



05/2023

#### Certifications

Our company is focused on international quality, environmental, and occupational safety standards.

Please find more information regarding our certifications at:  
[www.tesa.com/certifications](http://www.tesa.com/certifications)

tesa SE  
Phone: +49 40 88899 0  
[tesa.com/company/locations](http://tesa.com/company/locations)

[tesa.com](http://tesa.com)



# Converter core assortment

Core assortment for Converter Partners



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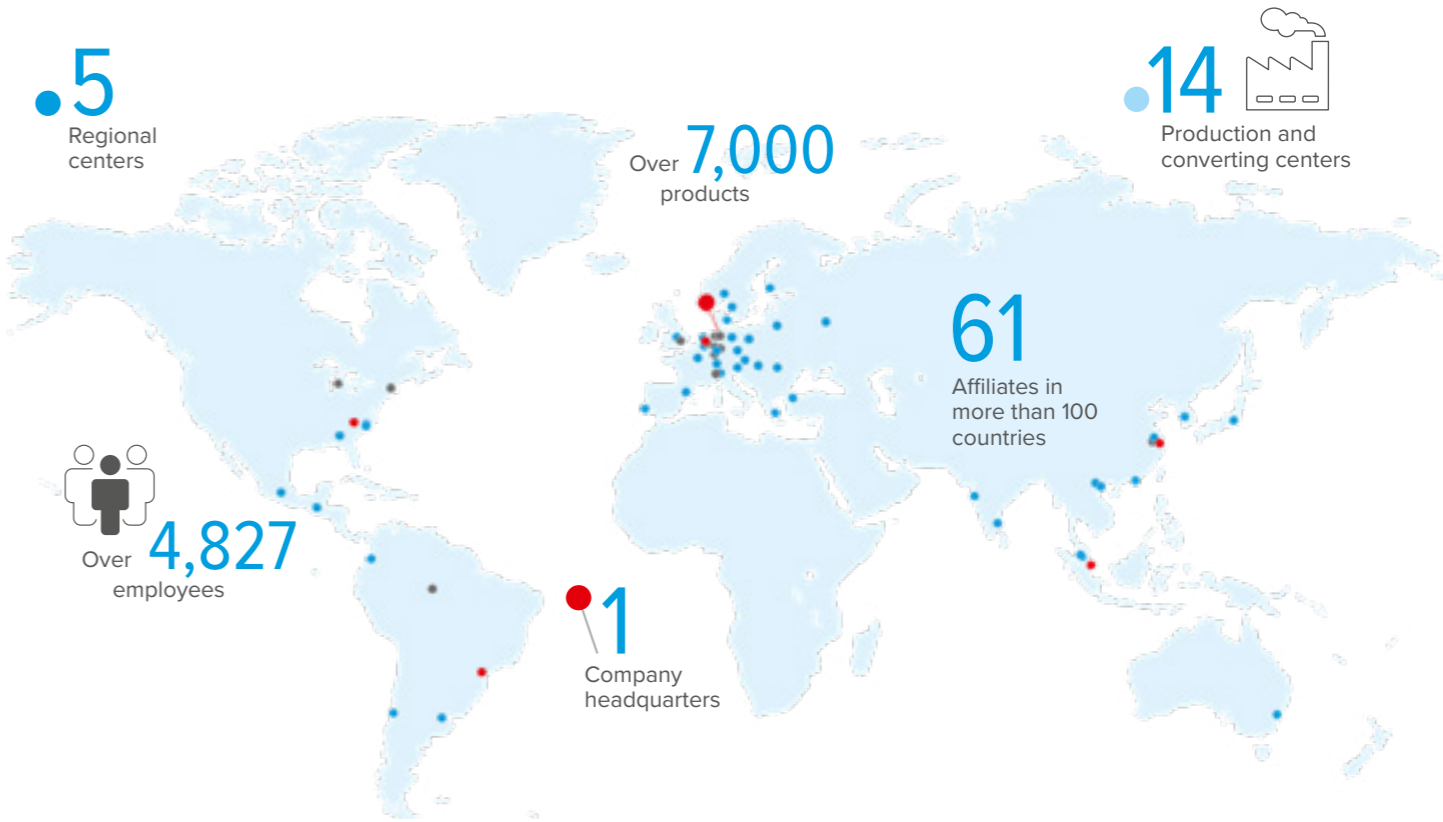
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**Core assortment for Converters**



By your side

# About us



## Your adhesive solutions partner

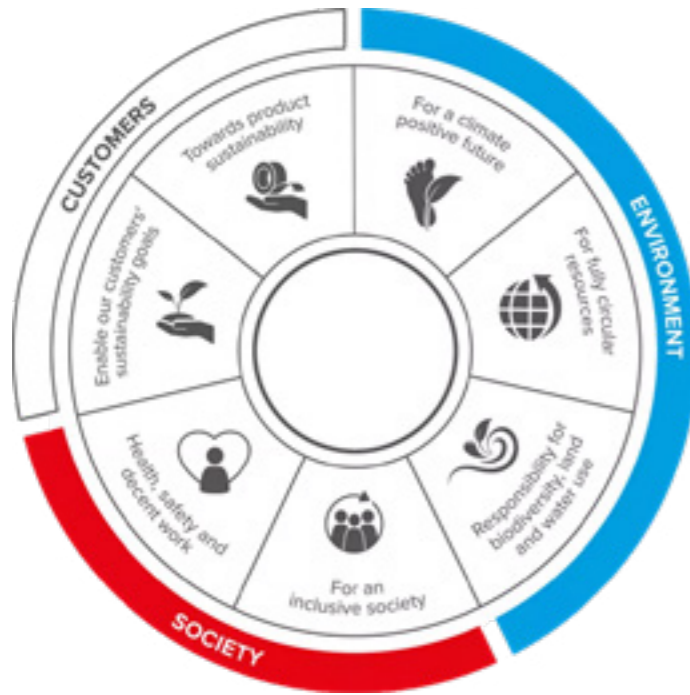
As a multinational company, tesa develops innovative adhesive tapes and self-adhesive system solutions for various industries, commercial customers, and end consumers. The age of technical adhesive tapes began 125 years ago, and there are already more than 7,000 tesa adhesive solutions that help improve the work, products, and lives of our customers.

Today, the focus is on sustainability and energy-saving processes. tesa invests in the development of environmentally friendly products and solvent-free manufacturing processes, as well as in the use of renewable energy sources at its locations.

# Sustainability agenda

## Holding the world together – for a sustainable future

We have always taken our social and environmental responsibility very seriously. Sustainability has been one of the key strategic targets at tesa for a number of years.



As a company, we are embedded in society and the environment. There is no healthy economy without a healthy society – no healthy society without a healthy environment.

We therefore take responsibility along our entire value chain and consider the entire life cycle to reduce our footprint.

Based on this understanding, we have derived our sustainability agenda, which reflects our holistic view.

The agenda creates clarity and steers our efforts and investments in the most meaningful directions.

## Our guiding principles

- We take a science-based and whole-systems perspective on sustainability.
- We achieve sustainable growth by focusing on innovation.
- We drive our transformation to sustainability with transparency, consistency, and accountability.



## Did you know?



### Sustainable products

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

Increased share of sustainable 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 and solutions.

Significant reduction of absolute carbon emissions



### 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

## This is what we have achieved so far

**900t reduced CO<sub>2</sub> emissions** thanks to our photovoltaic system in Suzhou in 2021

**100% of the electricity\*** comes from renewable energies

**16.5% absolute reduction** of energy-related CO<sub>2</sub> emissions\*\*

**3.6 million euros** were donated in the fight against COVID (in 2020 and 2021)

**43% coverage** of direct purchasing volume with EcoVadis in 2021

\* of electricity purchased worldwide by the end of 2021 | \*\* 2021 compared to base year 2018

Want to learn more?

To know more about our Sustainability agenda visit our website: [www.tesa.com/en/about-tesa/sustainability](http://www.tesa.com/en/about-tesa/sustainability)



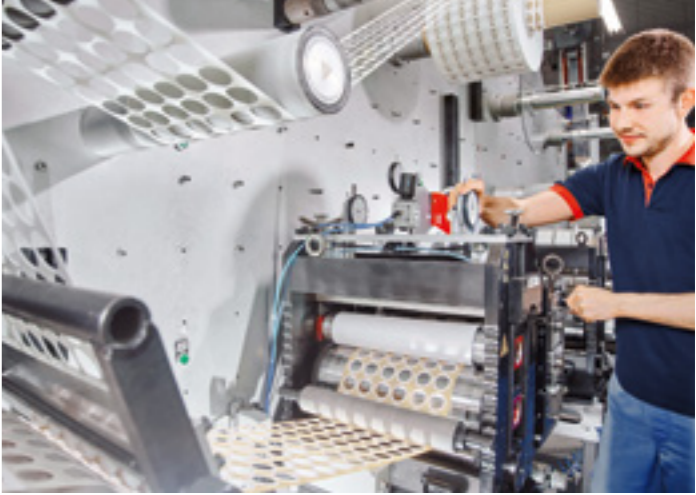


Converting  
expertise

# 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.



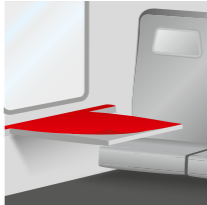
## Customized solutions across industries



Automotive



Appliance



Transportation



Electronics



Health & medical



Leather & textile



Signage



Furniture



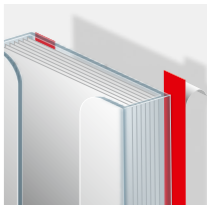
Construction



Doors & windows



Renewable



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
- Rewinding
- Laminating
- Printing
- Spooling

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



## Partners beyond tape



### Product excellence

Access to the broadest tesa product portfolio, including a selection of 60+ products handpicked for our Converter Partners, for 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:

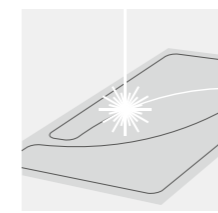
- Comparative tests with competitor products
- Customized tests with customer substrates
- Simulations under a wide range of environmental conditions

## 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:



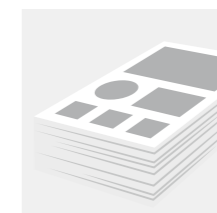
Flatbed die- and kiss cutting



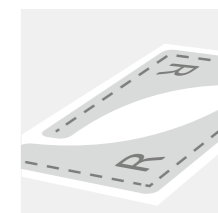
Die-cuts lasered onto rolls or sheets



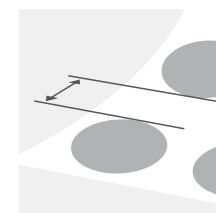
Separable paper layer with possible divisions



Family sheets (different shapes on the same sheet)



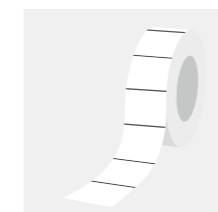
Die cuts with print or tape as application aid



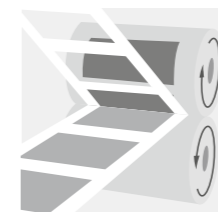
Individually designed gaps between die cuts



Finger lift with grabbing tab



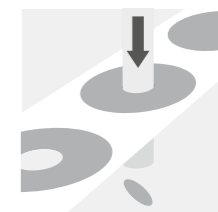
Butt cutting, with or without space between objects



