AUTOMOTIVE CONVERTER ASSORTMENT

AUTOMOTIVE CONVERTER ASSORTMENT

Agenda

About Us

Your Complete Automotive Converting Partner

- Pressure sensitive adhesive basics
- Surface tension

1. Double-Sided Tape – Automotive

- Filmic and Non-woven Tapes
- Foam Tape
- Acrylic-Foam Tape
- Structural Tape
- LSE Tape
- Flame-Retardant Tape

2. Functional Tape – Automotive/Electronics

- Electrically Conductive Tape
- Thermally Conductive Tape

3. Optically Clear Adhesives

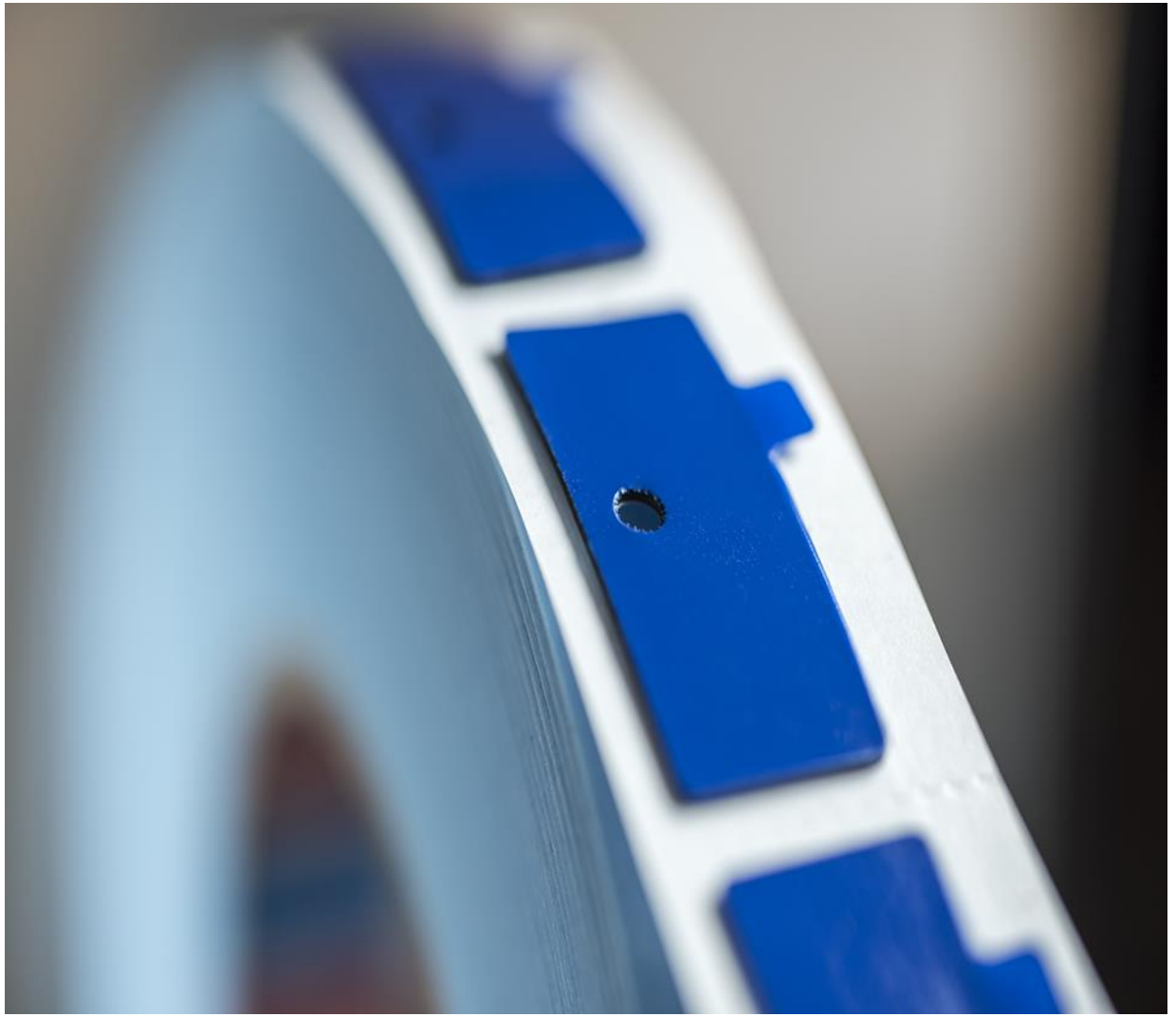
- Display Lamination Films
- Display Mounting Tape

4. E-Mobility Solutions

- Electrical Insulation Tape
- Cell and Pack Mounting

5. Single-Sided Tape – Automotive

- Permanent Protection Tape
- Masking Tape
- Multipurpose Tape



ABOUT US

Qualified Experience and Individual Support

As a leading global manufacturer of adhesive solutions for the automotive industry, we offer a wide range of specially developed adhesive tape for trends like car customization, e-mobility or low-VOC products. We are continuously developing new products enabling you to accelerate in this fast moving business and offer the latest innovations to your customers. We put you and your suppliers first by giving you the individual attention and service you deserve.

Our numerous sales offices, our research and development departments, and our production facilities offer worldwide assistance wherever our customers are located. At our Application Solution Centers, our technical experts evaluate your specific application needs. Our state-of-the-art equipment allows us to conduct the latest critical tests in order to find the adhesive tape that perfectly matches your individual needs.

BY YOUR SIDE

We are one of the leading global manufacturers of self-adhesive tape. Our product solutions prove their performance in countless industrial sectors around the globe. The nearest office is just a call away – contact us.

Your Contact:
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AUTOMOTIVE CONVERTER ASSORTMENT

tesa Converter Offers

FROM SKETCH TO REALITY

YOUR COMPLETE AUTOMOTIVE CONVERTING PARTNER

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
- Printing
- Slitting
- Rewinding
- Laminating
- Spooling

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

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 & Validation

Our local experts and engineers will support you on-site and remotely, resorting to state-of-the-art equipment to perform:

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

Features of Our Tapes

High bonding

Impact resistance

LSE performance

Quick bonding

Chemical resistance

Anti-repulsion

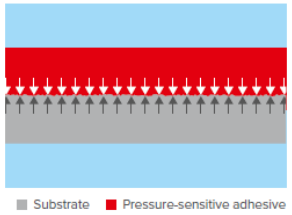
Balanced properties

Good die-cutting

… and many more

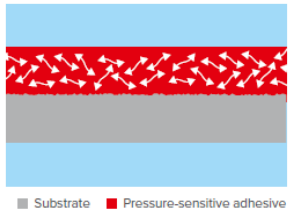
PRESSURE SENSITIVE ADHESIVE BASICS

An interplay between adhesion and cohesion



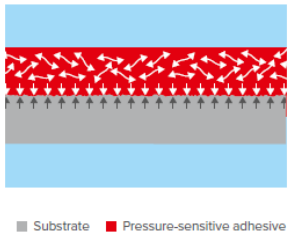
Adhesion

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.



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.



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.

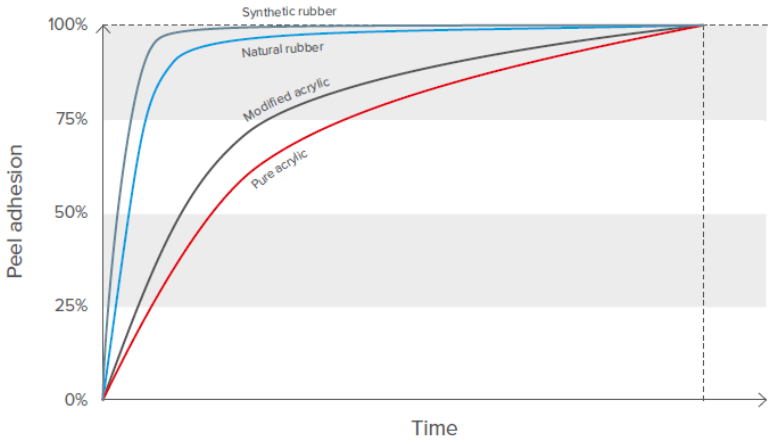
A particular form of adhesion is the **tack**, which determines whether an adhesive mass can quickly wet a surface with which it comes into contact with virtually no pressure. But the tack does not ultimately correlate with the actual bond strength of a pressure-sensitive adhesive. Pressure-sensitive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

Therefore, the thumb test (or even finger tack) is not suitable for drawing conclusions about the bond strength of a pressure-sensitive adhesive.

AUTOMOTIVE CONVERTER ASSORTMENT

PSA Basics

Initial and ultimate peel adhesion

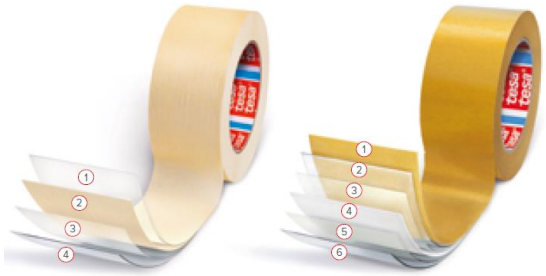


Due to the viscoelastic character of an adhesive tape the peel adhesion increases over time. The time needed to achieve the ultimate peel adhesion strongly depends on factors such as the type of adhesive mass, temperature, contact pressure and substrate. This behavior is described as the initial and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



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

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.

