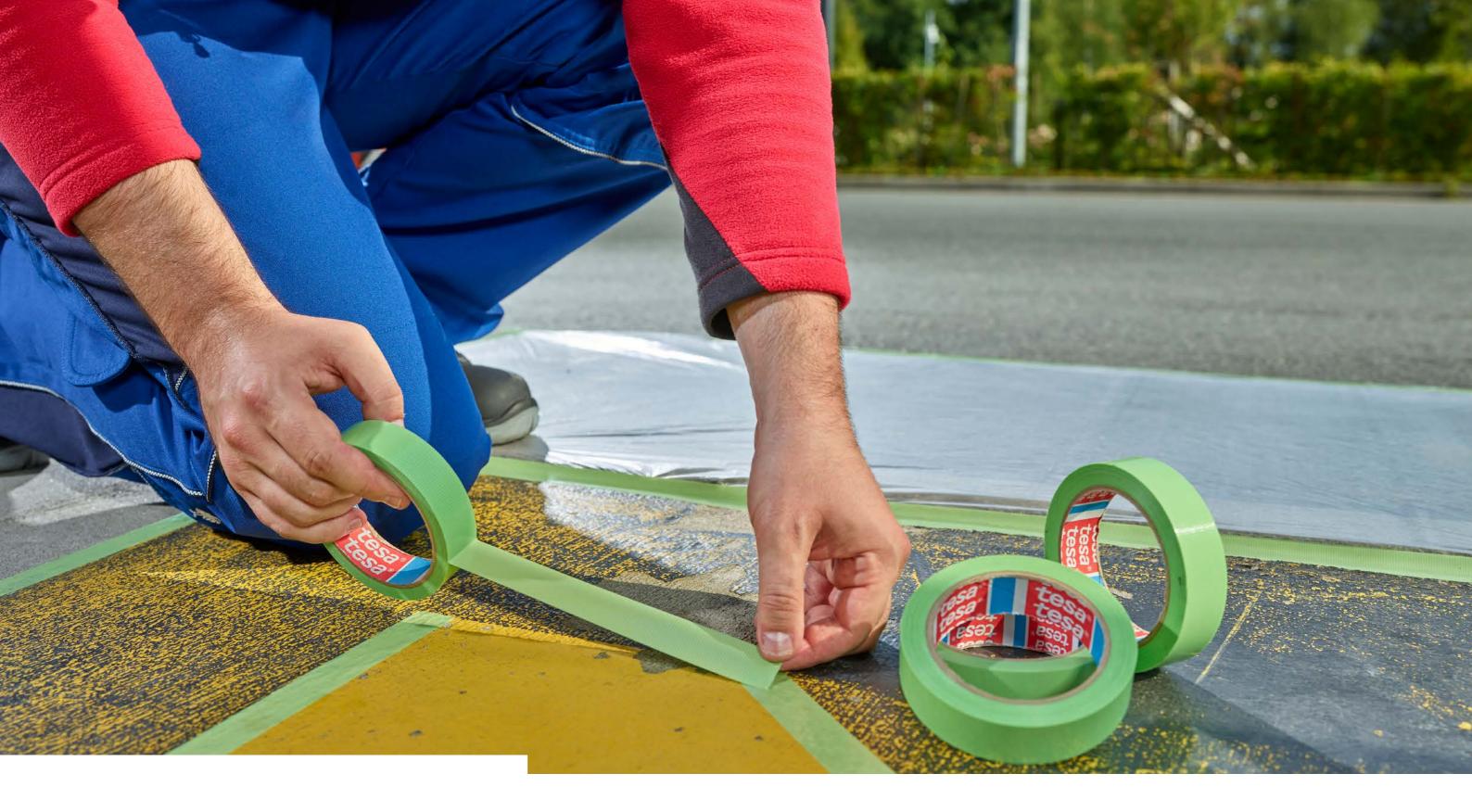
37 Bonding & lamination

Main features

Conformable

High bonding

Check out more details 🛛 🛹 by clicking on the product name.