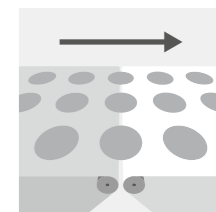
Rotary die cutting with hole punching



Die cuts and rolls with positioning tabs



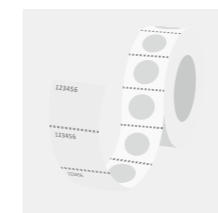
Hole punching with automatic waste removal



Die cut can be easily transferred to another liner



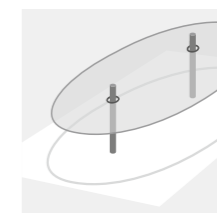
Die cuts placed in multiple rows along the same sheet



Sections of roll can be perforated for easy separation



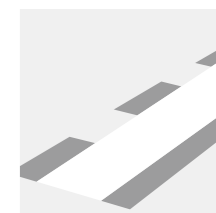
Butt cutting, with or without space between objects



Positioning features to aid marking



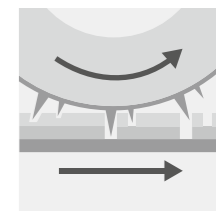
Die cuts interlaced to save material



Intermittent adhesive zones can be produced



Temporary fixing aid, which keeps the cut out in place

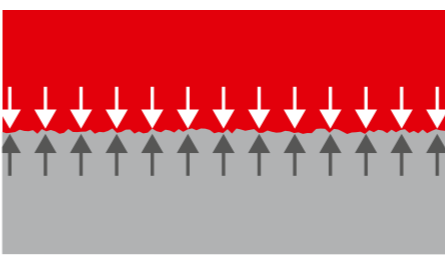


Multi-level rotational cutting



# Pressure-sensitive adhesive basics

## An interplay between adhesion and cohesion



■ Substrate ■ Pressure-sensitive adhesive

### Adhesion

Adhesion refers to the sum of all forces which occur at the interfaces between two substrates, for example, 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.

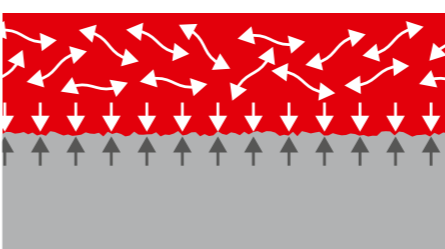
A particular form of adhesion is the tack, which determines whether an adhesive mass can quickly wet a surface with which it comes into contact with virtually no pressure. But the tack does not ultimately correlate with the actual bond strength of a pressure-sensitive adhesive. Pressure-sensitive adhesives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



■ Substrate ■ Pressure-sensitive adhesive

### 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 behavior 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, that is only through a certain combination of adhesion and internal strength is an adhesive bond able to withstand the stresses that act on it.

# The role of polarity

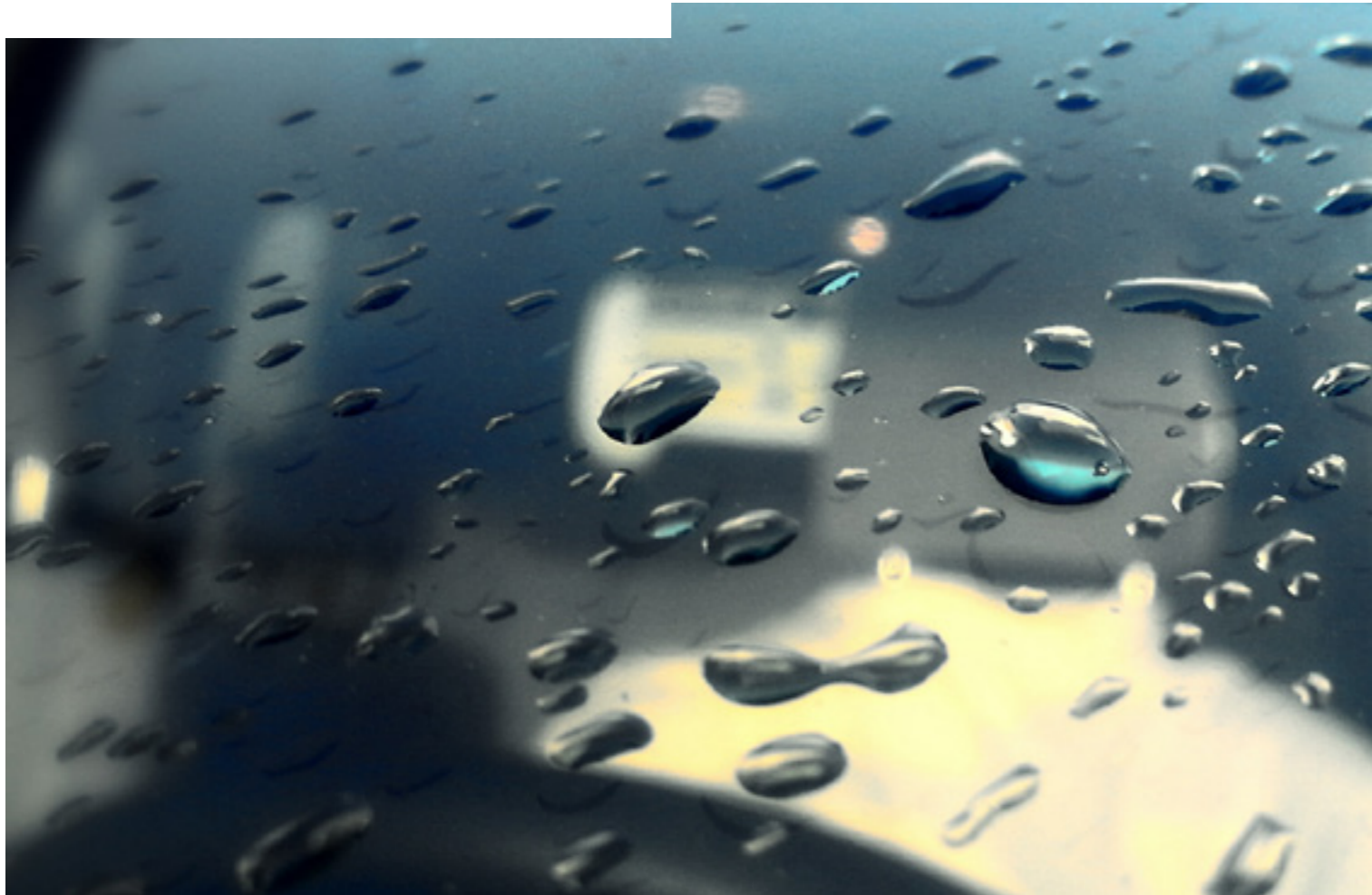
## Surface tension

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

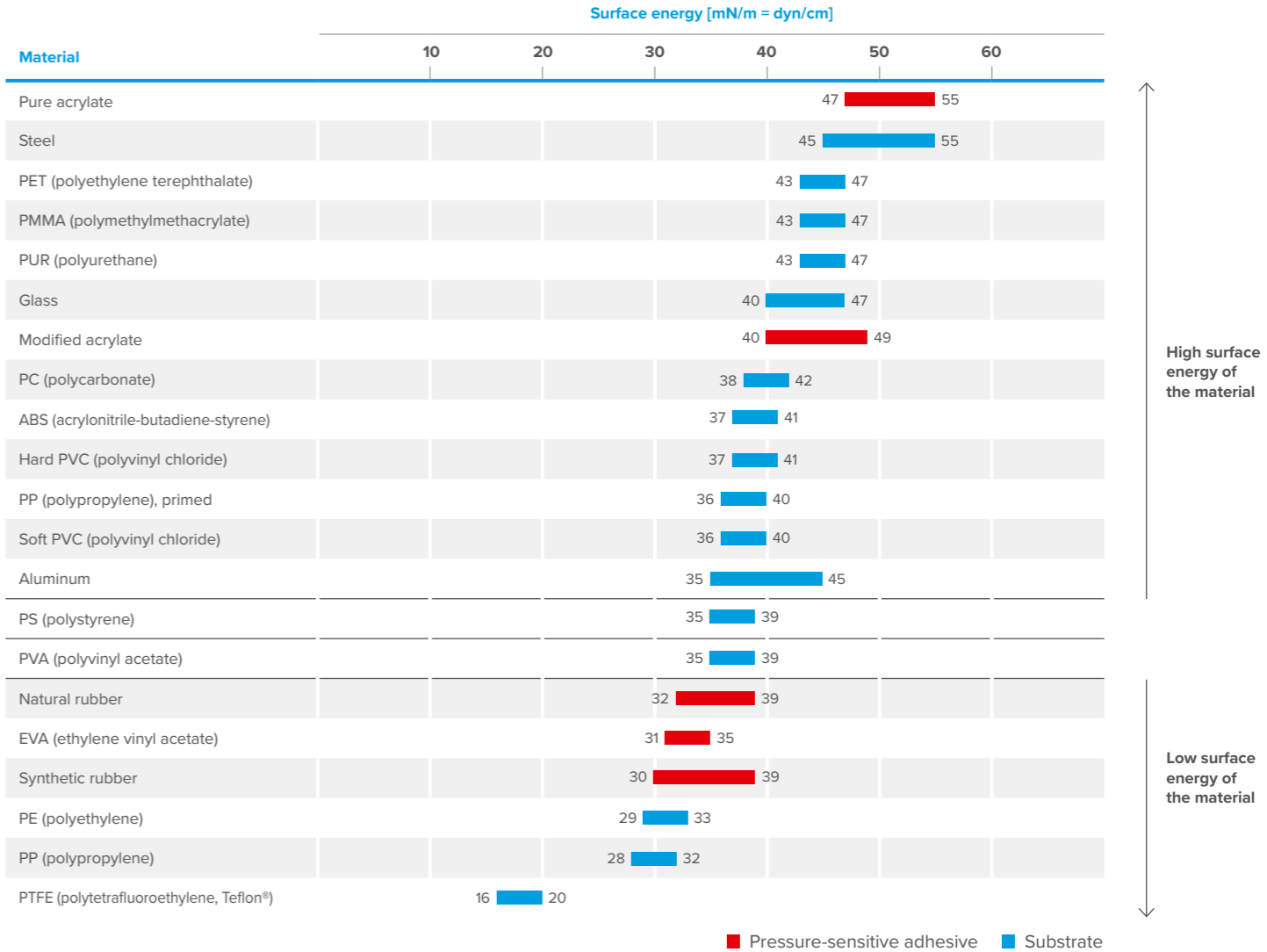
<b>Wettability</b>	Poor	Good	Very good
<b>Surface energy</b>	Pressure-sensitive adhesive > substrate	Pressure-sensitive adhesive = substrate	Pressure-sensitive adhesive < substrate

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/m<sup>2</sup>, whereby: 1 mN/m = 1 dyn/cm.