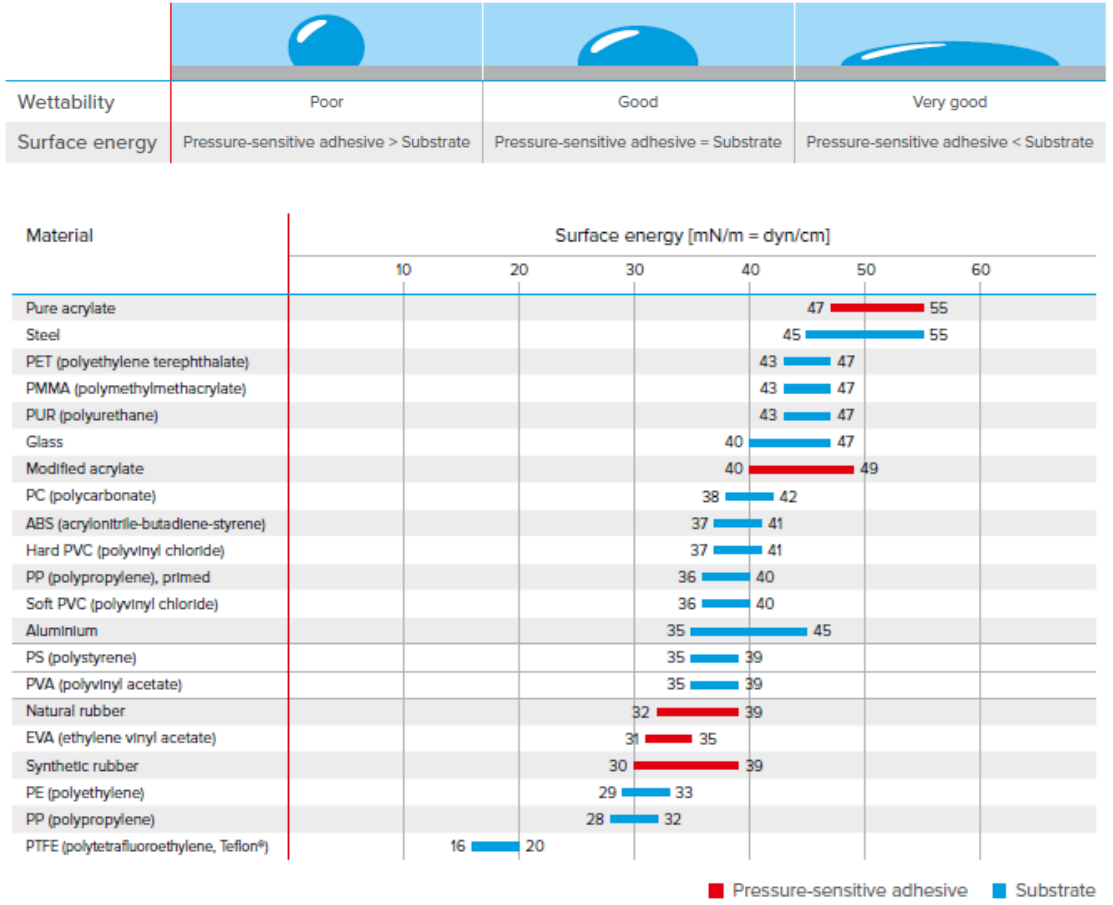
Surface tension

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.



AUTOMOTIVE CONVERTER ASSORTMENT

Overview Tape Categories

Double-Sided Adhesive Tape

- Automotive Lamination Tape (p. 9)
- Automotive Foam Tape for Permanent Mounting (p. 12)
- Automotive Tape for Ultimate Bonding (p. 14)
- Automotive Heat-Activated Tape Solutions (p. 17)
- LSE Plastic Mounting (p. 19)
- Automotive Flame-Retardant Solutions (p. 21)

Functional Adhesive Tape

- Electrically Conductive Shielding and Grounding (p. 23)
- Thermal Conductivity (p. 23)

Optically Clear Adhesive Tape

- Automotive Display Solutions (p. 26)

Single-Sided Adhesive Tape

- Automotive Surface-Protection Solutions (p. 37)
- Automotive Masking Solutions (p. 39)
- Automotive Multipurpose Solutions (p. 41)

AUTOMOTIVE TAPE FOR LAMINATION

Double-Sided Adhesive Tape: Scrim, Transfer, Non-woven, and Filmic

Back

Main Application

- Thin double-sided adhesive tape for **fast** and **efficient** converting processes
- Transfer, non-woven, and filmic double-sided tape for f**oam**, **felt,** and **fleece** laminations

Assortment Properties

- The different technology blocks - from **water- and solvent-born adhesives** in thicknesses from 50 µm to 220 µm - offer a wide-ranging level of performance and design to cost options
- Our double-sided adhesives for lamination and converting applications **offer very Low VOC emissions** judged as **ultra Low VOC** and **Low VOC**
- Broad portfolio including special **solutions for demanding loads** in the applications

Main Product Features

- High bonding
- Good wetting on uneven surfaces
- LSE performance
- Quick bonding
- Chemical resistance
- Low Odor
- Temperature resistant
- Anti-repulsion
- Good die-cutting
- Qualified according.to automotive conditions
- Low and ultra Low VOC

Best Seller

tesa® 52105
- Efficient solution for lamination
- Good wet out on all substrates
- Ultra Low VOC

tesa® 51970
- Strong performance on rough substrates and textiles
- Strong repulsion resistance
- Low VOC

tesa® 66022
- Suitable for LSE substrates
- Strong repulsion resistance
- Ultra Low VOC

tesa® 4965
- Strong all-round solution
- High shear resistance
- Low VOC

AUTOMOTIVE TAPE FOR LAMINATION

Double-Sided Adhesive Tape: Scrim, Transfer

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Peel adhesion to steel initial /three days [N/cm]	Temperature resistance short/long term [°C]	Low emission	Description/special features
tesa® 75007	75	Transparent	Glassine Brown / Blue logo	1,372	Acrylic	Scrim	7.3/8.6	170/-	LOW VOC	Tape with high conformability and repulsion and humidity resistance
tesa® 66007	75	Transparent	Glassine Brown / Blue logo	1,150	Acrylic	Scrim	9.7/12.3	170/-	ULTRA LOW VOC	Tape with high conformability and strong initial performance even on LSE substrates
tesa® 66013	130	Transparent	Glassine Brown / Blue logo	1,150	Acrylic	Scrim	15.4/16.5	180/-	ULTRA LOW VOC	Tape with high conformability and strong initial performance even on LSE substrates
tesa® 66022	220	Transparent	Glassine Brown / Blue logo	1,150	Acrylic	Scrim	12.3/17.3	200/-	ULTRA LOW VOC	Tape with high conformability and gap-filling properties as well as strong initial performance even on LSE substrates
tesa® 52105	50	Transparent	Glassine Yellow	1,480	Acrylic	None	9.2/9.5	170/-	ULTRA LOW VOC	Lamination adhesive suitable for all substrates
tesa® 52110	100	Transparent	Glassine Yellow	1,480	Acrylic	None	13/13	180/-	ULTRA LOW VOC	Lamination adhesive suitable for all substrates
tesa® 4985	50	Transparent	Glassine Brown	1,270	Acrylic	None	8/11.1 (14 days)	200/80		Temperature-resistant tape with high adhesion to uneven surfaces
tesa® 75507	75	Transparent	Glassine Brown	1,372	Acrylic	None	11 (steel initial)	200/100	LOW VOC	Tape with excellent conformability and very good initial adhesion to a variety of substrates
tesa® 88125	63	Transparent	PE-coated paper White	1,524	Acrylic	None	3.3/6.0	200/-	LOW ODOR	Tape with high temperature and high shear performance
tesa® 88150	127	Transparent	PE-coated paper White	1,524	Acrylic	None	3.0/8.0	200/-	LOW ODOR	Tape with high temperature and high shear performance

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AUTOMOTIVE TAPES FOR LAMINATION

Double-sided Adhesive Tapes: Cloth, Nonwoven and Filmic

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Peel adhesion to steel (initial/14 days…) [N/cm]	Temperature resistance short/long term [°C]	Low emission	Description/special features
tesa® 4934	200	Transparent	Glassine White	1,400	Rubber	Cloth	14.5/24 (14 days)	60/40		High-tack tape with high initial adhesion suitable for rough surfaces
tesa® 4959	100	Translucent	Multiple	1,372	Acrylic	Non-woven	8/8.5	200/80	LOW VOC	Tape with high resistant properties against different ambient influences
tesa® 4962	160	Translucent	Brown glassine	1,362 1,372	Acrylic	Non-woven	11.5/12 (14 days)	200/80	LOW VOC	Tape with high adhesion to different substrates
tesa® 52210	100	Translucent	Glassine Brown	1,000 1,480 1,500	Acrylic	Non-woven	6/11.5	170/-	ULTRA LOW VOC	Tape with high conformability to follow 3D shapes
tesa® 52215	150	Translucent	Glassine Brown	1,000 1,500	Acrylic	Non-woven	6/13	180/-	ULTRA LOW VOC	Tape with high conformability to follow 3D shapes
tesa® 51571	160	Translucent	Glassine Brown	1,400	Rubber	Non-woven	12.5/13	80/40		High initial bonding tape for LSE substrates and uneven surfaces
tesa® 4959	100	Translucent	Multiple	1,372	Acrylic	Non-woven	8/8.5	200/80	LOW VOC	Tape with high resistant properties against different ambient influences
tesa® 4942	140	Transparent	Glassine Brown	1,372	Acrylic	PET	10.3/12.7	200/100		High bonding strength and shear resistance
tesa® 4965	205	Transparent	Multiple	1,372	Acrylic	PET	11.5/11.8	200/100	LOW VOC	Extremely well balanced all-round tape with excellent humidity and ageing resistance
tesa® 4970	225	White	Glassine Brown	1,372	Acrylic	PET	13/13.6	70/60	LOW VOC	Tape with excellent adhesion and plasticizer resistance
tesa® 4972	48	Transparent	Glassine Brown / Blue	1,250	Acrylic	PET	7/9.6	200/100		Excellent resistance to demanding environmental conditions and handling performance when converting
tesa® 51966	200	Transparent	Glassine Brown / Blue	1,372	Acrylic	PETP	10.5/11	130/80		Excellent converting properties, fully suitable for long-term applications
tesa® 64993	240	White	PE-coated paper White	1,372	Acrylic	PP	12/12.5	120/-		Superior wet-out performance, excellent gap-filling
tesa® 51970	220	Transparent	Glassine Brown	1,372	Acrylic	PP	13/13.5	130/80		Secure bond even on critical materials such as PP and PE and rough surfaces
tesa® 61395	200	Black	Glassine White with logo	1240	Acrylic	PET	14.3/17	200/100		High shock resistance and very high bonding strength

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AUTOMOTIVE FOAM TAPE FOR PERMANENT MOUNTING

Double-Sided Adhesive Tape: Foam

Back

Main Application

- Globally OEM approved for applications such as for automobiles
  - **Exterior emblems, PDC holder, and entry trims**
  - **Exterior and interior mirror mounting**
  - **Interior plastic trims and instrument clusters**
  - **Locator pin mounting on glass**
- Suitable if sealing, shock resistance, gap-filling, and dampening is required

Assortment Properties

- Widely used and utilized because of the conformable closed-cell design for several applications