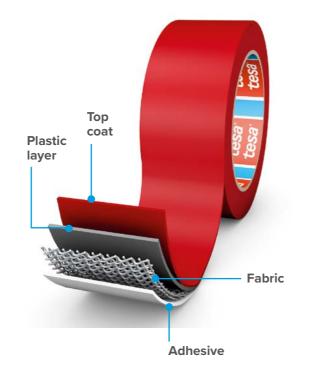


Repairing & general applications

Cloth tapes

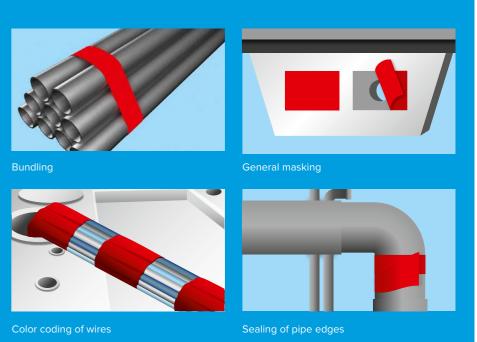
Cloth tapes are ideal products for temporary applications, such as repairing, sealing, bundling, masking. They can bond to rough surfaces, are hand tearable and can be removed quickly and cleanly after use. The higher the mesh count of the backing, the tougher the tape is and the higher its tensile strength and abrasion resistance. Mesh count is a measure of how many threads cross each other per square inch of tape.

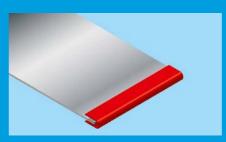
Cloth tapes are very versatile and may be used not only for repairing applications, but also for masking while sandblasting or spray painting, bundling and reinforcing, color coding of wires, permanent sealing of pipe joints, securing of sharp edges, fixing and insulating wires.



Application examples







Securing of sharp edges

Main features



Product		Description	Level	Backing	Adhesive	Thickness [µm]	Color	Standard log roll width [mm]	Core material / diameter	Adhesion to steel - Ultimate [N/cm]
tesa® 4651		Very strong cloth tape for almost every application, including masking, sea- ling, bundling, or repairing. Due to its resistance to water, UV and humidity, it is ideal for long term outdoor applications	Premium	Acrylic-coated cloth	Natural rubber	310	•••	970	Cardboard / 3"	3.3
tesa® 4657 PV1	C.	High-quality cloth tape showing good tensile strength, hand-tearability and resistance to high temperatures, water, abrasion and solvents. Used for a wide range of fastening, covering, and masking applications indoors and outdoors.	Premium	Thermosetting natural rubber		290	•	965	Cardboard / 3"	4.6
tesa® 4688	agu)	Mid-grade cloth tape used for various masking, marking, packaging, pro- tecting and repairing applications. It is water repellant, hand-tearable and temperature and abrasion resistant.	Mid-grade	PE extruded cloth	Natural rubber	260	•//•○•••	1300	Cardboard / 3"	4.5



Temperature resistence short / long term [°C]	Mesh count	Tensile strength
130	145	100
180	145	100
110	110	52
	•• very good • ge	ood O discrete - poor

Repairing & general applications 42



Masking & surface protection

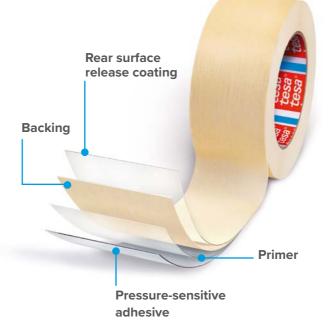
Industrial paint jobs & surface protection tapes

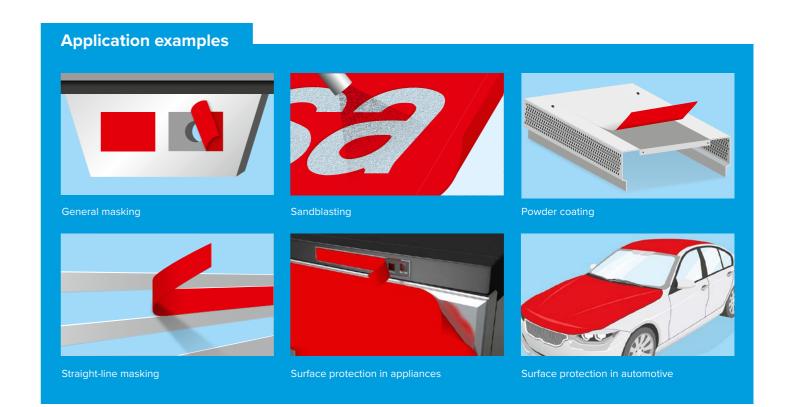
Masking tapes are essential for a variety of industrial painting applications, even at very high temperatures, while surface protection tapes protect sensitive surfaces from scratches. They must be easy to use and removable without residue, both indoors and outdoors.