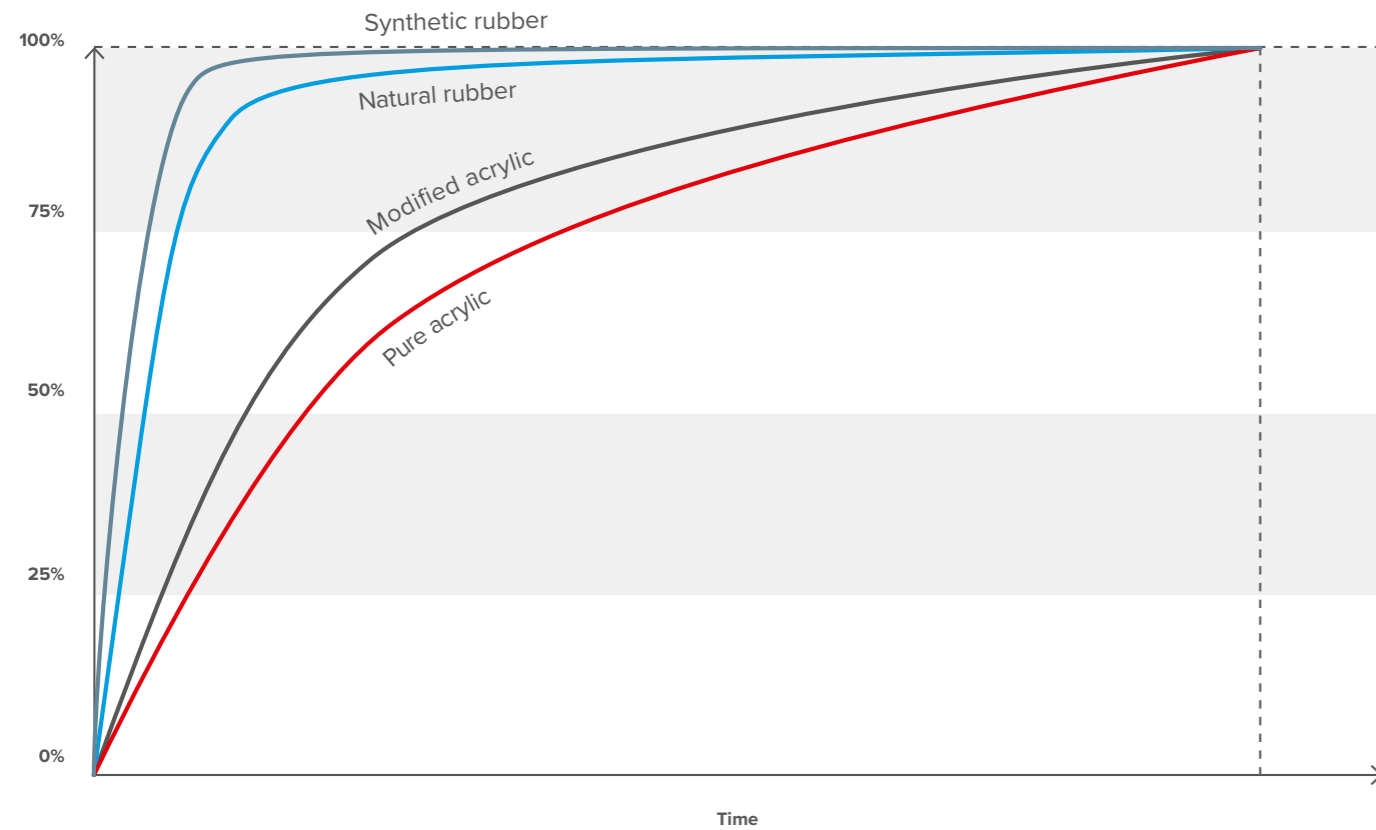
The boundary between low-energy and high-energy surfaces is usually drawn in the range of a surface energy of 36–38 mN/m. Therefore, the bondability for surface tensions above this range is usually problem-free, whereas at values below this range a pretreatment of the surface to be bonded should be considered.





# 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.

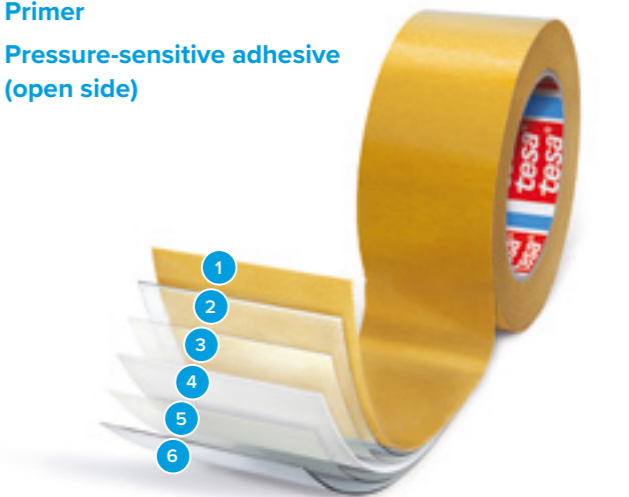
### Product structure single-sided adhesive tape:

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



### Product structure double-sided adhesive tape:

- 1 Release liner
- 2 Pressure-sensitive adhesive (covered side)
- 3 Primer
- 4 Backing
- 5 Primer
- 6 Pressure-sensitive adhesive (open side)



# Core assortment for Converters

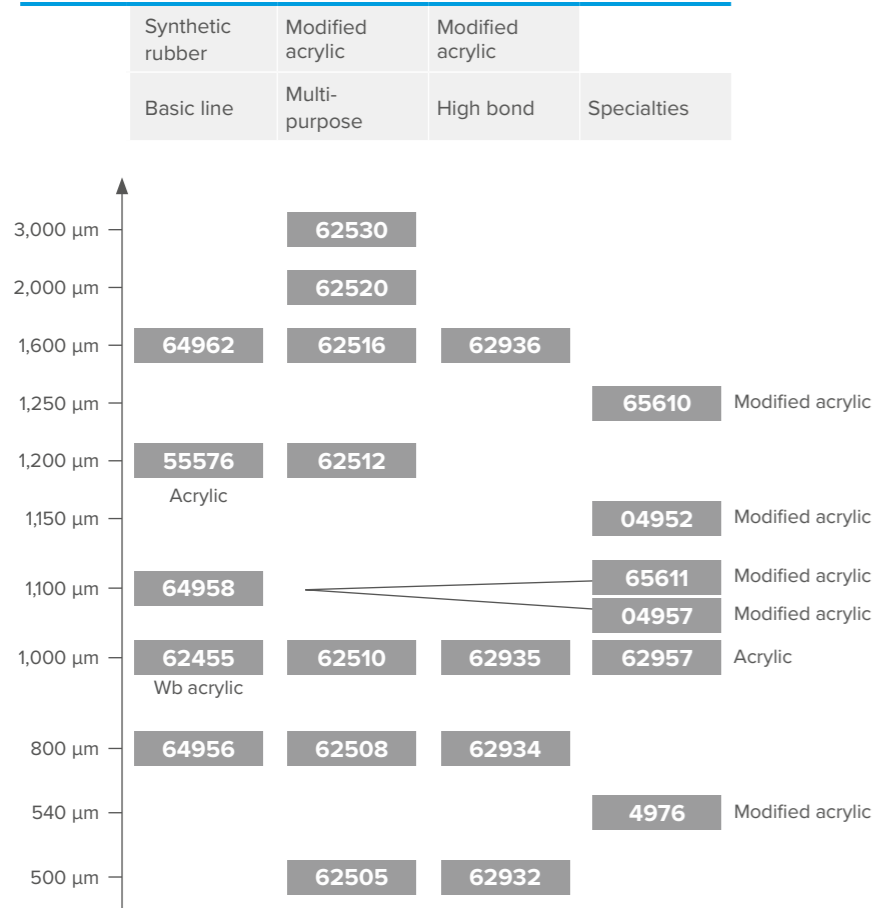
## Product overview

Application	Category	Tapes	Page
Bonding & lamination	tesa® ACX <sup>plus</sup> acrylic core tapes	7254, 7255, 7272, 7273, 7274, 7282, 7283, 7284, 7074, 7805, 7808, 7811, 7812	28
	Double-sided foam tapes	4952, 4957, 4976, 55576, 62455, 62510, 62932, 64958, 45001	30
	Double-sided filmic tapes	4965, 4965 (59650), 4965 (59651), 4965 (59652), 4968, 4970, 4972, 4982, 51966, 51970	32
	Double-sided tissue and cloth tapes	4934, 4943, 4959, 4962, 4964, 51570, 51571, 52210, 52215	34
	Transfer & scrim tapes	52105, 52110, 4985, 4965, 66022, 75505, 75007, 75515, 75013	36
Repairing & general applications	Premium cloth tapes	4651, 4657	40
	Mid-grade cloth tape	4688	40
	Aluminum tapes	60630, 60632, 60650, 60652	42
Masking & surface protection	Sandblasting tapes	4432	46
	Powder coating tapes	50600, 50650	46
	Surface protection tapes	4414, 51136	46
	Masking specialties	51407	46
Printing & ancillary	Printing solutions	52918, 52916, 52310 PV7, 52307, 52310, 52315, 52320, 52325, 52332, 51904, 64620, 60404, 4122, 4137, 51194	50–51
	Roller wrapping	4863	52
	Adhesion promoters, removers, and cleaners	60040, 60150, 60151, 60153, 60042	56–58