Main Product Features


High bonding


Conformable

LSE performance


Good wetting


Chemical resistance


Impact resistance


Compressible

Reliable


Approved and in use

Best Seller

tesa® 649xx Primerless
- For medium- and low-surface-energy plastics and clear coats
- Primerless application
- High initial tack even at low temperatures

tesa® 6285x High Temperature
- For medium- and high-surface-energy plastics and clear coats
- High temperature resistance
- High peel adhesion

tesa® 625xx
- Excellent wet-out and superior conformability
- Good for gap-filling and sealing
- High foam compression rate

tesa® 6290x
- High initial and ultimate adhesion
- Excellent cold-shock performance
- High temperature resistance

AUTOMOTIVE FOAM TAPE FOR PERMANENT MOUNTING

Double-Sided Adhesive Tape: Foam

Product	Thickness [µm]	Color	Standard log roll width [mm]	Type of adhesive	Backing	Special features	Description
tesa® 64905 tesa® 64908 tesa® 64912	500 800 1,200	Black	1,240	LSE adhesive	PE foam	High initial adhesion to LSE and MSE surfaces, ultimate peel adhesion level right after application even at low temperatures, excellent cushioning	**Primerless grade** for mounting smaller exterior and interior decorative trims, like emblems and lettering like single letters for classification of car models or engine data
tesa® 62852	500	Black	1,240	Pure acrylic	PE foam	High ultimate adhesive strength, very good peel adhesion, superior pushout performance, excellent cushioning	**High-temperature-performance grade** for mounting exterior parts, emblems, nameplates and lettering like single letters for classification of car models or engine data, especially if they have filigree designs or a locator pin on windscreens
tesa® 62708	800	Black	1,240	Pure acrylic	PE foam	High ultimate adhesive strength, excellent cushioning, excellent cold-shock performance	**High-temperature-performance grade** for mounting smaller emblems, lettering, or nameplates
tesa® 62904 tesa® 62906	400 600	Black	1,240	Tackified acrylic	PE foam	High initial and ultimate adhesive strength, excellent cold-shock performance, excellent temperature resistance and cushioning	**High-initial-performance grade** for mounting exterior and interior trims and mirrors on backplates
tesa® 62932 tesa® 62934 tesa® 62935 tesa® 62936	500 800 1,000 1,600	Black/White	1,360	Tackified acrylic	PE foam	High ultimate adhesion strength, immediate adhesion to numerous substrates, suitable for outdoor applications, UV, water, and ageing resistant, excellent cushioning, good initial tack and very good cold-shock absorption	**High-initial-performance grade** for mounting exterior and interior parts like plastic trims and decorative trims
tesa® 62516 tesa® 62520 tesa® 62530	1,600 2,000 3,000	Black/White	1,360	Tackified acrylic	PE foam	High ultimate adhesion strength, suitable for outdoor applications, UV, water, and ageing resistant, excellent cushioning, high foam compression rate	**General-purpose grade** for general mounting, mounting exterior and interior trims, and mounting exterior mirrors with or without a heating element onto the baseplate
tesa® 62505	500	Black/White	1,360	Tackified acrylic	PE foam	High ultimate adhesion strength, suitable for outdoor applications, UV, water, and ageing resistant, excellent cushioning, high foam compression rate	**General-purpose grade** for general mounting, mounting exterior and interior trims, and mounting exterior mirrors with or without a heating element onto the baseplate
tesa® 62508	800	Black/White	1,360	Tackified acrylic	PE foam	High ultimate adhesion strength, suitable for outdoor applications, UV, water, and ageing resistant, excellent cushioning, high foam compression rate	**General-purpose grade** for general mounting, mounting exterior and interior trims, and mounting exterior mirrors with or without a heating element onto the baseplate
tesa® 62510	1,000	Black/White	1,360	Tackified acrylic	PE foam	High ultimate adhesion strength, suitable for outdoor applications, UV, water, and ageing resistant, excellent cushioning, high foam compression rate	**General-purpose grade** for general mounting, mounting exterior and interior trims, and mounting exterior mirrors with or without a heating element onto the baseplate
tesa® 66108	800	Black	1,250	Tackified acrylic	PE foam	High initial adhesive strength, excellent cold-shock resistance Superior wet-out performance	**General-purpose grade** for mounting exterior mirrors with or without a heating element onto the baseplate
tesa® 62512	1,200	Black/White	1,360	Tackified acrylic	PE foam	High ultimate adhesion strength, suitable for outdoor applications, UV, water, and ageing resistant, excellent cushioning, high foam compression rate	**General-purpose grade** for mounting exterior mirrors with or without a heating element onto the baseplate

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AUTOMOTIVE TAPE FOR ULTIMATE BONDING

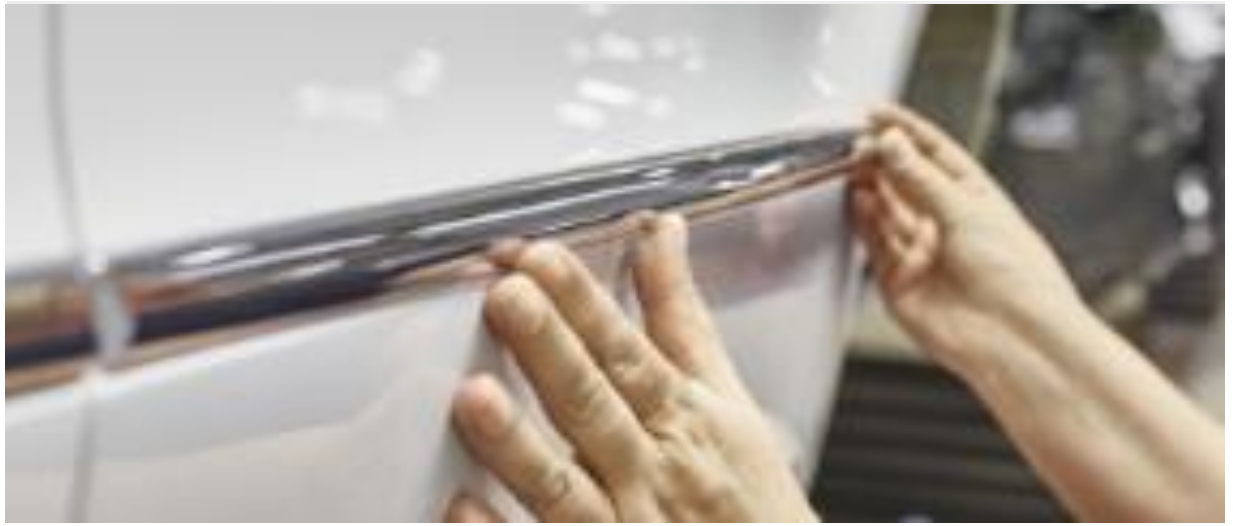
Double-Sided Adhesive Tape: Acrylic Foam

Back

Main Application

- **Primerless application** on LSE clear coats and plastic parts
- Emblems, decorative-trim parts, body side moldings, fender flares, and many more **exterior attachment parts**
- tesa® ACX^{plus} for **display-frame-mounting applications**
- tesa® ACX^{plus} for **battery-sealing and gap-filling tape** between cells in ePowertrain

Click here for approvals of acrylic- and PE-foam tape Assortment



Main Product Features

Best Seller

tesa® ACXplus 78XX Black Line
- High shear strength and temperature resistance
- Broad market acceptance
- Deep-black color
- Excellent on M&HSE* substrates

tesa® ACXplus 778XX Primerless
- Superior bonding of dissimilar LSE* plastics and materials
- Good initial performance at 5°C
- Faster processes and cost savings
- Environmentally friendly

tesa® ACXplus 772XX Base Line
- Highly price competitive
- Good conformability
- Excellent on M&HSE* substrates
- Reliable alternative to PE foams

tesa® ACXplus 771XX Series
- Acrylic foam with functional adhesive layers
- Excellent shear strength at 90°C
- Superior wet-out performance
- Outstanding on ribbed parts

AUTOMOTIVE TAPE FOR ULTIMATE BONDING

Double-Sided Adhesive Tape: Acrylic Foam

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Peel adhesion to Steel (three days) [N/cm]	Temperature resistance [°C]	Description/special features
tesa® ACXplus 7805	500	Deep Black	White/Blue	1,260	Modified acrylic	Foamed acrylic	18	Unspecified	Cold shock resistance, compensation for different thermal elongation of bonded parts
tesa® ACXplus 7808	800	Deep Black	White/Blue	1,260	Modified acrylic	Foamed acrylic	26	Unspecified	Excellent cold shock performance, color for enhanced appearance and design flexibility
tesa® ACXplus 7811	1,100	Deep Black	White/Blue	1,260	Modified acrylic	Foamed acrylic	32	Unspecified	Excellent cold shock performance, color for enhanced appearance and design fle xibility
tesa® ACXplus 7812	1,200	Deep Black	White/Blue	1,260	Modified acrylic	Foamed acrylic	32	Unspecified	Excellent cold shock performance, color for enhanced appearance and design fle xibility
tesa® ACXplus 7815	1,500	Deep Black	White/Blue	1,260	Modified acrylic	Foamed acrylic	35	Unspecified	Excellent cold shock performance, color for enhanced appearance and design fle xibility
tesa® ACXplus 77108	800	Black	White/Blue	900	Tackified acrylic	Foamed acrylic	29	Unspecified	Excellent shear resistance at elevated temperature
tesa® ACXplus 77112	1,200	Black	White/Blue	900	Tackified acrylic	Foamed acrylic	30	Unspecified	Excellent shear resistance at elevated temperature
tesa® ACXplus 77115	1,500	Black	White/Blue	900	Tackified acrylic	Foamed acrylic	34	Unspecified	Excellent shear resistance at elevated temperature
tesa® ACXplus 77608	800	Gray	Blue	900	Tackified acrylic	Foamed acrylic	25	-40/80	Superior peel-adhesion level right after application
tesa® ACXplus 77611	1,100	Gray	Blue	900	Tackified acrylic	Foamed acrylic	26	-40/80	Superior peel-adhesion level right after application

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AUTOMOTIVE TAPE FOR ULTIMATE BONDING