The most common industrial application fields for masking tapes are the following:

- Wet coating/spray painting
- Powder coating
- Sandblasting
- Galvanizing
- Surface protection

Our tapes with a paper or film backing have a low elongation and are therefore perfect when straight paint edges are required, for example for two-tone applications. Due to their good quick-stick properties, the paper masking tapes can also be used to securely fix masks that protect surrounding areas against overspray.





Main features

Reworkable	Con-	Hand-tearable	No scratches	Residue free	Environ-		Temperature	Chemical	Con-
Rewondbie	formable	(paper backing)		Residue free	mental resistance	resistance	resistance	resistance	formable

Product		Description	Main application	Backing	Adhesive	Thickness [μm]	Color	Standard log roll width [mm]	Core material / diameter
tesa [®] 4432		Strong flat paper masking tape mainly used for stenciling during sandblasting applications. Features strong hold on multiple surfaces, high tack, great paint anchorage and plottability.		Flat paper	Natural rubber	330	•	1020	Cardboard / 3"
tesa® 50600 Standard	Ø	High-temperature PET masking tape used for masking during powder-coa- ting processes or bonding and splicing applications of non-polar materials. Features: easy to apply, residue-free removability. tesa® 50600 is also available on a special PET liner	Powder coating	PETP	Silicone	80	•	1280	PE / 3"
tesa® 50650 Conformable	0	Conformable high-temperature PET masking tape used for masking during powder-coating processes, surface protection applications and bonding of non-polar materials. Features: easy to apply, residue-free removability.	Powder coating	PETP	Silicone	55	•	1280	PE / 3"
tesa® 4414		UV-stabilized strong PE tape with high tack and clean removability up to 6 months, even in outdoors conditions. Used for temporary protection of surfaces during assembly, storage and transportation.	Surface protection	PE film	Acrylic	150	•	1450	Cardboard / 3"
tesa® 51136 PV2		PE tape featuring good adhesion and traceless removal, used for masking large areas of interior plastic parts and textiles, mainly in transportation industries.	Surface protection	PE film	Acrylic	110	•	1450	Cardboard / 3"
tesa [®] 51407	O	Polyimide tape with silicone adhesive developed to provide extremely high temperature and chemical resistance. Used for wave soldering, thermal insulation, cable wrapping and powder-coating masking.	Speciality	Polyimide	Silicone	62	•	1000	PE / 3"



Adhesion to steel - Ultimate [N/cm]	Temperature resistence short / long term [°C]	Tensile strength
8	100	93
4	220	75
3.3	220	50
2.2	70	23
2.6	100	19
2.5	260	40
	•• very good • good	O discrete - poor

Masking & surface protection 46



Ancillary products

Roller wrapping

Our decades of experience as the pioneering manufacturer of roller wrapping tapes have made our Printer's Friend® tapes a benchmark. They support a variety of manufacturing and printing processes that utilize roller systems and process materials such as films, textiles, paper, and more.

Ever striving for highest quality and optimal solutions, the well-proven tape design has been improved even further over the years, ensuring maximum process reliability and efficiency. The tape design allows for clean and accurate application, while at the same time ensuring easy removal. Applied on the roller, the tape will securely keep its position, even at elevated temperatures.

Our Printer's Friend® roller wrapping tapes:

- Offer outstanding grip and traction to provide tension in the web being processed
- Repel a variety of substances involved in the process (e.g. adhesives or inks)
- Are highly resistant to wear
- · Are easily removable, even after a prolonged period of time
- · Are exceptionally temperature resistant



Put the tape on a flat surface

Wrap the tape once around the roller at the desired angle and mark the point where the end of the roll meets the second turn of the tape.



and cut it diagonally from the end of the roll to the marked point of the tape.