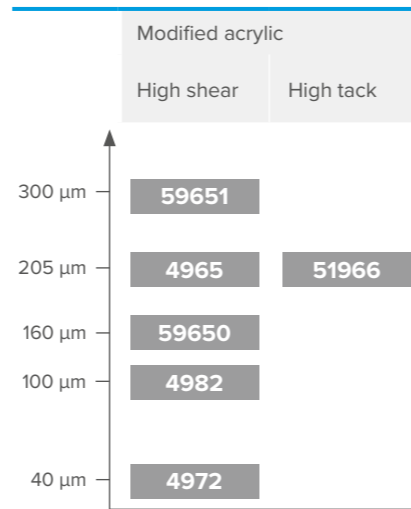


# Product overview

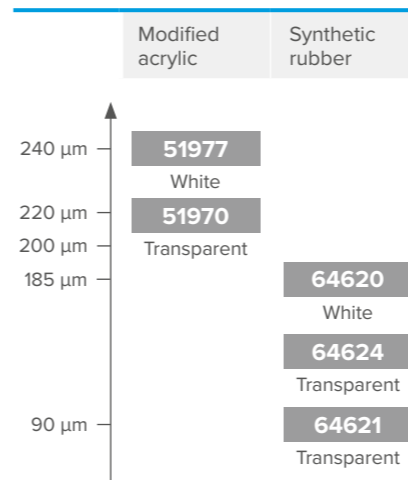
## PE foam tapes



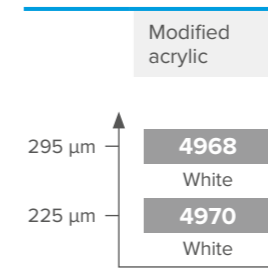
## Filmic PET tapes



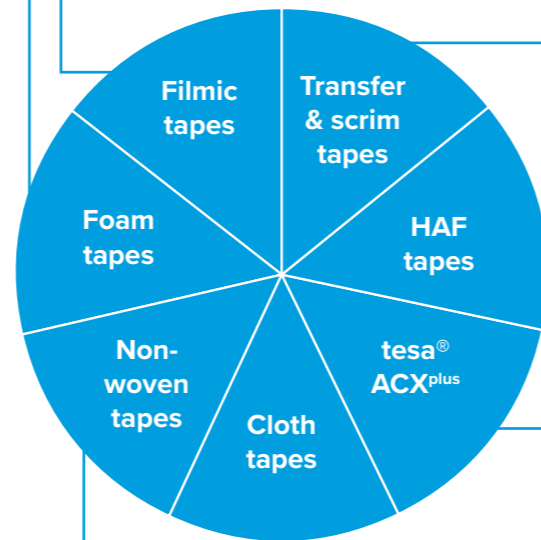
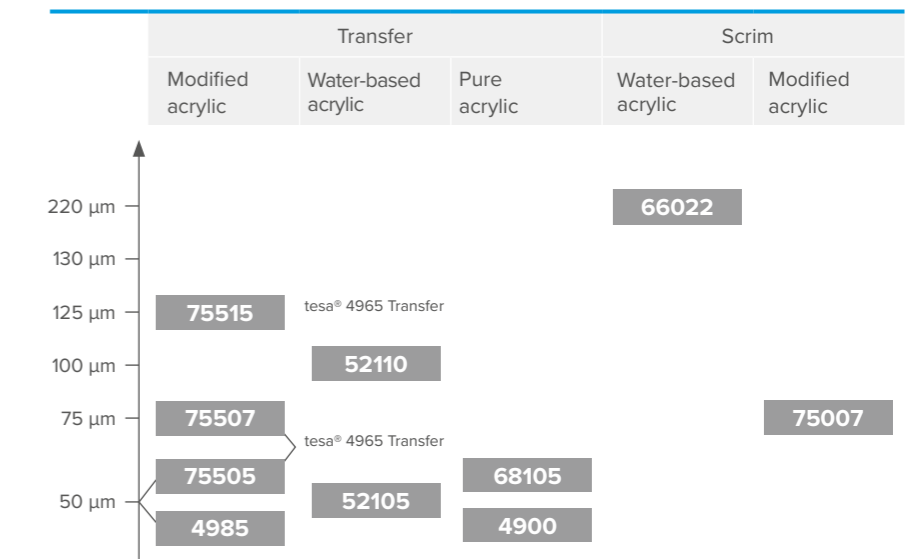
## Filmic PP tapes



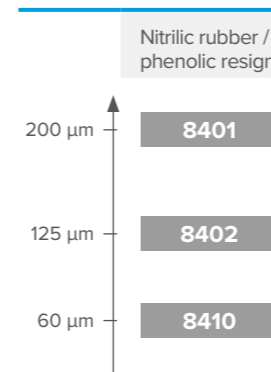
## Filmic PVC tapes



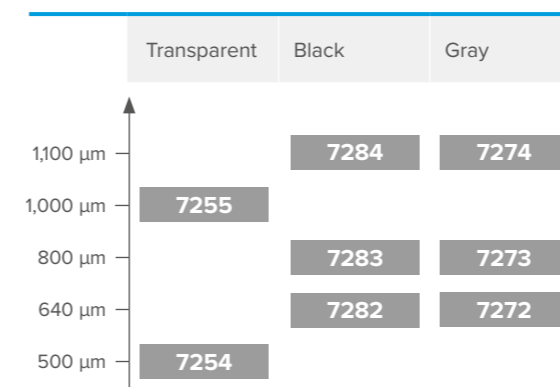
## Transfer & scrim tapes



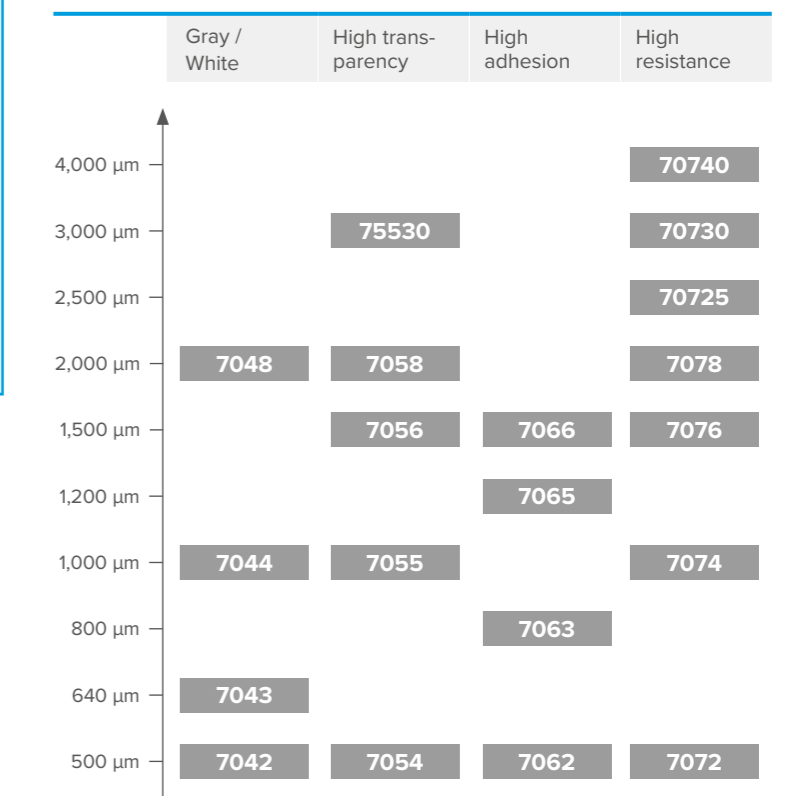
## HAF tapes



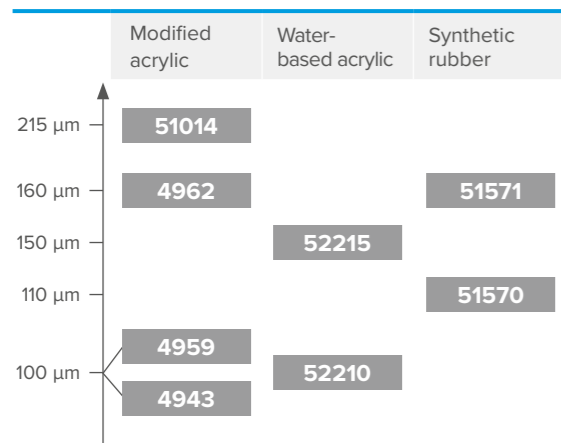
## tesa® ACXplus MP



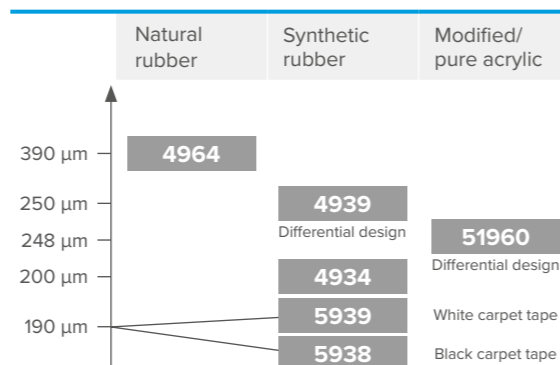
## tesa® ACXplus



## Non-woven tapes



## Cloth 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 tapes' 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.

### Advantages of double-sided tape vs. liquid glue and mechanical fastening

			Double-sided tape	Liquid glue	Mechanical fastening (e.g. rivets, screws, nails)
Design		Improved visual appearance – no damage to the material	••••	•••	•
		Invisible fastening – mounting of transparent materials	••••	•••	•
Assembly		Fast application process – elimination of curing time and reduction of complexity	••••	•	••
		Healthy working environment and clean production sites	••••	••	••
Quality		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	••••	••	•
		Noise-dampening properties – sounds caused by vibration are eliminated	••••	•••	•
		Shock absorption	••••	••	•
		Sealing function – tape seals and protects against dust and moisture	••••	••••	••
		Reduced risk of corrosion	••••	••••	•

Evaluation across relevant tesa® assortment: •••• very good ••• good •• medium • low



# The structure of double-sided 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:

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



## 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.

## Backings

Backing	Description
tesa® ACX <sup>plus</sup>	<ul style="list-style-type: none"> <li>• Viscoelasticity</li> <li>• Bonding power</li> <li>• Stress dissipation</li> <li>• Temperature and weather resistance</li> </ul>
Foam tapes	<ul style="list-style-type: none"> <li>• Compensation of tension, gaps, and irregular surfaces</li> <li>• High bonding power even to rough surfaces</li> <li>• Excellent shock absorption</li> <li>• Sealing function against dust and moisture</li> </ul>
Film tapes	<ul style="list-style-type: none"> <li>• High tensile strength</li> <li>• Well suited for die-cut production</li> <li>• For high-speed manufacturing processes</li> </ul>
Cloth tapes	<ul style="list-style-type: none"> <li>• Flexible</li> <li>• High temperature resistance</li> <li>• Thick backings are abrasion resistant</li> </ul>
Non-woven tapes	<ul style="list-style-type: none"> <li>• Flexible and extremely conformable</li> <li>• Hand-tearable, but nick resistance</li> <li>• Cushioning features</li> </ul>

## Liners

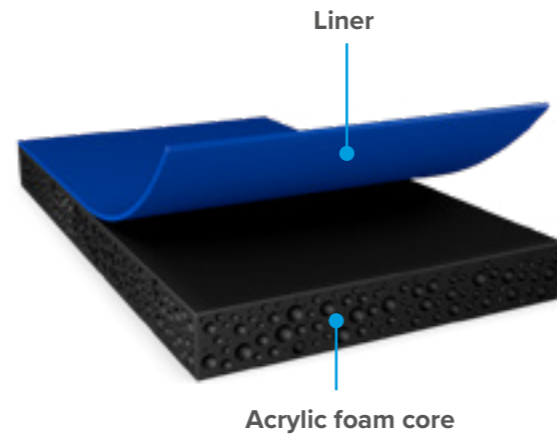
Product features/advantages	Color	Thick-ness	Weight [g/m <sup>2</sup> ]	Breaking force [N/cm]
<b>Siliconized paper</b> <ul style="list-style-type: none"> <li>• Low electric discharge</li> <li>• Stable under pressure due to hard paper core</li> </ul>	Brown	70	82	>63
<b>PE (polyethylene) coated paper</b> <ul style="list-style-type: none"> <li>• Good tensile strength</li> <li>• Excellent die-cutting properties</li> <li>• Excellent humidity resistance</li> </ul>	White	122	120	>73
<b>PP (polypropylene) release film</b> <ul style="list-style-type: none"> <li>• Dust-free convertibility</li> <li>• High tear resistance</li> <li>• Safe use in automated processes</li> </ul>	Red	80	72	>180
		120	108	>180
<b>PET (polyethylene terephthalate) release film</b> <ul style="list-style-type: none"> <li>• Excellent tear strength</li> <li>• Good thickness tolerance</li> <li>• Dust-free processing</li> </ul>	Trans-parent	50	72	>70
		75	109	>100
<b>PE (polyethylene) release film</b> <ul style="list-style-type: none"> <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