Double-Sided Adhesive Tape: Acrylic Foam

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Peel Adhesion to Steel (three days) [N/cm]	Temperature resistance [°C]	Description/special features
tesa® ACX^plus 77708	800	Gray	Royal Blue	900	LSE	Foamed acrylic	31	–40 to +80	Suitable for a wide range of exterior-attachment part-mounting applications
tesa® ACX^plus 77711	1,100	Gray	Royal Blue	900	LSE	Foamed acrylic	31	–40 to +80	Suitable for a wide range of exterior-attachment part-mounting applications
tesa® ACX^plus 77808	800	Gray	Royal Blue	900	LSE	Foamed acrylic	31	–40 to +80	Helps to eliminate the primer in the process. Secure bond to typical automotive attachment parts made of LSE plastics without primer
tesa® ACX^plus 77811	1,100	Gray	Royal Blue	900	LSE	Foamed acrylic	35	–40 to +80	High initial performance on LSE plastics and difficult-to-bond clear coats without primer
tesa® ACX^plus 77815	1,500	Gray	Royal Blue	900	LSE	Foamed acrylic	39	–40 to +80	Excellent bonding stability at an application temperature as low as 5°C
tesa® ACX^plus 77208	800	Gray	White	900	Pure acrylic	Foamed acrylic	24	Unspecified	Viscoelastic acrylic foam core compensates stress caused by different thermal elongation of bonded parts

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AUTOMOTIVE HEAT-ACTIVATED TAPE SOLUTIONS

Double-Sided Adhesive Tape: Structural Bonding

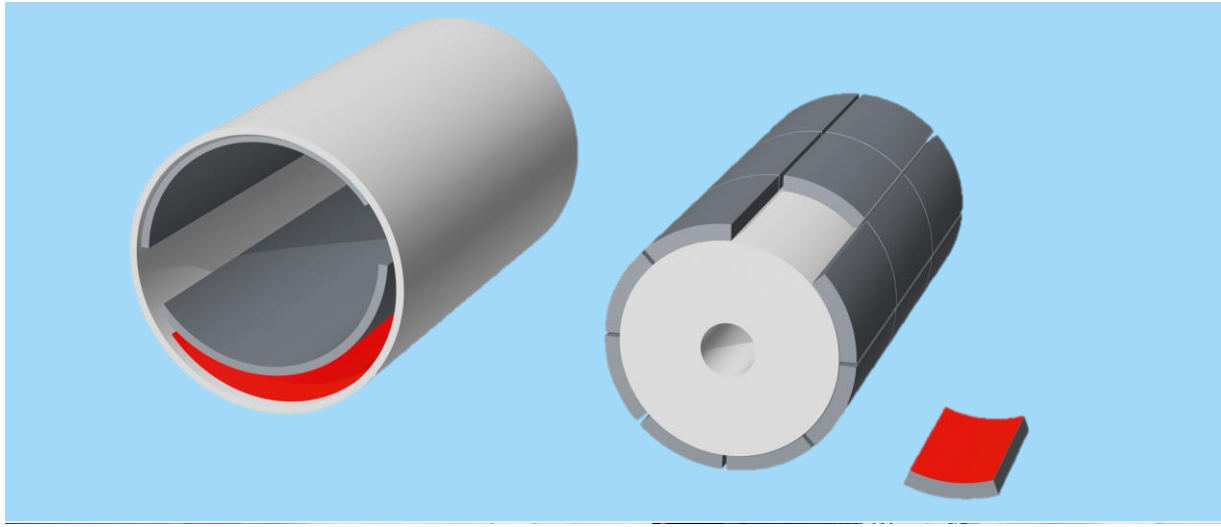
Back

Main Application

- For automotive applications that require high structural bonding performances and recommended for bonding metal components to various plastic or metal surfaces
- Bonding applications that need to withstand the harshest conditions:
  - FPC in auto electronics
  - Friction materials in clutches
  - Magnets in e-motors
  - Sensors in powertrain

Assortment Properties

- tesa Heat Activated Films HAF are activated by heat and pressure to reach very high bonding strength



Main Product Features

- >120°C — Activation temperature
- Chemical resistance
- Oil resistance
- Good wetting
- Temperature resistance
- Suitable for harshest conditions
- Low bonding pressure
- Impact resistance

Best Seller

tesa® 9410
- Outstanding performance
- Oil and chemical resistance
- Excellent bonding on material with uneven/rough bonding partner

tesa® 9456
- Excellent performance at elevated temperatures and humidity
- Oil and chemical resistance
- Excellent bonding on friction-layer material

tesa® 9430
- Outstanding performance
- Oil and chemical resistance
- Excellent bonding on material with even and nonporous bonding partner

Outlook
- Structural bonding solutions for lower activation temperatures on request

SPECIFIC PRODUCT ASSORTMENT

Double-Sided Adhesive Tape: Structural Bonding

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Type of adhesive	Activation temperature	Bonding strength [MPa]	Dynamic shear [N]	Description/special features
tesa® 9410	60	Amber	Glassine Brown	1,020	Nitrile rubber/ phenolic resin	<120	<5.5	<7.0	Reactive tape with very high structural adhesion and excellent chemical and oil resistance
tesa® 9430	45	Amber	Glassine	1,020	Nitrile rubber/ phenolic resin	<120	<5.5	<7.0	Reactive tape with very high structural adhesion and excellent chemical and oil resistance
tesa® 9405	30	Amber	Glassine	On demand	Nitrile rubber/ phenolic resin	<120	<5.5	<7.0	Reactive tape with very high structural adhesion and excellent chemical and oil resistance
tesa® 9402	125	Amber	Glassine	On demand	Nitrile rubber/ phenolic resin	<120	<5.5	<7.0	Reactive tape with very high structural adhesion, excellent chemical and oil resistance, and very good wetting of rough surfaces
tesa® 9401	200	Amber	Glassine	1,020	Nitrile rubber/ phenolic resin	<120	<5.5	<7.0	Reactive tape with very high structural adhesion, excellent chemical and oil resistance, and excellent wetting of rough surfaces
tesa® 9400	270	Amber	Glassine	On demand	Nitrile rubber/ phenolic resin	<120	<5.5	<7.0	Reactive tape with very high structural adhesion, excellent chemical and oil resistance, and excellent wetting of rough surfaces
tesa® 9456	60	Amber	PE-coated paper	1,020	Nitrile rubber/ phenolic resin		<5.5	<7.0	Reactive tape with very high structural adhesion, excellent chemical and oil resistance, and reduced tackiness at moderate temperatures

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LSE PLASTIC MOUNTING

Double-Sided Adhesive Tape: LSE

Back

Main Application

- Thin PSA for e.g. lamination with foam, felt, non-woven, textiles, or (faux) leather to serve multiple applications on LSE substrates to offer BSR prevention, splinter protection, or mounting decorative materials
- Thick PSA for structural bonding of interior plastic parts in door panels, consoles, and instrument panels as well as exterior-attachment-part mounting

Assortment Properties

- tesa solutions for LSE substrate provide a cost-efficient, reliable, and strong bonding performance on challenging low-surface-energy substrates
- Selecting the suitable tesa product can eliminate the need for surface treatment like primer, flaming, or plasma treatment

Main Product Features

High bonding

Conformable

Low bonding pressure

Good wetting

Chemical resistance

Anti-repulsion

Impact resistance

Compressible

LSE performance

Quick bonding

Best Seller

tesa® 92108
- High initial performance
- Strong ultimate bonding performance
- Suitable for bonding different substrates like PP to ABS

tesa® 77808
- Superior bonding of dissimilar LSE* plastics and materials
- Good initial performance at 5°C
- Faster processes and cost savings
- Environmentally friendly

tesa® 66022
- Suitable for LSE substrates
- Strong repulsion resistance
- Ultra low VOC

tesa® 64912
- Superior performance without primer
- Suitable for LSE and MSE paint systems

SPECIFIC PRODUCT ASSORTMENT

Double-Sided Adhesive Tape: LSE

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Peel adhesion to **PP** [N/cm] (initial/three days)	Temperature resistance [°C]	Description/special features
tesa® 66022	220	Transparent	Brown/Blue Logo	1,150	Acrylic	None	14.0/16.0	200/-	Low VOC and highly conformable to follow 3D shapes
tesa® 4965	205	Transparent	Multiple	1,372	Acrylic	Pet	6.8/7.9 (14 days)	200/100	Immediate usability right after assembly, suitability for critical demands such as heavy stress and temperatures
tesa® 51970	220	Transparent	Brown	1,372	Acrylic	PP	6.8/8.8 (14 days)	130/80	Good static shear resistance at 23°C and 40°C
tesa® 51570	110	Translucent	Brown	1,400	Rubber	Non-woven	7.0/12.0 (14 days)	40/80	Good shear resistance at 23°C
tesa® 75507	75	Transparent	Brown	1,372	Acrylic	None	11.0 (initial on steel)	100/200	Excellent static shear resistance at 70°C
tesa® 92105	500	Black	Transparent	610	Performance polymer foam	None	25/30	–30°C to 100°C	Low VOC, excellent static shear resistance
tesa® 92108	800	Black	Transparent	610	Performance polymer foam	None	28/36	–30°C to 100°C	Low VOC, excellent static shear resistance
tesa® 92111	1100	Black	Transparent	610	Performance polymer foam	None	29/40	–30°C to 100°C	Low VOC, excellent static shear resistance
tesa® 77808	800	Gray	Royal Blue	900	Foamed acrylic	Foamed acrylic	28/31	–40°C to +80°C	High initial adhesion to LSE and MSE surfaces without primer
tesa® 64912	1200	Black	Brown	1,240	Foamed acrylic	PE foam	20/20 (after 14 days)	–40°C to reliable performance to higher temperatures	High initial adhesion to LSE and MSE surfaces without primer
tesa® 61529	140	Transparent	White PET	1,240	Silicone/Acrylic	PET	SI to silicone, after 14 days 4.0 AC to steel, after 14 days 12.6	–30°C to +100°C	Excellent bonding properties of the silicone adhesive especially to silicone or silicone containing substrates

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AUTOMOTIVE FLAME-RETARDANT SOLUTIONS