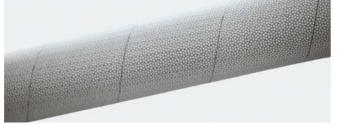
Remove the liner and start applying the tape, starting from the edge of the roller.



Keep on wrapping the roller with the tape at even angles. leaving no gaps in between the layers.



Complete roller spiral wrapped, providing grip and a nonstick surface.



Alternative design, starting from the middle and wrapping to the ends aids in pulling the material evenly across the roller to eliminate creases

Product	Desciption	Backing	Adhesive	Liner	Thickness [%]	Color	Standard log roll width	Core material / diameter	Adhesion to steel ultimate
tesa Printer`s Friend® 4863	Cloth tape with embossed silicone coated surface, which offers reliable "grip". Designed for roller wrapping in a variety of manufacturing, converting and printing processes.	Silicone- coated cloth	Natural rubber	PP red	620	•	100	cardboard / 3°	3

Surface cleaning

The surfaces to be bonded must be clean, dry and free of dust, grease, oil and release agents. For cleaning, only use clean cloths and material-compatible cleaning agents. The components must be adapted to the ambient climate for a sufficient period to prevent the formation of condensation on the surfaces.

Prior to bonding, the surfaces are cleaned and thus all impurities removed. These include:

Dust

• Greases

- Release agents
- Waxes
- Plasticisers
- Oxidation layers, e.g. rust

Coarse, dusty or grainy impurities can best be removed with a brush or a white lint-free cloth.

Cleaning with water and solvent



Water-soluble impurities can be removed with water and detergents. Other impurities, e.g. oil traces, grease, wax, and release agents, can strongly reduce the bonding capacity of the surface. Special care must be taken to remove such impurities. Suitable solvents for this are:

- tesa[®] 60040 Industry Cleaner
- Isopropanol
- Isopropanol + water (1:1)
- · Acetone or methyl ethyl ketone (butanone)

Determining which solvent is required is ultimately dependent on the surface to be cleaned. It is recommended to follow the manufacturer's cleaning recommendations. During cleaning, please make sure to work with lint-free and always wipe in one direction. The rags should be changed several times until complete removal of all impurities. Thereafter, the solvent must evaporate completely.

Mechanical cleaning

If the above cleaning agents are not sufficient, the surface can be prepared for bonding by means of mechanical treatment. Loose oxides (such as rust) and poorly adhering coatings are removed with a suitable abrasive, e.g. Mirlon Sanding Fleece VF 360.

The surface should only be roughened slightly and remain flat. Corrosion protection coatings must not be damaged. Thereafter, the surface must be cleaned again to remove the grinding dust.with a brush or a white lint-free cloth.

tesa® 60040 Industry Cleaner Cleaning of surfaces for optimum bonding results with adhesive tapes and spray glues. • Evaporates without leaving residues Excellent cleaning results on machinery

- and many different surfaces like plastic and metal
- Color: Transparent



Adhesion promoters

For bonding – especially outdoors and on challenging surfaces – we recommend the use of a bonding agent (adhesion promoter). Bonding agents form a layer on the surface to which the pressure-sensitive adhesive adheres particularly well. This layer also prevents water from entering the adhesive joint and thus enables consistent outdoor bonding.



tesa® Adhesion Promoter 60150 – Universal

Our universal adhesion promoter is recommended for a broad variety of substrates including zinc, steel, and PP/EPDM. Its UV-traceability allows easy quality control during the application process.



tesa® Adhesion Promoter 60151 – Glass

This highly transparent adhesion promoter was specifically developed to ensure permanent bonding and moisture resistance on glass substrates.



tesa[®] Adhesion Promoter 60152 – PU/HPVC

This adhesion promoter can be used to improve the adhesion on specific substrates such as PU* and HPVC**. Its UV-traceability allows easy quality control during the application process.



tesa[®] Adhesion Promoter 60153 – Fast Cure

Our fast-curing adhesion promoter can be used on various surfaces, including PP/EPDM***. Its UV-traceability allows easy quality control during the application process.