## Adhesive systems

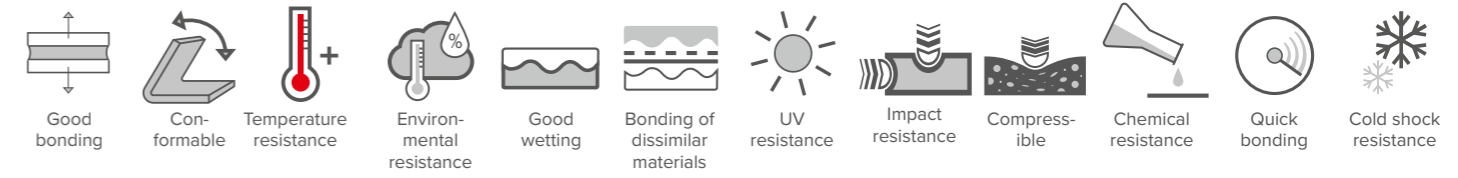
	Description	Attributes
Pure acrylic	Pure acrylic adhesive is especially suitable for outdoor applications and applications at elevated temperatures	<ul style="list-style-type: none"> <li>• Good adhesive strength on polar and pretreated non-polar surfaces</li> <li>• Very good performance at elevated temperatures</li> <li>• Resistance against environmental conditions (e.g. UV, humidity) and aging</li> </ul>
Tackified acrylic	Tackified acrylic is a versatile adhesive with a well-balanced performance on a wide variety of surfaces for permanent applications	<ul style="list-style-type: none"> <li>• Very good adhesive strength on polar surfaces, good on non-polar surfaces</li> <li>• High initial adhesion power</li> <li>• Resistance against environmental conditions (e.g. UV, humidity) and aging</li> </ul>
Water-based acrylic	Water-based acrylic adhesives are solvent-free and thus feature low VOC emissions. They are quite versatile and perform well in lamination and lightweight mounting applications	<ul style="list-style-type: none"> <li>• Low VOC</li> <li>• High tack</li> <li>• Good adhesion to polar substrates</li> <li>• Good heat and aging resistance</li> <li>• Poor adhesion to non-polar substrates</li> <li>• Preferred for indoor use or temporary outdoors applications</li> </ul>
Synthetic rubber (SiS)	SiS adhesive is suitable for a variety of surfaces but offers limited aging and temperature resistance	<ul style="list-style-type: none"> <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	Natural rubber adhesive is extremely sticky for use on rough surfaces	<ul style="list-style-type: none"> <li>• High immediate adhesive bonding strength</li> <li>• Very good bonding on polar and non-polar surfaces</li> <li>• Preferred for use in indoor applications</li> </ul>

# tesa® ACX<sup>plus</sup> 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<sup>plus</sup> 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<sup>plus</sup> bonding solutions can outperform conventional fastening methods by optimizing our customers' production processes and the quality and aesthetics of their products.



## Main features



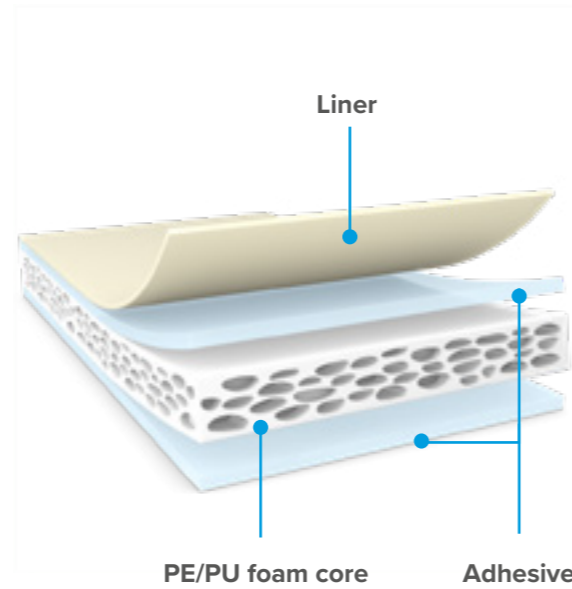
Product	Description	Backing	Adhesive	Liner	Thickness [µm]	Color	Standard log roll width [mm]	Core material / diameter	Adhesion to steel – Ultimate [N/cm]	Temperature resistance short / long term [°C]	Adhesion to ABS – Ultimate [N/cm]	Adhesion to PVC – Ultimate [N/cm]	Aging resistance	Humidity resistance				
<b>tesa® ACX<sup>plus</sup> Multi Purpose</b>																		
tesa® ACX <sup>plus</sup> 7254 Multi Purpose	Transparent acrylic foam tape suitable for a wide range of general bonding applications between transparent or translucent surfaces.	Solid acrylic	Pure acrylic	PE-coated paper white w/logo	500	⊗	900	PE / 3"	19	200 / 100	Values measured only for tesa® ACX <sup>plus</sup> Specialties							
		Solid acrylic	Pure acrylic	PE-coated paper white w/logo	1,000	⊗	900	PE / 3"	24	200 / 100								
tesa® ACX <sup>plus</sup> 7272 Multi Purpose	Acrylic foam tape suitable for a wide range of general bonding applications, such as mountings of emblems, decorative parts, and signs.	Foamed acrylic	Pure acrylic	Filmic white w/logo	640	●	900	PE / 3"	27	200 / 100								
		Foamed acrylic	Pure acrylic	Filmic white w/logo	800	●	900	PE / 3"	28	200 / 100								
		Foamed acrylic	Pure acrylic	Filmic white w/logo	1,100	●	900	PE / 3"	32	200 / 100								
tesa® ACX <sup>plus</sup> 7282 Multi Purpose	Acrylic foam tape suitable for a wide range of general bonding applications, such as mountings of emblems, decorative parts, and signs. Shows good adhesion on surfaces with low surface energy, e.g. plastics/PE.	Foamed acrylic	Modified acrylic	Filmic white w/logo	640	●	630	PE / 3"	26	200 (short)								
		Foamed acrylic	Modified acrylic	Filmic white w/logo	800	●	630	PE / 3"	27	200 (short)								
		Foamed acrylic	Modified acrylic	Filmic white w/logo	1,100	●	630	PE / 3"	29	200 (short)								
<b>tesa® ACX<sup>plus</sup> Specialties</b>																		
tesa® ACX <sup>plus</sup> 7074 High Resistance	Acrylic foam tape for permanent demanding outdoor bonding applications, showing outstanding cold shock, UV, chemical, salt water, and cleaning agent resistance.	Foamed acrylic	Pure acrylic	HDPE blue	1,000	●	1,240	PE / 3"	30	220 / 120					6*	12*	●●●●	●●●●
tesa® ACX <sup>plus</sup> 7078 High Resistance		Foamed acrylic	Pure acrylic	HDPE blue	2,000	●	1,240	PE / 3"	37	220 / 120					-	-	●●●●	●
tesa® ACX <sup>plus</sup> 7805 Black Line	Closed cell acrylic foam tape showing high bonding power on MSE clear coats and plastics, as well as impressive cold shock, humidity, and UV resistance.	Foamed acrylic	Tackified acrylic	HDPE blue	500	●	1,260	PE / 3"	21	80					18	21	●●●●	●●●●
tesa® ACX <sup>plus</sup> 7808 Black Line		Foamed acrylic	Tackified acrylic	HDPE blue	800	●	1,260	PE / 3"	26	80					22	26	●●●●	●●●●
tesa® ACX <sup>plus</sup> 7811 Black Line		Foamed acrylic	Tackified acrylic	HDPE blue	1,100	●	1,260	PE / 3"	32	80					24	32	●●●●	●●●●
tesa® ACX <sup>plus</sup> 7812 Black Line		Foamed acrylic	Modified acrylic	HDPE blue	1,200	●	1,260	PE / 3"	35	80					28	-	●●●●	●●●●
tesa® ACX <sup>plus</sup> 7815 Black Line		Foamed acrylic	Modified acrylic	HDPE blue	1,500	●	1,260	PE / 3"	35	80	28	-	●●●●	●●●●				

Evaluation across relevant tesa® assortment: ●●●● very good ●●● good ●● medium ● low \*after 72 hours

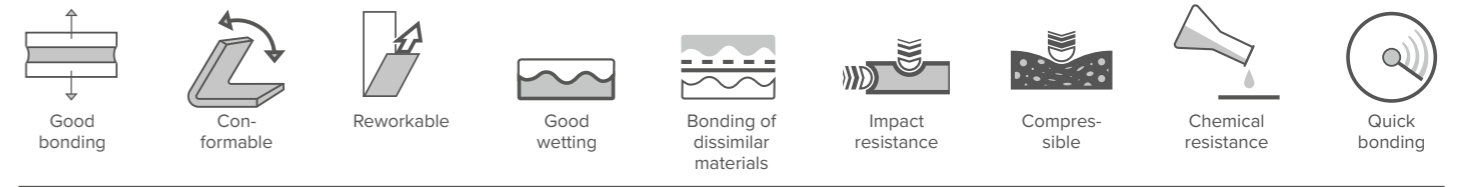
# Double-sided foam tapes

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 aging.



## Main features



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]	Temperature resistance short / long term [°C]	Static shear resistance at 23°C	Tack	Aging resistance	Humidity resistance
tesa® 45001	PE-foam tape for permanent mounting in demanding applications, flame-retardant according to FAR 25.853(a) and UL 94 HBF–HF1. Highly conformable and lightweight.	PE foam	Pure acrylic	MOPP red	1,000	○	1,360	Cardboard / 3"	22	-	-	80 / 80	●●●●	●●●	●●●●	●●●●
tesa® 4976	Conformable double sided open-cell PU foam tape for general mounting applications. Shows high short-term temperature resistance and good sealing functions.	PE foam	Tackified acrylic	Glassine brown	540	●	1,360	Cardboard / 3"	12	4.3	12	200 / 80	●●●	●●●	●●●	●●●●
tesa® 4957	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	1,100	●	1,360	Cardboard / 3"	4	2.2	4	80 / 80	●●●	●●●	●●●	●●●●
tesa® 4952	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	1,150	○	1,360	Cardboard / 3"	8	2.8	8	80 / 80	●●●	●●●	●●●	●●●●
tesa® 62932	Thin double sided PE foam tape for a variety of constructive mounting applications. Fully outdoor suitable: resistant against UV, water, aging, and cold shocks.	PE foam	Tackified acrylic	Glassine brown	500	●○	1,360	Cardboard / 3"	17	3	17	80 / 80	●●●	●●●	●●●	●●●●
tesa® 62510	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	1,000	●	1,360	Cardboard / 3"	13.5	0.9	13.5	80 / 80	●●●	●●●	●●●	●●●●
tesa® 64958	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	1,050	○	1,400	Cardboard / 3"	4	4	4	60 / 40	●●●●	●●●	●●●	●●●
tesa® 55576	Double sided PE foam tape for light duty mounting of trims and profiles, POS signs, advertising material, and mirror pre-mounting.	PE foam	Tackified acrylic	PE red	1,200	○	1,060	Cardboard / 3"	5.5**	1.4**	3**	80 / 60	●●●	●●●	●●●	●●●●
tesa® 62455	Double-sided PE foam tape with good peel adhesion even on critical surfaces, suitable for basic indoor and outdoor applications. Designed mainly for trims and profiles mounting.	PE foam	Water-based acrylic	Glassine white	1,000	○	9, 12, 19	Cardboard / 3"	6*	-	6	80 / 80	●●●	●●●	●●●	●●●●

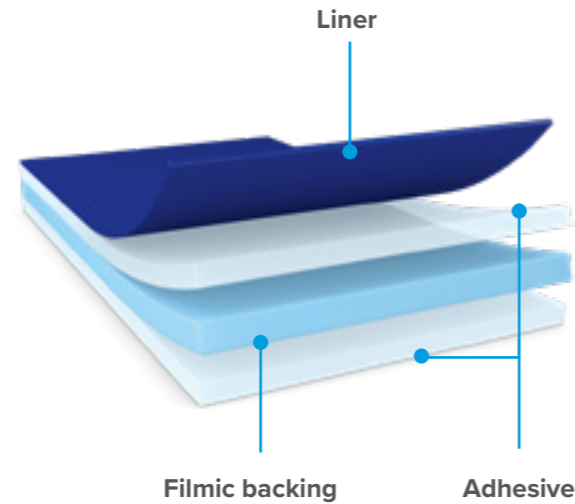
Evaluation across relevant tesa® assortment: ●●●● very good ●●● good ●● medium ● low \* to aluminum \*\* Initial peel adhesion



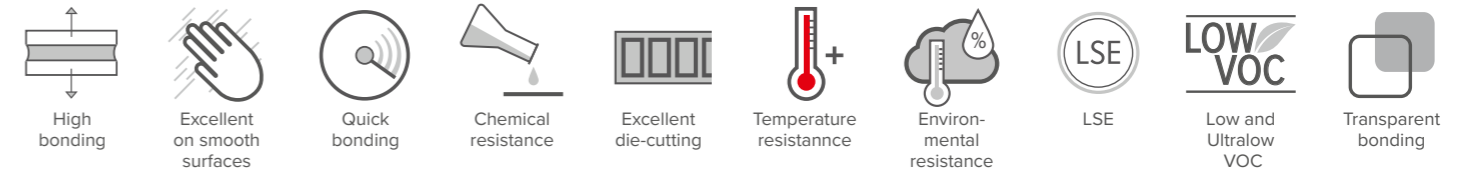
# Double-sided filmic tapes

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 also offer good performance on rough, hard to stick surfaces and generally offer a good temperature resistance.