Double-Sided Adhesive Tape: Flame Retardancy

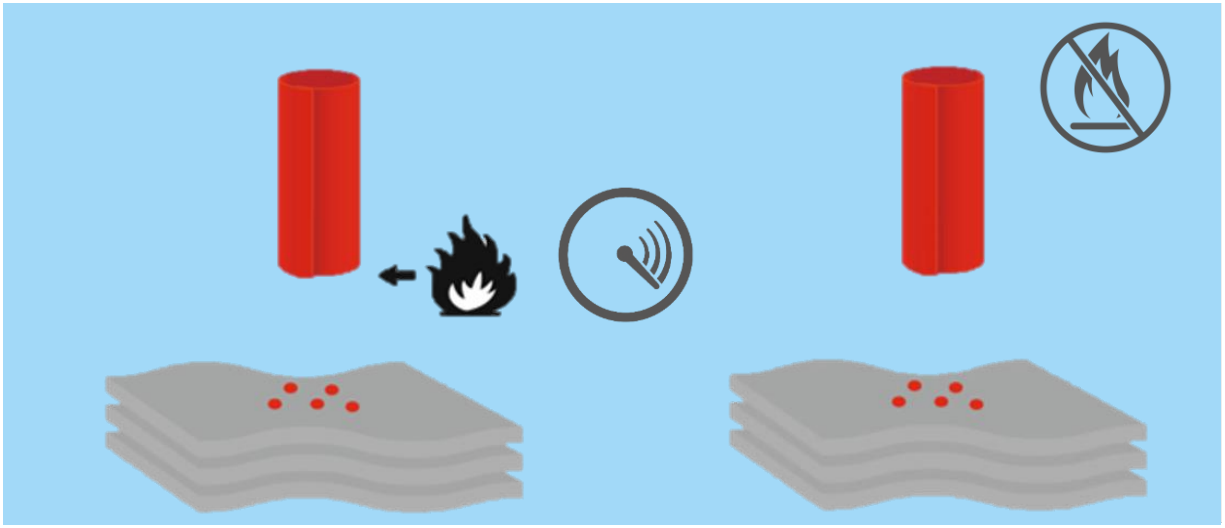
Back

Main Application

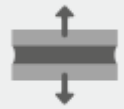
- Special and highly functional flame-retardant adhesives are developed to suit these requirements e.g. in battery applications

Assortment Properties

- tesa solutions for flame retardancy are specially developed to fulfill the requirements of relevant specifications
- According to **common automotive requirements,** the testing is required **in combination with substrates**
- Flame-retardancy requirements are increasing and, for certain applications, looking for tests that are performed without substrates



Main Product Features


High bonding


Conformable


Reworkable


Good wetting


Chemical resistance


Anti-repulsion


Impact resistance


Compressible

LSE performance


Quick bonding

Best Seller

tesa® 45001
- Fulfills flame-retardant requirements of building industry
- Strong, reliable bonding on multiple substrates
- Gap-filling and stress dissipation

Development Pipeline - Allrounder
- High shear resistance
- Strong, reliable bonding on multiple substrates
- All-rounder with flame-retardant properties

tesa® 583xx Series
- Strong, reliable bonding on multiple substrates
- Fulfills different automotive flame-retardant requirements

SPECIFIC PRODUCT ASSORTMENT

Double-Sided Adhesive Tape: Flame-Retardant

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Peel adhesion to steel [N/cm]	FMVSS 302 tape only	UL Norm	Description/special features
tesa® 45001	1,000	White	MOPP Red	1,360	Acrylic	PE foam	19.3/22	SE/NBR Burn rate = 0 mm/min	UL 94 HBF-HF1	Flame-retardant PE-foam tape with excellent bonding strength for permanent mounting in demanding applications
tesa® 58372	50	Transparent	White/Red logo Glassine	1,250	Tackified acrylic	PET	7.1	SE/NBR Burn rate = 0 mm/min	UL94 VTM-0	Flame-retardant tape specially designed for e-mobility applications
tesa® 58373	80	Transparent	White/Red logo Glassine	1,250	Tackified acrylic	PET	7.5	SE/NBR Burn rate = 0 mm/min	UL94 VTM-0	Flame-retardant tape specially designed for e-mobility applications
tesa® 58375	130	Transparent	White/Red logo Glassine	1,250	Tackified acrylic	Non-woven	8.0	SE/NBR Burn rate = 0 mm/min	UL94 VTM-0	Flame-retardant tape specially designed for e-mobility applications

ELECTRICALLY CONDUCTIVE SHIELDING AND GROUNDING

Functionally Conductive Adhesive Tape

Back

Main Application

- EMI shielding and grounding
- Thermal management

Assortment Properties

- Filled acrylic adhesive systems with a balance between either electrical conductivity and adhesive properties (ECT) or thermal conductivity (TCT), adhesive, and gap-filling properties
- Simply decide what is most important for your application: bonding performance, conductivity, or both

Main Product Features

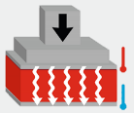
Balanced properties

Anti-repulsion

Temperature resistance

Best conductivity

High bonding



Conductivity

EMI shielding

Abrasion resistance

Best Seller

tesa® ECT 6025x/6026x
- These series provide a balanced performance of conductivity and bonding performance

tesa® ECT 6037x
- Highest conductivity in our assortment
- The contact resistance, even in harsh environmental conditions, is extremely low

tesa® ECT 6038x
- Best bonding performance in this assortment
- Offers very high peel-adhesion values, and is resistant to repulsive forces

tesa® TCT/TIM 5839x
- Excellent thermal conductivity
- Bonding strength with very good wetting and gap-filling properties!

ELECTRICALLY CONDUCTIVE MATERIALS

Balanced Conductivity and Bonding Properties

Product	Thickness [µm]	Color	Type	Backing	Peel adhesion to SUS (initial/ultimate) [N/cm]	Contact resistance [mΩ.inch^2]	Surface resistance [mΩ.inch^2]	Shielding effectiveness [dB]	Product description
tesa® ECT 60251	55	Gray	d/s Tape	Woven	4.6/0.5	0.05	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60252	55	Gray	d/s Tape	Woven	5.5/8.5	0.05	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60253	70	Gray	d/s Tape	Woven	4.8/9.7	0.05	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60254	100	Gray	d/s Tape	Woven	6.6/10.4	0.05	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60255	150	Gray	d/s Tape	Woven	4.5/10.5	0.05	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60256	200	Gray	d/s Tape	Woven	4.6/10.6	0.05	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60257	250	Gray	d/s Tape	Woven	4.8/10.8	0.05	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60264	17	Gray	d/s Tape	Non-woven	3.5/4.5	0.02	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60261	25	Gray	d/s Tape	Non-woven	4.0/5.6	0.02	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60260	35	Gray	d/s Tape	Non-woven	4.0/4.2	0.02	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60262	50	Gray	d/s Tape	Non-woven	5.4/8.3	0.02	0.2	>50	Balanced conductivity and bonding
tesa® ECT 60371	30	Black	d/s Tape	Non-woven	3.5/5.1	0.01	0.1	>60	Best conductivity
tesa® ECT 60372	50	Black	d/s Tape	Non-woven	4.3/5.6	0.01	0.1	>60	Best conductivity
tesa® ECT 60374	100	Black	d/s Tape	Woven	5.7/ 8.5	0.01	0.1	>60	Best conductivity
tesa® ECT 60381	50	Gray	d/s Tape	Woven	8.0/10.0	0.06	0.3	>50	Best bonding
tesa® ECT 60384	100	Gray	d/s Tape	Woven	8.0/10.0	0.06	0.3	>50	Best bonding
tesa® ECT 60382	50	Gray	d/s Tape	Non-woven	8.0/10.0	0.06	0.3	>50	Best bonding
tesa® ECT 60385	100	Gray	d/s Tape	Non-woven	8.0/10.0	0.06	0.3	>50	Best bonding
tesa® ECT 60231	25	Matte Black	s/s Tape	Cond. fabric	3.0/4.1	0.05	0.2	>50	Modern, matte black design
tesa® ECT 60232	35	Matte Black	s/s Tape	Cond. fabric	3.5/4.5	0.05	0.2	>50	Modern, matte black design
tesa® ECT 60234	55	Matte Black	s/s Tape	Cond. fabric	4.5/6.5	0.05	0.2	>50	Modern, matte black design
tesa® ECT 60238	45	Matte Black	s/s Tape	Copper	5.5/7.0	0.05	0.2	>70	Modern, matte black design

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THERMAL INTERFACE MATERIALS

Good Thermal Conductivity and Excellent Bonding Strength with Very Good Wetting and Gap-Filling Properties

Product	Thickness	Color	Adhesive	Thermal conductivity ASTM D5470	Wet out	Gap-filling	90° Peel adhesion at RT/72h ASTM D3330	Dynamic shear at RT initial/72hr	Die-electric strength ASTM D-149	Product features
tesa® 60731	30	White	Acrylic	0.6W/mK	89%	26%	4.3 N/cm		33 kV/mm	Good thermal conductivity and excellent bonding strength with very good wetting and gap-filling properties
tesa® 60732	50	White	Acrylic	0.6W/mK	90%	69%	4.7 N/cm		25 kV/mm	Same as above
tesa® 60733	100	White	Acrylic	0.7W/mK	92%	93%	5.0 N/cm		20 kV/mm	Same as above
tesa® 58394	125	White	Acrylic	0.7W/mK	81%	85%	3.9 N/cm	234N/300N	36 kV/mm	Same as above
tesa® 58395	250	White	Acrylic	0.8W/mK	89%	90%	4.1 N/cm	224N/522N	28 kV/mm	Same as above
tesa® 58398	400	White	Acrylic	0.8W/mK	84%	84%	5.4 N/cm	258N/600N	24 kV/mm	Same as above

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AUTOMOTIVE DISPLAY SOLUTIONS

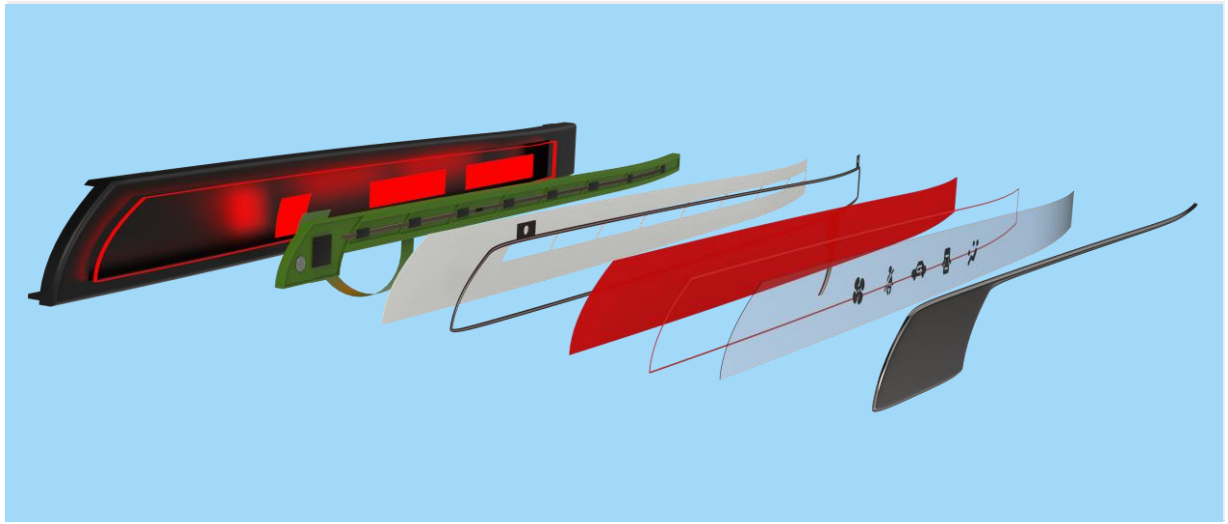
Optically Clear Adhesive and Frame-Mounting Tape

