



# EFFICIENT SOLUTIONS FOR VEHICLE CONVERSION

**Innovative Tape Solutions for Commercial and  
Specialty Vehicles**



# JOIN US ON THE ROAD TO SUCCESS

We Work Hand-in-Hand with You to Develop Optimum Solutions for Your Processes



In the construction of commercial and specialty vehicles, modern adhesive tapes are increasingly replacing traditional bonding techniques such as welding, brazing, and bolting. Adhesive tape solutions save time, weight, and costs. As your reliable partner, we offer you a comprehensive assortment of products built on more than 125 years of experience in the production of adhesive tapes.

## Always by your side

We are one of the world's leading manufacturers of adhesive tapes. Our quality products are used by all internationally operating original equipment manufacturers (OEM) – either directly, or indirectly via their suppliers. We therefore possess first-class knowledge of the market and understand

the need for customized solutions to meet the particular requirements of specialty vehicles.

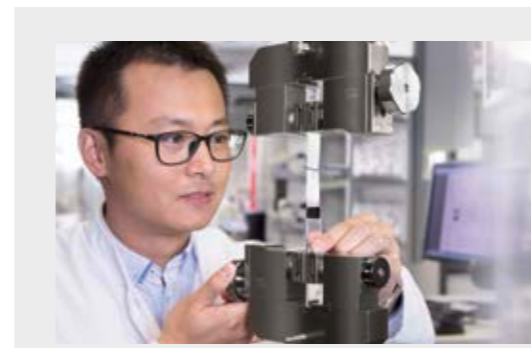
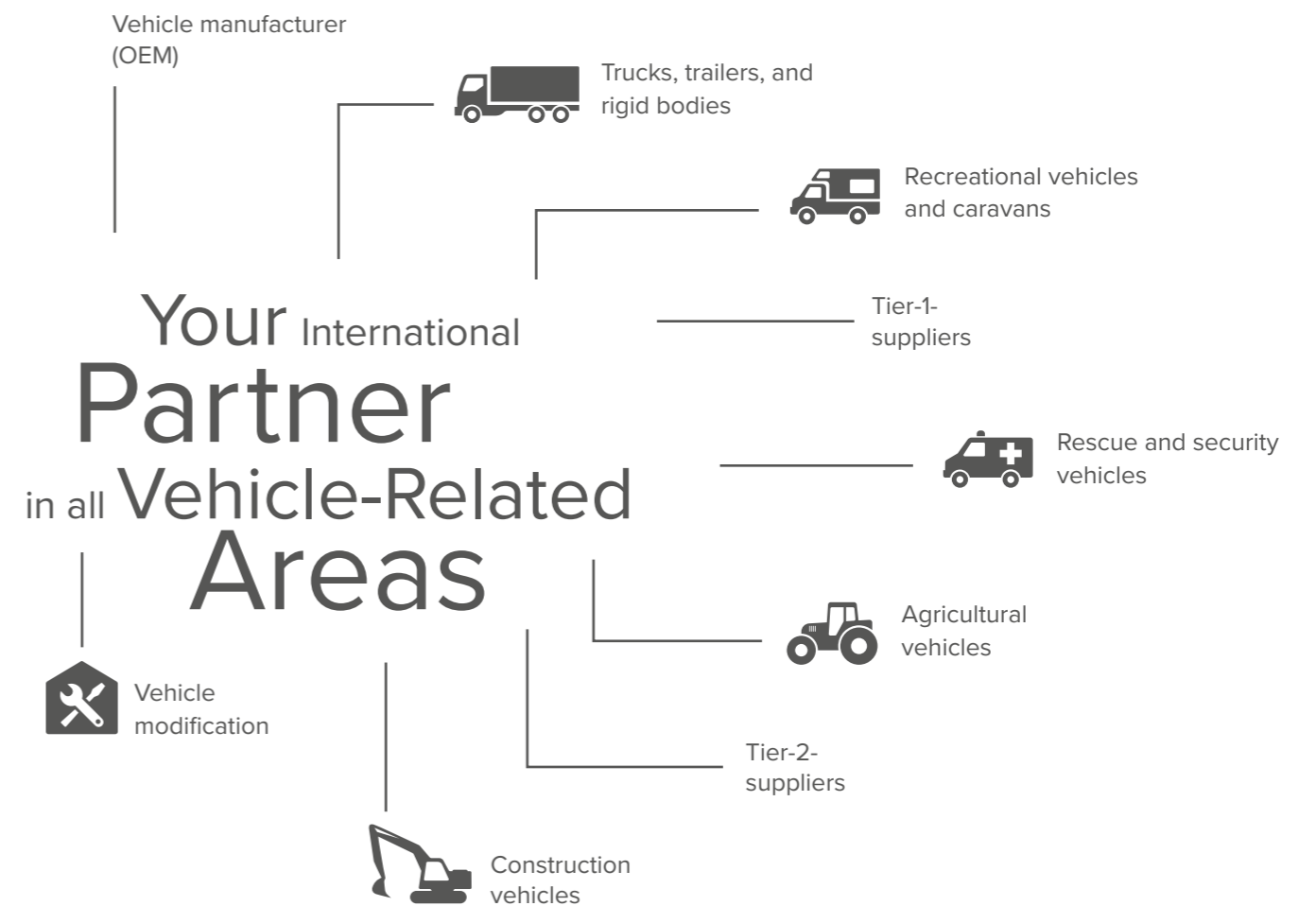
Today's vehicle types are a perfect combination of design, functionality, and quality. As a result, the demand for customization to meet the requirements of the end-customer has increased. We offer you a broad spectrum of product solutions that enable you to fulfill your customers' particular requirements.