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



## Main features



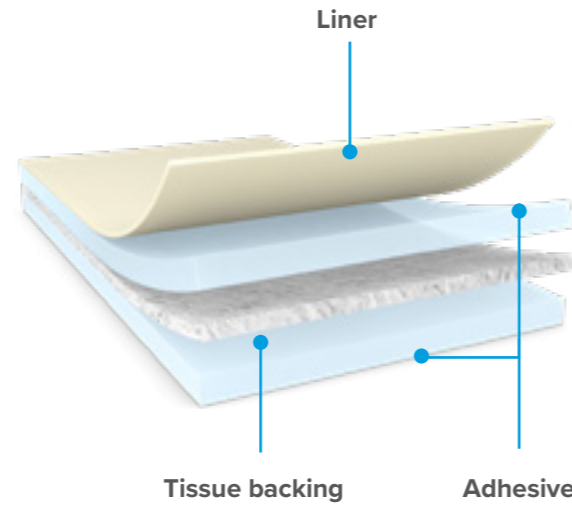
Product	Description	Backing	Adhesive	Liner	Thickness [µm]	Color	Standard log roll width [mm]	Core material / diameter	Adhesion to steel – Ultimate [N/cm]	Adhesion to PE – Ultimate [N/cm]	Adhesion to PVC – Ultimate [N/cm]	Temperature resistance short / long term [°C]	Static shear resistance at 23 °C	Tack	Aging resistance	Humidity resistance
<b>tesa® 4965 Original</b>	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	⊗	1,372	Cardboard / 3"	11.8	6.9	13	200 / 100	●●●●	●●●	●●●	●●●●
<b>tesa® 59651 – Team 4965 Thick</b>	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	⊗	1,372	PE / 3"	14.5	6.4	14.3*	200 / 100	●●●●	●●●	●●●	●●●●
<b>tesa® 59650 – Team 4965 Thin</b>	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	MOPP red	160	⊗	1,372	PE / 3"	13.4	5.7	11.9	200 / 100	●●●●	●●●	●●●	●●●●
<b>tesa® 59652 – Team 4965 Black</b>	Black double-sided PET tape equipped with our proven tesa® 4965 adhesive. 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	●	1,372	Cardboard / 3"	14	6.6	12.8	200 / 100	●●●●	●●●	●●●	●●●●
<b>tesa® 4982</b>	Transparent PET double-sided tape with excellent bonding strength/thickness ratio and temperature resistance. Good for mounting of LCD panels and battery packs.	PET film	Tackified acrylic	Glassine brown w/logo	100	⊗	1,372	PE / 3"	11.7	5.1	10.0	200 / 100	●●●●	●●●	●●●	●●●●
<b>tesa® 4972</b>	Transparent PET double-sided tape with high initial tack and adhesion. Suitable for long-term mounting applications and designed for converter and tape specialist businesses.	PET film	Tackified acrylic	Glassine brown w/logo	48	⊗	1,240	Cardboard / 3"	9.6	3.5	9.4	200 / 100	●●●	●●●●	●●●	●●●●
<b>tesa® 51966</b>	Transparent PET double-sided tape with high initial tack and adhesion. Suitable for long-term mounting applications and designed for converter and tape specialist businesses.	PET film	Tackified acrylic	Glassine brown w/logo	200	⊗	1,372	Cardboard / 3"	11	7.5	13	130 / 80	●●●	●●●●	●●●	●●●●
<b>tesa® 4968</b>	Thick PVC double-sided tape showing high UV-stability, chemical resistance, and flame retardancy. Proves exceptional bonding to low energy or rough substrates for general mounting applications.	PVC film	Tackified acrylic	Glassine brown	295	○	1,372	Cardboard / 3"	21.2	14.1**	24.6*	70 / 60	●●●	●●●●	●●●	●●●●
<b>tesa® 4970</b>	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	○	1,372	Cardboard / 3"	13.6	9.1	16.6	70 / 60	●●●	●●●●	●●●	●●●●
<b>tesa® 51970</b>	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	⊗	1,372	Cardboard / 3"	13.5	8.0	17.5	130 / 80	●●●	●●●●	●●●	●●●●

Evaluation across relevant tesa® assortment: ●●●● very good ●●● good ●● medium ● low \* to PC \*\* to PP

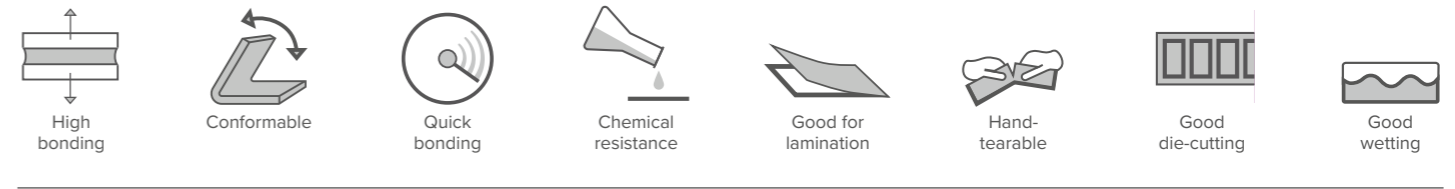
# Double-sided tissue and cloth tapes

Double-sided tissue 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 while 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.



## Main features



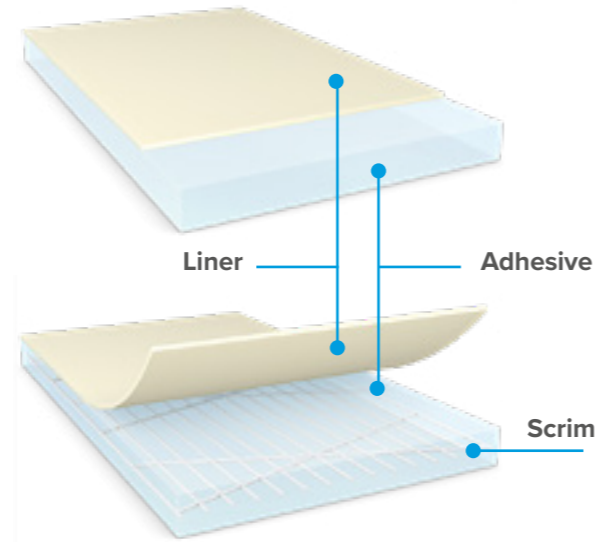
Product	Description	Backing	Adhesive	Liner	Thickness [µm]	Color	Standard log roll width [mm]	Core material / diameter	Adhesion to steel – Ultimate [N/cm]	Adhesion to PE – Ultimate [N/cm]	Adhesion to PVC – Ultimate [N/cm]	Temperature resistance short / long term [°C]	Static shear resistance at 23 °C	Tack	Aging resistance	Humidity resistance
tesa® 4962	High-adhesion double-sided non-woven tape proving excellent wetting power on rough surfaces and temperature resistance. Optimal for mounting of plastic and foam parts, heavy papers, textiles, and leather.	Non-woven	Tackified acrylic	Glassine brown	160	○	1,372	Cardboard / 3"	12	7	15	200 / 80	●●●	●●●●	●●●●	●●●●
tesa® 4959	Double-sided non-woven tape providing high initial tack and good shear, UV, and plasticizer resistance. Optimal for lamination, lightweight mounting, splicing, and bag sealing.	Non-woven	Tackified acrylic	Glassine brown	100	○	1,372	Cardboard / 3"	8.5	4.5	14	200 / 80	●●●	●●●●	●●●●	●●●●
tesa® 4943	Double-sided non-woven tape providing high initial tack and good shear resistance. Optimal for lamination, lightweight mounting, splicing, and bag sealing.	Non-woven	Tackified acrylic	Glassine white w/logo	100	○	1,220	Cardboard / 3"	8.1	0	10.8	100 / 70	●●●	●●●	●●●	●●●
tesa® 52215	Double-sided non-woven tape for permanent mounting of metal and plastic materials. The thick adhesive bonds well on uneven surfaces, and shows a very high initial tack.	Non-woven	Water-based acrylic	Glassine brown	150	○	1,250	Cardboard / 3"	12	2	12	190 / 80	●●	●●●	●●●●	●●●
tesa® 52210	Double-sided non-woven tape equipped with a water-based acrylic adhesive. The conformable non-woven tape is especially designed for general purpose lamination applications.	Non-woven	Water-based acrylic	Glassine brown	100	○	1,250 / 1,500	Cardboard / 3"	7.6	6.0	9.5	200 / 80	●●	●●●	●●●●	●●●
tesa® 51571	Double-sided non-woven tape for permanent mounting of metal and plastic materials. The thick adhesive bonds well on uneven surfaces, and shows a very high initial tack.	Non-woven	Tackified acrylic	Glassine brown	160	○	1,400	Cardboard / 3"	13	8.5	13	80 / 40	●●●	●●●●	●●	●●●
tesa® 4964	Strong and flexible double-sided cloth tape created to adhere to rough and non-polar surfaces with residue-free removability. Suitable for laminations, splicing, and applications in the carpentry, and leather industry.	Cloth	Natural rubber	Glassine brown	390	○	1,550	Cardboard / 3"	7.6	5.4	7	110 / 30	●●	●●●●	●●	●●
tesa® 4934	Solvent-free double-sided cloth tape with high tack, humidity resistance, and suitable for rough surfaces. Performs best in indoor applications such as permanent carpet laying, and can be torn by hand.	Cloth	Synthetic rubber	Glassine white	200	○	1,400	Cardboard / 3"	24	8.5	22.5	60 / 40	●●	●●●●	●●	●●●

Evaluation across relevant tesa® assortment: ●●●● very good ●●● good ●● medium ● low

# 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 re-positioning. 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 applications, 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.