Main Application

- Bonding of displays and smart surfaces with diverse requirements
- Optically clear bonding of glass and plastic substrates
- tesa ACX^{plus} for strong and reliable frame- and housing-mounting applications

Assortment Properties

- tesa solutions for displays and smart surfaces serve the requirements of the different applications and substrates with dedicated products
- Optically clear tapes suitable for glass and plastic substrates with excellent optical performance
- Specially designed products offer outgassing-resistant performance requested when plastic substrates are in use
- Excellent performance for shock and impact resistance



Main Product Features

High bonding

UV-curable

Outgassing resistance

Optically Clear

Impact resistance

Chemical resistance

High shear strength

Best Seller

tesa® 69408
- Pressure-sensitive OCA
- Suitable for cover glass, ITO, polarizer
- Easy converting

tesa® 69608
- UV-curable OCA
- Suitable for cover glass, ITO, polarizer
- Superior gap-filling

tesa® 69808
- UV-curable outgassing-resistant OCA
- Additionally, suitable for plastic cover material
- Superior gap-filling

tesa® 7805
- High shear strength and temperature resistance
- High shock resistance
- Deep-black color
- Excellent on-display substrates

AUTOMOTIVE DISPLAY SOLUTIONS

Optically Clear Adhesive

Product	Thickness [µm]	Color	Type	Transmission [%]	Haze [%]	Color			R. index	Peel adhesion [N/cm]				Gap-filling [%]	DK at 100 kHz	Young's modules [MP]	Features
						L	a	b		Glass	PET	PC	PMMA				
tesa® 69401	25	Trans-parent	PSA	>99	<0.5	99.95	0.00	0.02	1.48	5.4	4.1	5.9	5.8	10–15	4.9	0.33	PSA and OCA specially modified for laminating films and suitable for touch sensors, polarizers, and glass
tesa® 69402	50	Trans-parent	PSA	>99	<0.5	99.84	0.00	0.03	1.48	6.3	4.3	6.4	6	10–15	4.9	0.33	PSA and OCA specially modified for laminating films and suitable for touch sensors, polarizers, and glass
tesa® 69404	100	Trans-parent	PSA	>99	<0.5	99.70	–0.03	0.08	1.48	6.9	4.8	7	6.2	10–15	4.9	0.33	PSA and OCA specially modified for laminating films and suitable for touch sensors, polarizers, and glass
tesa® 69405	125	Trans-parent	UV-curable	>99	<0.5	99.60	–0.06	0.13	1.48	7.8	5.4	7.7	6.4	10–15	4.9	0.33	PSA and OCA specially modified for laminating films and suitable for touch sensors, polarizers, and glass
tesa® 69604	100	Trans-parent	UV-curable	>99	<0.5	99.50	–0.04	0.04	1.48	12.2	9.4	15.1	13.2	30	4.5	0.29	UV-cured OCA with excellent wet out and gap-filling for cover-glass lamination
tesa® 69606	150	Trans-parent	UV-curable	>99	<0.5	99.30	–0.05	0.06	1.48	14.4	10.4	17.1	15.5	30	4.5	0.29	UV-cured OCA with excellent wet out and gap-filling for cover-glass lamination
tesa® 69804	100	Trans-parent	UV-curable	>99	<0.5	99.60	–0.06	0.12	1.48	11.7	7.9	13.2	12.5	30	4.7	1.0	UV-cured OCA with excellent wet out and gap-filling. Suitable for plastic covers due to excellent outgassing resistance.
tesa® 69806	150	Trans-parent	UV-curable	>99	<0.5	99.40	–0.08	0.18	1.48	13.3	8.4	15.3	14.1	30	4.7	1.0	UV-cured OCA with excellent wet out and gap-filling. Suitable for plastic covers due to excellent outgassing resistance.
tesa® 69808	200	Trans-parent	UV-curable	>99	<0.5	99.10	–0.11	0.21	1.48	16.4	9.3	16.5	17.1	30	4.7	1.0	UV-cured OCA with excellent wet out and gap-filling. Suitable for plastic covers due to excellent outgassing resistance.
tesa® 69802	50	Trans-parent	UV-curable	>99	<0.5	99.90	-0.05	0.06	1.48	9.0	6.1	9.8	9.5	30	4.7	1.0	UV-cured OCA with excellent wet out and gap-filling. Suitable for plastic covers due to excellent outgassing resistance.

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AUTOMOTIVE DISPLAY SOLUTIONS

Frame-Mounting Tape

Product	Thickness [µm]	Color	Type	Peel adhesion [N/cm]				Features
				PC	Steel	Glass	Aluminum	
tesa® 7805	500	Black	ACX^{plus}	40	11	40	28	Display-frame and housing-mounting tape with high shear resistance and excellent compensation for thermal expansion of parts. Strong performance on common display substrates.
tesa® 61057	350	Black	ACX^{plus}	34	19	18	16	Display-frame and housing-mounting tape with high shear resistance and excellent compensation for thermal expansion of parts. Strong performance on common display substrates.
tesa® 61058	400	Black	ACX^{plus}	38	22	16	13	Display-frame and housing-mounting tape with high shear resistance and excellent compensation for thermal expansion of parts. Strong performance on common display substrates.

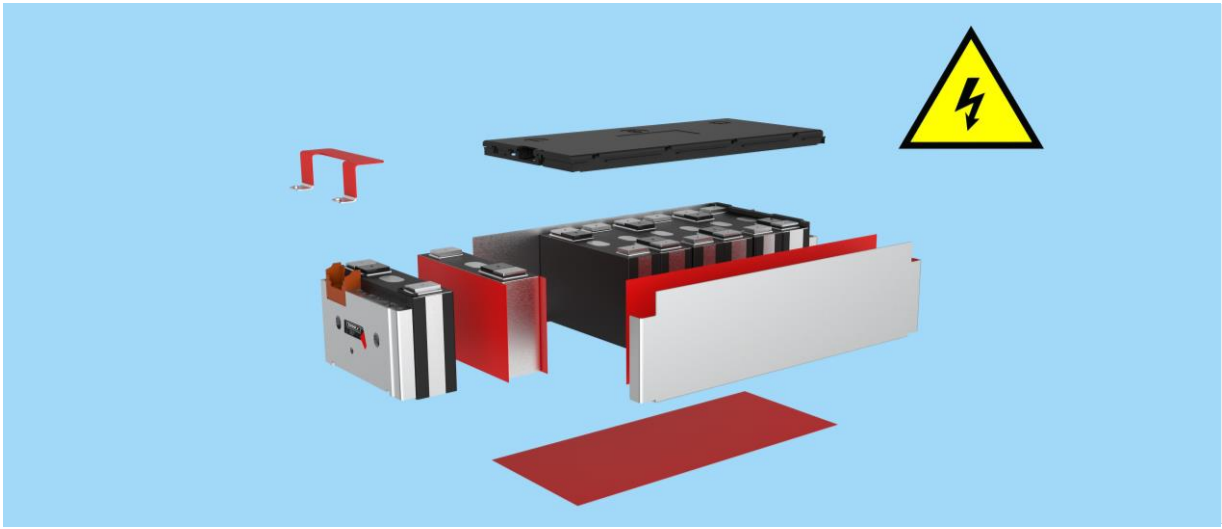
AUTOMOTIVE E-MOBILITY SOLUTIONS

Electrical-Insulation Tape for E-Mobility Applications

Back

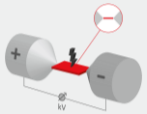
Main Application

- Reliable electrical insulation for:
  - Battery cells
  - Battery modules
  - Power electronic devices
- Wrapping prismatic cells
- Covering Cooling plates, bus bars and other metal parts



Main Product Features

Flame retardant



Electric breakdown

Anti-repulsion

Temperature resistance

Tear resistance

High bonding

Best Seller

tesa® 58353
- 85 µm PET electrical-insulation tape
- Reliable adhesion even in when folding over edges

tesa® 58358
- 220 µm PET electrical-insulation tape
- Covering EV battery metal parts
- Superior protection against mechanical stress through thick PET backing

tesa® 64250
- 79 µm PP electrical-insulation tape
- Excellent conformability even in complex geometries

SPECIFIC PRODUCT ASSORTMENT

Electrical-Insulation Tape for E-Mobility Applications

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Dielectric-breakdown voltage [kV]	Surface and volume resistance [Ω] /[Ω*cm]	Peel adhesion, steel, initial /180 ° [N/cm]	Description/special features
tesa® 58353	85	Black	PE-coated paper	1,372	Tackified acrylic	PET	>7	$>10^{13}$ /> 10^{14}	6	Strong PET backing for reliable protection. Reworkable up to 24h Very suitable for bending around edges
tesa® 58358	220	Black	Glassine paper	1,372	Tackified acrylic	PET	>8	$>10^{13}$ /> 10^{14}	15.3	Extra thick PET backing to counter mechanical stress and provide reliable protection against dielectric breakdown
tesa® 64250	79	Transparent Blue	n/a	1,300	Tackified acrylic	PP	>7	$>10^{13}$ /> 10^{14}	3	Very suitable for bending around edges
tesa® 7100	100	Black	Glassine paper	1,250	Tackified acrylic	PET	>4	$>10^{13}$ /> 10^{14}	7.5	Reliable standard protection against dielectric breakdown
tesa® 7250	50	Black	n/a	1,250	Tackified acrylic	PET	>4	$>10^{13}$ /> 10^{14}	4.2	Reliable standard protection against dielectric breakdown