* PU = Polyurethane ** HPVC = Hard Polyvinyl chloride *** PP/EPDM = Polypropylene diene monomer

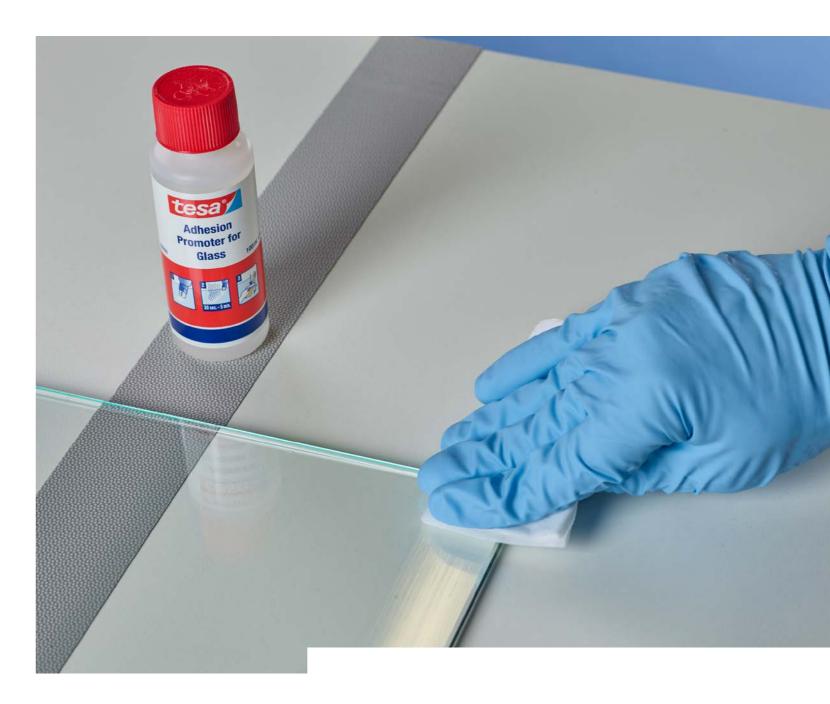
When using our adhesion promoters, the following instructions should be observed:

Surface	tesa [®] Adhesion promoter	Repositionability	Application	Tools	Evaporation time	Time window for subsequent bonding
Plastic and metal surfaces (PP, EPDM, zinc, paints)	tesa® 60150, tesa® 60153	tesa® 60150: Yes tesa® 60153: No (high initial bond strength	Apply thinly	Line-free cloth, brush, application pen	30 sec to 5 min	Several hours/days
Glass	tesa® 60151	No	Apply thinly and wipe with a clean cloth	Line-free cloth, brush, application pen	30 sec to 5 min	5 min
PUR/hard PVC/PVC-U	tesa® 60152	Yes	Apply thinly	Line-free cloth or brush	2 to 5 min	Several hours/days

Physical pretreatment

The surfaces of the material to be bonded and the pressuresensitive adhesive ideally have a similar surface energy. By means of physical methods such as flame treatment, corona discharge or plasma treatment, the surface energy of an object is increased short-term by the attachment of polar and reactive molecular groups.

However, such activated surfaces can easily and quickly become deactivated by contact with gases and dust of the



ambient climate. The application of physical methods to increase the surface energy should therefore take place immediately before the bonding. It is especially suitable for continuous processing operations.

Ask your application consultant for our technical customer service, who will gladly assist you in implementing physical pretreatment methods.



Adhesive Remover

Detaching a single-sided adhesive tape

When removing single-sided adhesive tapes, you should proceed as follows:

- Peel off adhesive tape at an acute angle to the substrate. Ideal: 45° angle. Then the risk that residues will be left behind is at its lowest.
- Always pull slowly and evenly. Thus, residue and tearing of the adhesive tape can be avoided.
- When peeling off, the substrate temperature should be > 10 °C. The carrier material and the adhesive mass will otherwise become brittle and the tendency of the adhesive tape to tear increases.
- If an adhesive tape is difficult to remove, it may help to heat the tape briefly with a hair dryer.