## Main features



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]	Temperature resistance short / long term [°C]	Tack	Aging resistance
<b>Transfer tapes</b>														
<b>tesa® 52105 Ultra Low VOC</b>	Conformable, water-based acrylic adhesive transfer tape with low VOC properties, suitable for laminating flexible substrates and lightweight mounting. Good die cutting properties and LSE performance.	None	Water-based acrylic	Glassine yellow	50	⊗	1,500	Cardboard / 3"	9.2	3*	-	170	•••	•••
<b>tesa® 52110 Ultra Low VOC</b>	Conformable, water-based acrylic adhesive transfer tape with low VOC properties, suitable for laminating flexible substrates and lightweight mounting. Good die cutting properties and LSE performance.	None	Water-based acrylic	Glassine yellow	100	⊗	1,500	Cardboard / 3"	11.6	5.1*	-	180	•••	•••
<b>tesa® 4985</b>	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	⊗	1,270	Cardboard / 3"	11.1	4.9	9.4	200	•••	••••
<b>tesa® 75505 – Team 4965</b>		None	Tackified acrylic	Glassine brown	50	⊗	1,372	PE / 3"	8.5	3.5	11	200 / 100	••••	••••
<b>tesa® 75507 – Team 4965</b>	Conformable, tackified acrylic transfer tape equipped with our proven tesa® 4965 adhesive. Shows excellent die-cutting properties and good adhesion on LSE substrates. Suitable for a variety of lamination, splicing, and lightweight mounting applications.	None	Tackified acrylic	Glassine brown	75	⊗	1,372	PE / 3"	11	4.5	13	200/100	••••	••••
<b>tesa® 75515 – Team 4965</b>		None	Tackified acrylic	Glassine brown	125	⊗	1,372	PE / 3"	12	6	15	200 / 100	••••	••••
<b>Scrim tapes</b>														
<b>tesa® 66022 Ultra Low VOC</b>	Conformable water-based acrylic adhesive tape reinforced by a PET scrim with low VOC properties. Suitable for laminating all kinds of flexible substrates and lightweight mounting. Good die cutting properties.	None	Water-based acrylic w/ PET scrim	Glassine brown w/ logo	220	⊗	1,150	Cardboard / 3"	17.3	9	19.3	200	•••	•••
<b>tesa® 75007 Low VOC</b>	Conformable, tackified acrylic adhesive tape reinforced by a PET scrim with low VOC properties. Suitable for demanding lamination and mounting applications, even on low surface energy substrates.	None	Tackified acrylic w/ PET scrim	Glassine brown w/ logo	75	⊗	1,372	Cardboard / 3"	8.6	4.9	8.8	170	•••	•••
<b>tesa® 75013 Low VOC</b>	Conformable, tackified acrylic adhesive tape with a thickness of 130 µm, reinforced by a PET scrim. This tape has been specially developed for all kinds of very demanding lamination and mounting applications.	None	Tackified acrylic w/ PET scrim	Glassine brown w/ logo	130	⊗	1,372	Cardboard / 3"	10.7	6.5	6.4	170	•••	•••

Evaluation across relevant tesa® assortment: •••• very good ••• good •• medium • low \* to PP, initial \* to PC \*\* to PC, initial

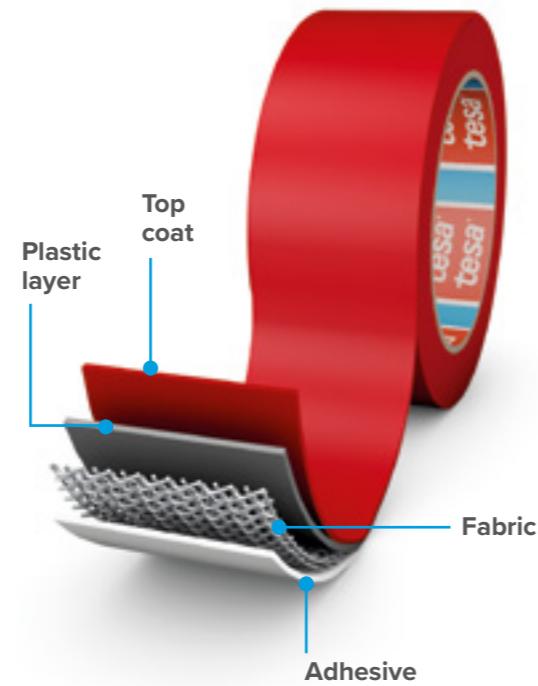


Repairing &  
general applications

# Cloth tapes





Cloth tapes are ideal products for temporary applications, such as repairing, sealing, bundling, and 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, and fixing and insulating wires.



## Main features



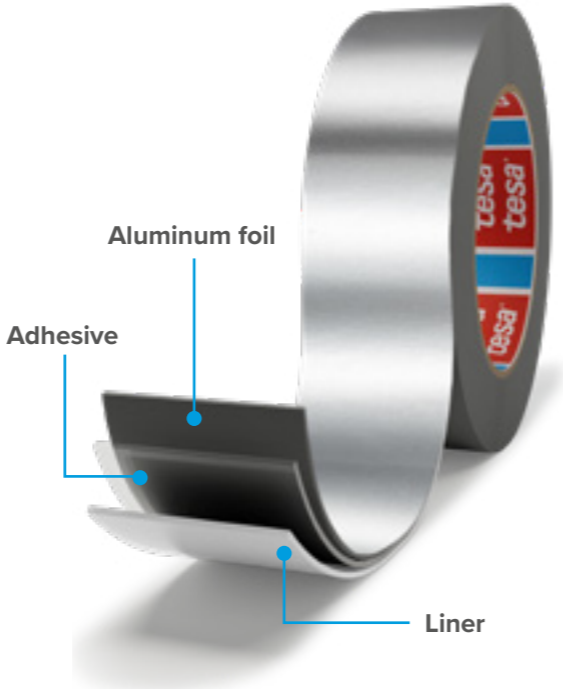
Product	Description	Level	Backing	Adhesive	Thickness [μm]	Color	Standard log roll width [mm]	Core material / diameter	Adhesion to steel – Ultimate [N/cm]	Temperature resistance short / long term [°C]	Mesh count	Tensile strength
 tesa® 4541	tesa® 4541 is a highly tear-resistant uncoated cloth tape. It is based on a 145 mesh rayon fabric backing and natural rubber adhesive. tesa® 4541 is a very flexible and conformable tape convenient for a wide range of applications.	Specialty	Uncoated cloth	Natural rubber	270	● ○	1,140	Cardboard / 3"	3.6	130	145	90
 tesa® 4651	Very strong cloth tape for almost every application, including masking, sealing, 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	130	145	100
 tesa® 4657 PV1	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	Acrylic-coated cloth	Thermosetting natural rubber	290	● ●	965	Cardboard / 3"	4.6	180	145	100
 tesa® 4688	Mid-grade cloth tape used for various masking, marking, packaging, protecting, and repairing applications. It is water repellant, hand-tearable, and temperature and abrasion resistant.	Standard	PE extruded cloth	Natural rubber	260	● ○ ● ● ● ● ● ● ● ●	1,300	Cardboard / 3"	4.5	110	55	52

# Aluminum tapes

tesa® offers a complete line of aluminum foil tapes, specifically engineered to meet the toughest requirements of the HVAC, metal construction, electrical, and household appliance industries.





Our range is characterized by high thermal resistance, durability, and conductivity, and can help increase efficiency and meet sustainability goals by minimizing air distribution loss.

Even for chemical masking, we offer you a solution resistant to chemicals to protect surfaces during the de-paint process and other chemical masking operations.



## Main features



Product	Description	Backing	Adhesive	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]	Tensile strength [N/cm]
 tesa® 60632	tesa® 60632 is a conformable aluminum tape based on a 30 µm (1.2 mil) aluminum foil, a transparent acrylic adhesive, and a white, single-sided siliconized, 85 µm thick paper liner.	Aluminum foil	Acrylic	65	⦿	1,200	Paper / 3"	8	4	6	25
 tesa® 60652	tesa® 60652 is an aluminum tape based on a 50 µm (2 mil) aluminum foil, a transparent acrylic adhesive, and a white, single-sided siliconized, 85 µm thick paper liner.	Aluminum foil	Acrylic	90	⦿	1,200	Paper / 3"	9	5	6	40
 tesa® 60672	tesa® 60672 is a robust aluminum tape based on a 75 µm (3 mil) aluminum foil, a transparent acrylic adhesive, and a white, single-sided siliconized, 85 µm thick paper liner.	Aluminum foil	Acrylic	125	⦿	1,200	Paper / 3"	10	6	4	60
 tesa® 60677*	tesa® 60677 is a 75 µm removable aluminum tape for high temperature masking applications.	Aluminum foil	Acrylic	120	⦿	1,200	Paper / 3"	3.4	-	-	-

\* Adhesion to backing (N/cm): 3.7



Masking &  
surface protection

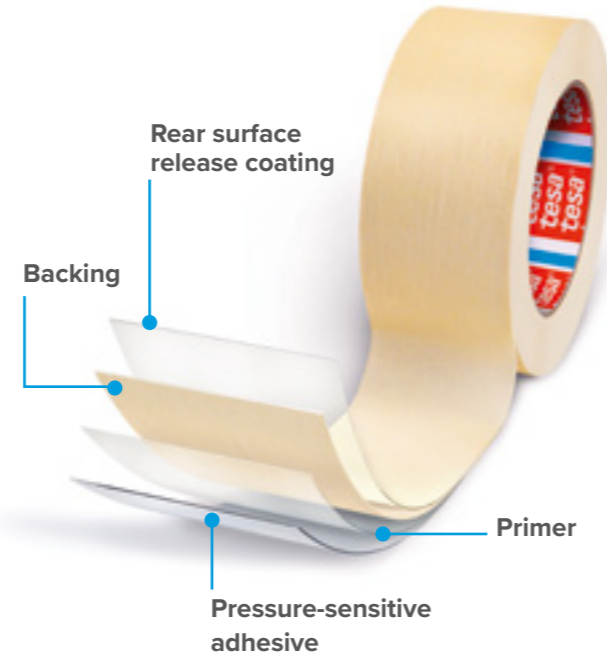
# Industrial paint jobs & surface protection tapes

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



Product	Description	Main application	Backing	Adhesive	Thickness [µm]	Color	Usable log roll width [mm]	Core material / diameter	Adhesion to steel – Ultimate [N/cm]	Temperature resistance short / long term [x°C/1h]	Tensile strength [N/cm]
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.	Sandblasting	Flat paper	Natural rubber	330	Yellow	1,020	Cardboard / 3"	8	100	93
tesa® 50600	High-temperature PET masking tape used for masking during powder-coating 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	Green	1,280	PE / 3"	4	220°C/30 min.	75
tesa® 50650	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	Blue	1,280	PE / 3"	3.3	220°C/30 min.	50
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	Blue	1,450	Cardboard / 3"	2.2	70	23
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	105	Green	1,450	Cardboard / 3"	2.4	100	19
tesa® 51407	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.	Specialty	Polyimide	Silicone	62	Yellow	1,000	PE / 3"	2.5	260	40
tesa® 4831	Silicone-free high temperature masking tape designed for highly demanding applications such as prebond masking, composite, and metal sandwich construction.	Masking	PET / non-woven	Acrylic	125	White	1,230	PE / 3"	3.5	180	60
tesa® 4331	High-temperature masking tape designed for masking during powder-coating processes and wave soldering, e.g. circuit board assembly.	Masking	PET / non-woven	Silicone	110	White	1,230	Cardboard / 3"	180	200	60
tesa® 4334	Precision masking tape designed to deliver superior performance in painting applications and achieves perfect, clean paint edges. Also ideal also for spray painting with subsequent oven-drying.	Masking	Washi paper	Acrylic	90	Yellow	1,230	Cardboard / 3"	60	120	30

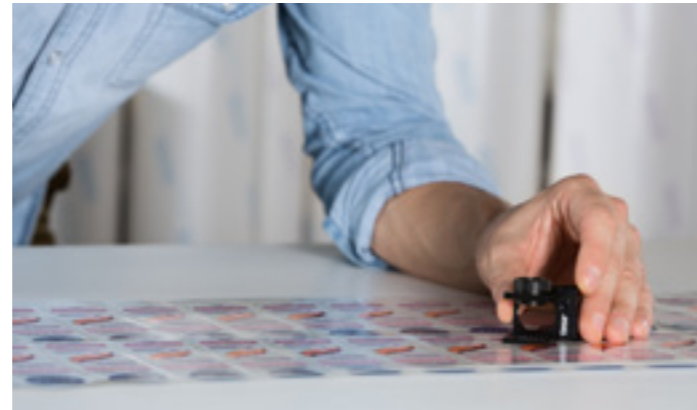




Plate mounting solution for  
flexographic label printing

# Plate mounting

Increasing demands on print quality and process efficiency call for specifically tailored plate mounting tapes. Our tesa® Softprint assortment provides distinctive product lines for Converter Partners and label printers to fulfill each and every requirement.