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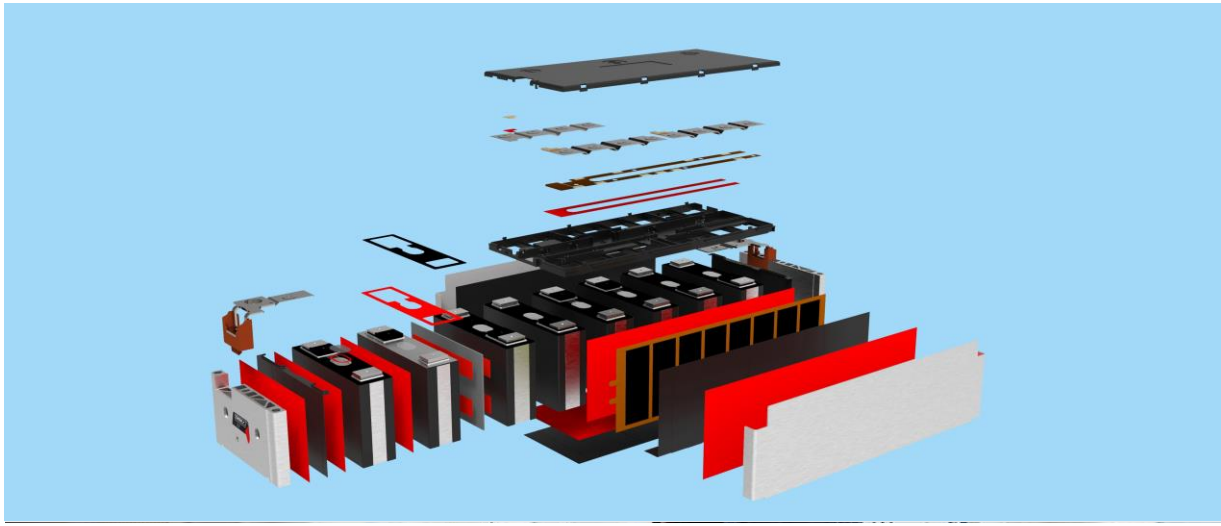
AUTOMOTIVE E-MOBILITY SOLUTIONS

Mounting Tape for E-Mobility Applications

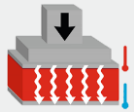
Back

Main Application

- Mounting and lamination applications in EV battery modules
  - Mounting flexible printed circuits and heating plates
  - Mica- and Polycarbonate-sheet mounting
  - Module-frame mounting
  - Cell-to-cell-mounting



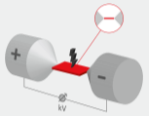
Main Product Features



Conductivity

Good die-cutting

High bonding



Electric breakdown

Flame retardant

Best Seller

tesa® 58323
- 75 µm PET non-woven acrylic d/s tape
- Perfect mounting and lamination of flexible printed circuits (FPC) and heating plates in EV batteries

tesa® 4982
- 100 µm PET acrylic d/s tape
- Mounting of mica- and PC-insulation sheets on and between battery cells

tesa® 58372
- 50 µm PET flame-retardant acrylic d/s tape
- Excellent mounting of battery parts that need extra protection in case of fire

SPECIFIC PRODUCT ASSORTMENT

Mounting Tape for E-Mobility Applications

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Peel adhesion, steel, initial/180° [N/cm]	Dynamic shear resistance, steel/steel, initial [MPA]	Dielectric-breakdown voltage [kV]	Description/special features
tesa® 58323	75	White translucent	Glassine paper	1,250	Tackified acrylic	PET non-woven	6.0	1.6	>1.5	Non-woven backing for excellent conformability
tesa® 4972	48	Transparent	Glassine paper	1,250	Tackified acrylic	PET film	7.0	1.6	>4	Strong PET backing for robust & reliable bonding
tesa® 4980	80	Transparent	Glassine paper	1,250	Tackified acrylic	PET film	8.6	1.6	>4	Strong PET backing for robust & reliable bonding
tesa® 4982	100	Transparent	Glassine paper	1,372	Tackified acrylic	PET film	8.2	1.6	>4	Strong PET backing for robust & reliable bonding
tesa® 4942	140	Transparent	Glassine paper	1,372	Tackified acrylic	PET film	10.3	1.6	>4	Strong PET backing for robust & reliable bonding
tesa® 4965	205	Transparent	Glassine paper	1,372	Tackified acrylic	PET film	11.5	1.6	>4	Strong PET backing for robust & reliable bonding
tesa® 58372	50	Transparent	Glassine paper	1,250	Tackified acrylic (FR)	PET film (FR)	7.1	1.2	>3	Flame-retardant in accordance with UL94 VTM-0
tesa® 58373	80	Transparent	Glassine paper	1,250	Tackified acrylic (FR)	PET film (FR)	7.5	1.2	>4	Flame-retardant in accordance with UL94 VTM-0
tesa® 58375	130	White translucent	Glassine paper	1,250	Tackified acrylic (FR)	PET non-woven (FR)	8.0	1.0	>4	Flame-retardant in accordance with UL94 VTM-0

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AUTOMOTIVE E-MOBILITY SOLUTIONS

Highly Dynamic Shear Tape for E-Mobility Applications

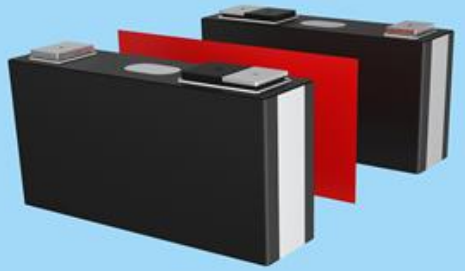
Back

Main Application

- Cell-to-cell mounting for cell-to-pack design
- Other demanding mounting applications with a shear-resistance requirement

Assortment Properties

- High bonding performance or shear resistance due to the introduction of CTP (cell-to-pack design) for increasing volume utilization, production efficiency, and energy density by reducing the number of components and enlarging the battery-cell dimensions

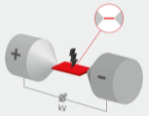


Main Product Features

Good die-cutting

High shear strength

Tear resistance



Electric breakdown

High bonding

Best Seller

tesa® 58360
- 50 µm PET d/s transparent tape
- Tackified acrylic adhesive, equipped with 12 µm PET backing

tesa® 58363
- 150 µm PET d/s transparent tape
- Tackified acrylic adhesive, equipped with 100 µm PET backing

tesa® 58364
- 200 µm PET d/s transparent tape
- Tackified acrylic adhesive, equipped with100 µm PET backing

SPECIFIC PRODUCT ASSORTMENT

Highly Dynamic Shear Tape for E-Mobility Applications

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Peel adhesion, steel, initial/180° [N/cm]	Dynamic shear resistance, blue PET/blue PET, initial [MPA]	Dielectric-breakdown voltage [kV]	Dynamic shear resistance, blue PET/blue PET, after aging* [MPA]	Description / Special Feature
tesa® 58333	30	Transparent	Glassine paper	1,250	Tackified acrylic	/	6.0	>2	/	>2	High dynamic shear mounting tape for mounting of EV battery cells
tesa® 58360	50	Transparent	Glassine paper	1,250	Tackified acrylic	12 µm PET film	7.0	>2	5.5	>2	High dynamic shear mounting tape for mounting of EV battery cells
tesa® 58362	100	Transparent	Glassine paper	1,250	Tackified acrylic	50 µm PET film	7.0	>2	9.8	>2	High dynamic shear mounting tape for mounting of EV battery cells
tesa® 58363	150	Transparent	Glassine paper	1,250	Tackified acrylic	100 µm PET film	6.5	>2	14.8	>2	High dynamic shear mounting tape for mounting of EV battery cells
tesa® 58364	200	Transparent	Glassine paper	1,250	Tackified acrylic	100 µm PET film	10.4	>2	14.4	>2	High dynamic shear mounting tape for mounting of EV battery cells

AUTOMOTIVE E-MOBILITY SOLUTIONS

Thermally Conductive Tape

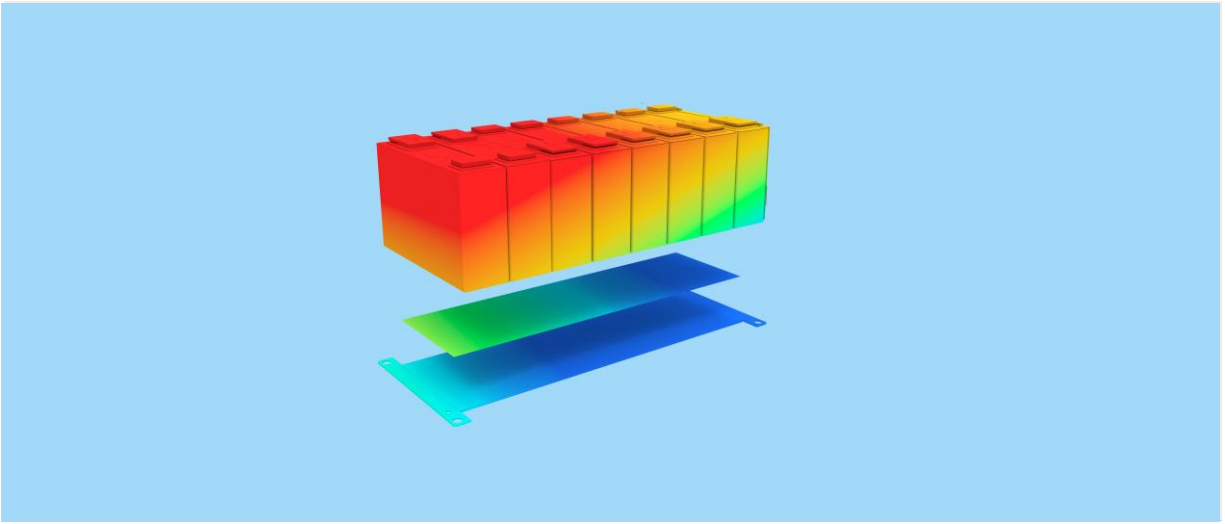
Back

Main Application

- Heat-transfer interface to the cooling plate in automotive applications
  - Power-electronic modules
  - High-performance onboard computers
  - LiDaR optics

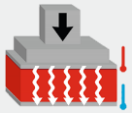
Assortment Properties

- Silicon-free/no silicone-oil out-gassing
- Good thermal conductivity
- Ideal for thin bonding applications
- Excellent dielectric-breakdown resistance
- RoHS andREACH compliance
- Halogen-free