Detaching a double-sided adhesive tape

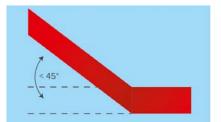
When peeling off, the substrate temperature should be > 10hesive tape. This is especially possible with thick products °C. The carrier material and the adhesive mass will otherwisuch as foam adhesive tapes or tesa® ACX^{plus}. se become brittle and the tendency of the adhesive tape to For this we recommend, for example, the use of an automatear increases. If an adhesive tape is difficult to remove, it may help to heat the tape briefly with a hair dryer. tic sealing compound cutter or a knife with a sharp and sta-

If the adhesive joint is sufficiently accessible, then interconnected surfaces can be separated again by cutting the ad-

Removing pressure-sensitive adhesive residues

In practice, adhesive mass residues may remain if it occurs that an unsuitable adhesive tape is used or one has waited too long to remove the tape. In this case, proceed as follows:

- Dab residues with the adhesive side of a more adhesive product, such as tesa[®] 4651.
- Use tesa[®] 60042 Adhesive Remover. Removes most adhesive residues on glass, metal and plastic surfaces reliably.
- Alternatively use mineral spirits, isopropanol or similar: Thoroughly soak and expel the adhesive mass with a plastic spatula to avoid damage. Please test solvent on concealed area first.



ble blade in combination with a lever tool. Carefully cut through the adhesive tape with these tools.

tesa® 60042 adhesive remover

Reliable removal of glue residues from plastic parts and glass and metal surfaces.

- Evaporates without leaving residues
- Easy removal of labels



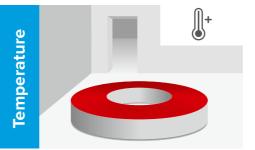




Tips before and after converting

The storage or transport of adhesive tapes is best done at normal room temperature and low air humidity. The rolls are to be covered individually with release film.

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tesa® adhesive tapes are best storedat temperatures between 15-35 °C and at normal relative humidity between 50–70 %.

In the case of side-tacky products, the

side surfaces of the rolls must be covered

with appropriate silicone-coated release

sheets. When stacking several rolls on top of each other, a double layer of release

sheets is recommended.

Covering



Ensure during transport and storage that the packaging is not damaged or deformed. The packaging should be resealed after parts removal so that the adhesive tapes are protected against dust, moisture and dirt.



from the date of delivery.

If all transport and storage recommendations are adhered to, the minimum shelf-life of tesa® products is usually twelve months

Customer Solution Center

Technical customer service is our top priority

We offer you a wide range of products supporting you in all of your business fields. Many options often require a closer look into the specific application. At the Customer Solution Center we can support you by taking into account your specific materials, their application process, and the operating conditions for the product in use. Not only do we recommend the suitable products, we also support the implementation stage of our solutions into your customers' process with application tools and equipment. Based on our modular training program, we individually teach you and your customers about the adhesive tape tech-

From a range of several hundred adhesive tape solutions, we select the right product for your customers' application while considering their specific requirements.

In our Customer Solution Centers we analyze customers' materials, in combination with our adhesive tape products, depending on the application-specific demands, such as bonding power, shock absorption, resistance to environmental impacts, removability, and much more.

During on-site visits, we assist you in detecting such requirements and translate those into appropriate test programs. Based on our modular training program, we individually teach you and your customers about the adhesive tape technology, along with our products, their applications, and corresponding tools. This can either be done at our technical training facilities or even as on-site training on your premises.

Our global network of application engineers collaborate closely to provide short response times and close customer contact, offering you many years of experience and expertise in adhesive tape products and applications.

Our Sales team will assist you in directing your inquiries to our Customer Solution Centers.

Learn more Scan the QR code to learn more about the Customer Solution Center





tesa® products prove their impressive quality day in, day out in demanding condition
stated above are provided to the best of our knowledge on the basis of our practical e
specification. Therefore tesa SE can make no warranties, express or implied, including
purpose. The user is responsible for determining whether the tesa® product is fit for
any doubt, our technical support staff will be glad to support you.

ions and are regularly subjected to strict controls. All technical information and data experience. They shall be considered as average values and are not appropriate for a ng, but not limited to any implied warranty of merchantability or fitness for a particular or a particular purpose and suitable for the user's method of application. If you are in