## tesa® Softprint 380 µm/15 mil category\*

X-Soft	Soft	Medium	Medium-Hard	Hard	Product color code
					Print motif

### Classic product design

Product	tesa® 52018	tesa® 52017	tesa® 52016	tesa® 52015	tesa® 52014	Description
tesa® Softprint STM						High tack adhesive for plate mounting in unclean and cold conditions. Secure bonding with excellent resistance to edge lifting.
tesa® Softprint TP	tesa® 52118	tesa® 52117	tesa® 52116	tesa® 52115	tesa® 52114	Medium tack adhesive for reliable plate mounting under most conditions. Secure bonding with excellent resistance to edge lifting.
tesa® Softprint SEC	tesa® 52818	tesa® 52817	tesa® 52816	tesa® 52815	tesa® 52814	Low tack adhesive for easy and fast plate mounting in clean and standardized conditions. Secure bonding with excellent resistance to edge lifting.

### Flex product design

Product	tesa® 53418	tesa® 53417	tesa® 53416	tesa® 53415	tesa® 53414	Description
tesa® Softprint FE						Compensating product design for demanding sleeve/cylinder surfaces. Very low tack adhesive for easy and fast plate mounting in clean and standardized conditions. Secure bonding with excellent resistance to edge lifting.

\*also available: tesa® Softprint 500 µm/20 mil category

Product	Tape characteristics and application examples	Thickness category [µm/mil]	Adhesive	Backing	Color
<b>tesaprint® plate mounting for versatile use</b>					
tesa® 52310	100 µm tape category for various plate mounting applications (e.g. letterpress plate mounting, plate mounting on compressible sleeves, dry offset blanket mounting)	100/4	Natural rubber	PVC	⊗
tesa® 52315	150 µm tape category for various plate mounting applications	150/6	Natural rubber	PVC	●
tesa® 52320	200 µm tape category for various plate mounting applications	200/8	Natural rubber	PVC	○
tesa® 52325	250 µm tape category for various plate mounting applications	250/10	Natural rubber	PVC	●

# Products for roll-to-roll processing

Efficiency is key to profitability. Our complementary solutions based on pressure-sensitive adhesive technology speed up changeovers, prevent machine stops, and facilitate everyday tasks.. With our high-quality process tapes we supply the best possible solution to be successful in producing your required level of quality. Our broad assortment is developed based on your individual needs.

Product	Special feature	Thickness [µm/mil]	Adhesive	Backing	Color
<b>Splicing</b>					
tesa® 51904	d/s tape with high tack, high adhesion for flying splice	110/4	Synthetic rubber	Non-woven	●
tesa® 64620	d/s tape with low tack, medium adhesion for flying splice	185/7	Synthetic rubber	PP	○
tesa® 60404	s/s tape for butt splicing	67/3	Natural rubber	PVC	●●●●●
tesa® 4122	s/s tape with high tear strength for butt splicing	88/3	Natural rubber	PVC	●●
tesa® 4137	s/s tape for butt splicing and inductive detection	50/2	Acrylic	PET	○
<b>Roller wrapping</b>					
tesa® Printer's Friend 4863	Embossed surface	620/24	Natural rubber	Cloth	●
tesa® Printer's Friend 4563	Smooth surface	380/15	Natural rubber	Cloth	●
<b>Edge sealing</b>					
tesa® 4174	Flexible s/s tape	110/4	Natural rubber	PVC	●
tesa® 60404	Rigid s/s tape	67/3	Natural rubber	PVC	●●●●●
<b>Core starting</b>					
tesa® 60404	s/s tape for safe bonding on paper and PE cores	67/3	Natural rubber	PVC	●●●●●
tesa® 51194	Splittable d/s tape for flying splice labelling applications	120/5	Synthetic rubber/acrylic	Splittable paper	●
tesa® 52307	d/s tape for safe bonding and easy release	70/3	Acrylic	PVC	○
<b>Failure flagging</b>					
tesa® 60404	Different colors to mark material imperfections	67/3	Natural rubber	PVC	●●●●●
<b>End tabbing</b>					
tesa® 60404	Safe bonding on all kind of materials	67/3	Natural rubber	PVC	●●●●●
<b>Additional tools</b>					
tesa® 52064	Plate cleaning				
tesa® 52065	Rubber roller				

# Roller wrapping

Our decades of experience as the pioneering manufacturer of roller wrapping tapes have made our tesa® 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 the 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 tesa® 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



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.



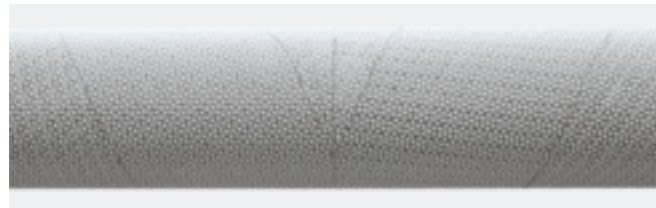
Put the tape on a flat surface and cut it diagonally from the end of the roll to the marked point of the tape.



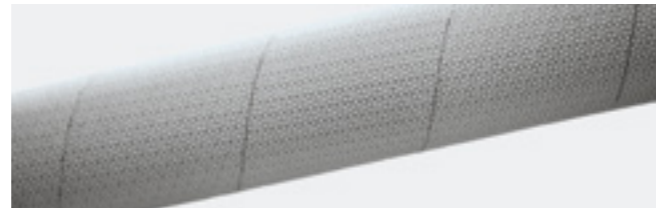
Remove the liner and start applying the tape, starting from the edge of the roller.



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	Description	Backing	Adhesive	Liner	Thickness [%]	Color	Standard log roll width	Core material / diameter	Adhesion to steel – Ultimate [N/cm]
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
tesa® Printer's Friend 4563	Designed for roller wrapping in a variety of manufacturing and printing processes that utilize roller systems to process web-based materials, such as films, textiles, paper, and more.	Silicone-coated cloth	Natural rubber	PP red	380	●	100	Cardboard / 3"	3





Ancillary products

# 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
- Release agents
- Greases
- Waxes
- Plasticizers
- 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

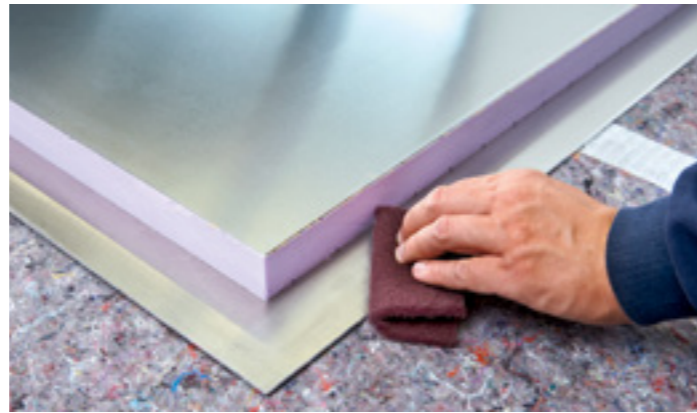


Water-soluble impurities can be removed with water and detergents. Other impurities, for example, oil traces, grease, wax, and release agents, can strongly reduce the bonding capacity of the surface. Special care must be taken to remove such impurities. Suitable solvents for this are:

- **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 use a lint-free cloth 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, for example, 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



# 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 >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.

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

hesive tape. This is especially possible with thick products such as foam adhesive tapes or tesa® ACX<sup>plus</sup>.

For this we recommend, for example, the use of an automatic sealing compound cutter or a knife with a sharp and stable blade in combination with a lever tool. Carefully cut through the adhesive tape with these tools.

## Removing pressure-sensitive adhesive residues

In practice, adhesive mass residues may remain if an unsuitable adhesive tape has been 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, which 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.

### 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
- 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 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.	15 min.

## Physical pretreatment

The surfaces of the material to be bonded and the pressure-sensitive 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 from

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.

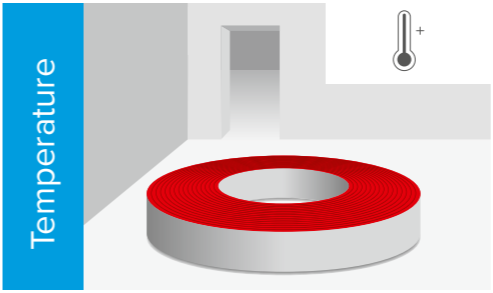




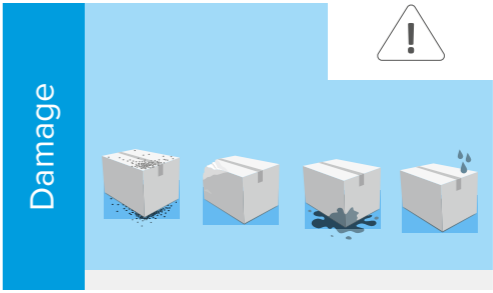
# Storage & transportation

## Tips before and after converting

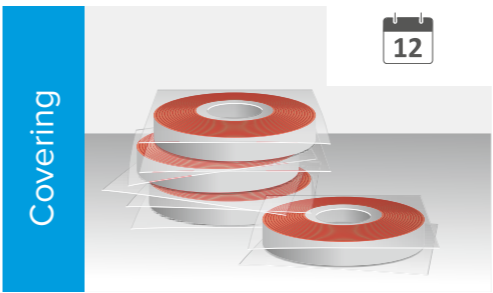
The storage or transport of adhesive tapes is best done at normal room temperature and low air humidity. The rolls are to be covered individually with release film.



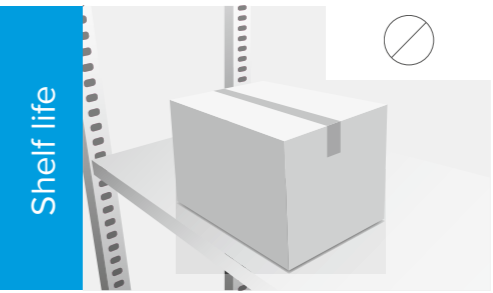
tesa® adhesive tapes are best stored at temperatures between 15–35°C and at normal relative humidity between 50–70%.



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.



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.



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



# 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.

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.

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 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