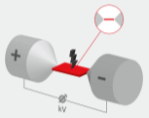


Main Product Features

High bonding



Conductivity



Electric breakdown

Best Seller

tesa® 58394
- 125 µm thermally conductive transfer tape

tesa® 58395
- 250 µm thermally conductive transfer tape

tesa® 58398
- 400 µm thermally conductive transfer tape

SPECIFIC PRODUCT ASSORTMENT

Thermally Conductive Tape

Product	Thickness [µm]	Color	Liner	Log roll dimension [m x mm]	Adhesive	Backing	Peel adhesion, steel, 72hr/90° [N/cm]	Thermal conductivity ASTM D5470 [W/mK]	Dielectric-breakdown voltage [kV]	Description/special features
tesa® 58394	125	White	Paper	1,000	Tackified acrylic	/	4.8	0.7	4.1	Acrylic-based, tacky and soft thermal interface material
tesa® 58395	250	White	Paper	1,000	Tackified acrylic	/	5.8	0.8	7.4	Acrylic-based, tacky and soft thermal interface material
tesa® 58398	400	White	Paper	1,000	Tackified acrylic	/	6.7	0.8	9.8	Acrylic-based, tacky and soft thermal interface material

AUTOMOTIVE SURFACE-PROTECTION SOLUTIONS

Temporary and Permanent

Main Application

- **Protection** against contamination of and damage to sensitive interior or exterior surfaces including clear coats, metals, plastics, and textiles during assembly, transport, finishing, and production processes

Assortment Properties

- Resistant to environmental and mechanical impacts are temporary and permanent
- Fulfilling to the variety of high-level market demands and customer requirements
- Evaluated, approved, and reliably in use for thousands of parts in different industries around the world

Main Product Features

- UV resistance
- Weather resistance
- Environmental resistance
- Conformable
- No scratches
- Anti-corrosion
- Approved and in use
- Approved
- Reworkable
- No ghosting

Best Seller

tesa® 50560
- Exterior
- Glossy plastics
- No ghosting

tesa® 51136
- Interior
- Multiple surfaces
- Mechanical resistance

tesa® 50535
- Transport protection
- Clear coats
- No residue

tesa® 51207
- Gliding tape
- Plastics
- No scratches and squeaking noises

AUTOMOTIVE SURFACE-PROTECTION SOLUTIONS

Single-Sided Adhesive Tape: Filmic

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Description/special features
tesa® 50530 PV3	79	White	No	1,400	Eva	Polyolefin film	Temporary OEM paint protection
tesa® 50535 PV7	61	White	No	1,400	Eva	Polyolefin film	Temporary OEM paint protection
tesa® 50560 PV1	52	White	No	1,400	Pib	Polyolefin film	For sensitive and glossy plastic such as PMMA, SAN, ABS …
tesa® 50551	70	Transparent	No	1,550	Acrylic	PE film	For aluminum and painted surfaces
tesa® 4848 PV1	48	Transparent	No	1,000	Acrylic	PE film	For anodized aluminum
tesa® 51136	105	Green translucent	No	1,450	Acrylic	PE film	For sensitive polar and nonpolar surfaces even at demanding 3D geometries. Stronger PV2 adhesive
tesa® 51134	84	Transparent	No	9,80	Acrylic	PE film	Similar to tesa® 51136
tesa® 7133	80	Blue	No	1,200 1,650	Rubber	PP film	For rough glass and sensitive polar and nonpolar surfaces
tesa® 4289	144	Yellow	No	1,650	Rubber	MOPP	High tensile strength with low elongation and good abrasion resistance
tesa® 64250	79	Blue translucent	No	1,300	Acrylic	MOPP	Good tensile strength combined with conformability even at demanding 3D geometries
tesa® 51207	114	Black transparent	Yes	510	Acrylic	PE-UHWM	UV-resistant gliding tape, against friction between components tesa® 51217 black tesa® 51206 transparent without UV resistance
tesa® 52994	260	Transparent	Yes	1,245	Acrylic	PU	PU stone-chip protection film with high UV resistance

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AUTOMOTIVE MASKING SOLUTIONS

Paper and Filmic Masking

Main Application

- **Masking tape** for paint or other finishing processes covering multiple applications, industries, and environments

Assortment Properties

- The assortment includes general paper masking products, fine-line tape, and specialty tape as well, fulfilling the variety of high-level market demands and customer requirements
- Products are evaluated, approved, and reliably in use for thousands of parts in different industries globally

Main Product Features

Environmental resistance

Conformable

Curved lines

Straight lines

Residue free

Approved

Approved and in use

Temperature resistance

Reworkable

Tear resistance

Best Seller

tesa® 4174
- Filmic fine-line tape
- Conformable
- Universal

tesa® 4341
- Paper masking tape
- Excellent adhesion
- Excellent tear resistance

tesa® 4330
- Special masking tape
- For wet-grinding

tesa® 4332
- Special masking tape
- For sandblasting

AUTOMOTIVE MASKING SOLUTIONS

Single-Sided Adhesive Tape: Paper and Filmic

Product	Thickness [µm]	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Temperature resistance [°C]	Description/special features
tesa® 7140	168	Yellow	No	1,050	Rubber	PVC	170	Highly tear-resistant masking tape
tesa® 4174	110	Olive	No	1,240 1,240	Rubber	PVC	150	Universal and conformable fine-line tape
tesa® 4244 PV2	140	Yellow	No	1,020	Rubber	PVC	140	Conformable fine-line tape with strong adhesion
tesa® 50777	132	Blue	No	1,220	Acrylic	PVC	160	Highly temperature-resistant fine-line tape with an acrylic adhesive
tesa® 50600	80	Green	No	960 1,250	Silicone	PETP	220 (for 30 min.)	PET masking tape for temperature up to 220°C with silicone adhesive
tesa® 4341	190	Brown	No	1,600	Rubber	Slightly creped paper	140	Masking tape with excellent adhesion and tear resistance
tesa® 4330	175	Brown	No	970	Rubber	Slightly creped paper	160	Conformable and wet-grinding masking tape
tesa® 4432	330	Brown	No	1,020	Rubber	Flat paper	100	Medium-grade paper stencil masking tape for sandblasting applications

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AUTOMOTIVE MULTIPURPOSE SOLUTIONS

Single-Sided Specialties

Back

Main Application

- Wide range of applications including mounting, repairing, bundling, wrapping, damping, noise-reducing, etc.

Assortment Properties

- **Fabrics** are one of our key competences and in use for multiple applications, industries, and environments
- The assortment includes general-purpose products in different grades, but as well special combinations of backing properties, adhesives, and finishings as well
- Some of these products have an outstanding level of performance and range of features, which makes them market leaders
  - Products are evaluated, approved, and reliably in use for thousands of parts in different industries around the world
- **Special backings** support the tape performance with their unique characteristics

Main Product Features

UV resistance

Weather resistance

Environmental resistance

Temperature resistance

Chemical resistance

Anti-repulsion

Approved

Approved and in use

Conformable

Reworkable

Hand tearable

Best Seller

tesa® 4657
- Stress-resistant coated cloth
- Known in the market as „the gray tape“
- Strong adhesion

tesa® 4651
- Flexible premium cloth
- Strong adhesion
- Different colors

tesa® 50118
- Low VOC
- Strong acrylic adhesive
- PET fleece

tesa® 4688
- PE extruded cloth
- Repairing tape
- Different colors

AUTOMOTIVE MULTIPURPOSE SOLUTIONS

Single-Sided Adhesive Tapes: Cloth, Filmic, Fleece, Aluminum and Laser Labels

Product	Color	Liner	Standard log roll width [mm]	Adhesive	Backing	Peel adhesion to steel [N/cm]	Temperature resistance [°C]	Description/special features
tesa® 4657	Gray	No	965	Rubber	Acrylic-coated cloth	4.6	180	Special high-temperature cloth, ageing resistant. PV1 for easy unwinding
tesa® 4651	Black, White, Yellow, Red, Gray, Brown	No	970	Rubber	Acrylic-coated cloth	3.3	140	Premium cloth, flexible and conformable
tesa® 4671	Black, White, Red, Gray, Neon Yellow, Green, Orange, Pink	No	1,540 1,540	Rubber	Acrylic-coated cloth	3.5	140	Premium cloth “gaffer tape,” flexible and conformable, matte surface
tesa® 4541	Black, White	No	1,140	Rubber	Cloth	3.6	130	Premium-uncoated cloth, flexible and conformable
tesa® 53799	Silver, Red, Blue, Dark Green	No	1,300	Rubber	PE-extruded cloth	3.6	130	Mid-grade cloth, flexible and conformable
tesa® 4688	Black, White, Red, Blue, Silver	No	1,300	Rubber	PE-extruded cloth	4.5	110	Mid-grade cloth, “repairing tape”
tesa® 51036	Black	No	1,140	Acrylic	PET cloth	3.0	150/3000h	Abrasion-resistant PET cloth
tesa® 68000	Silver	Yes	1,130	Acrylic	Aluminum-glass cloth	6.0	>500	Heat-reflecting glass cloth
tesa® 50204	Blue translucent	Yes	1,240	Acrylic	Filmic/non-woven	-	200	High-tack and good-shear filmic bonding, low VOC
tesa® 50118 PV1	Black, White	Yes	1,050	Acrylic	PET fleece	-	160	Noise-damping PET fleece with high adhesion to PET, low VOC
tesa® 51608	Black	No	1,140	Rubber	PET fleece	3.0	105	Noise-damping PET fleece
tesa® 60632	Silver	Yes	1,200	Acrylic	Aluminum	8.0	160	30µm, conformable to curved surfaces
tesa® 60652	Silver	Yes	1,170	Acrylic	Aluminum	9.0	160	50µm, mechanically stable and conformable
tesa® 60672	Silver	Yes	1,170	Acrylic	Aluminum	10.0	160	75µm, mechanically stable
tesa® 6930	Black, Silver, White	Yes	300	Acrylic	Acrylic	1.8	120	Security-laser-markable label where tampering is evident: manipulation leaves visible trace
tesa® 6940	Black, Yellow, Red	Yes	300	Acrylic	Acrylic	1.8	120	Security-high-speed-laser-markable label where tampering evident: manipulation leaves visible trace

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

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Learn more about our company
www.tesa.com