We are quick to identify and embrace trends such as individualization and e-mobility, and recognize their potential. This enables us to provide the product/solution packages you need. Thanks to our worldwide presence, we can offer you reliable support at both the local and global level.

# IDEALLY POSITIONED

We Maintain an Active Worldwide Presence for You with More Than 4,000 Employees, 8 Production Facilities, and 51 Subsidiaries

We work in close collaboration with our customers in the various industry segments to ensure that our adhesive tape solutions fulfill all their specific needs – at every stage of the value chain. In addition to this, we help you to identify the best possible way of using our adhesive tapes in every process phase.



## Application Solution Center – Customer Service Is Our Top Priority

We work hand-in-hand with you to develop specially engineered adhesive tape solutions that perfectly match your needs. In this, we take factors such as the materials you use, your production processes, the required adhesive strength, impact resistance, and resistance to environmental influences into account. To ensure the optimum utilization of our products, we offer on-site support as well as training programs for your staff or customer.



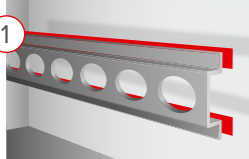
# TRUCKS, TRAILERS, AND RIGID BODIES

## We Ensure Reliable Bonding

Adhesive bonds in trucks, trailers, and rigid bodies must stand up to exceptionally high stresses and loading factors. Our adhesive tapes developed especially for this segment satisfy all manufacturer requirements and are in use around the world.



### Mounting of tracks and stiffening bars



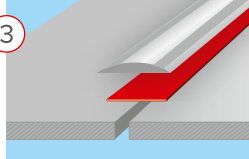
Our acrylic core tapes offer extremely high bonding strength, making them particularly suited to mounting applications. They are perfect for fast and secure constructive bonding on interior and exterior surfaces.

### Fitting of floor coverings and roof systems



Our double-sided adhesive tapes offer reliable bonding of floor coverings together with easy removal. The adhesive tapes can also be employed for secure mounting of roof systems.

### Mounting of add-on components



Our adhesive tape solutions for mounting add-on components resist all the external influences that a vehicle may be subjected to in the course of its service life.

### Mounting of emblems and number plates



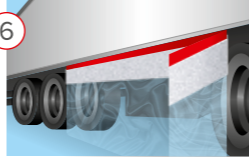
Our adhesive tapes resist extreme environmental conditions and ensure reliable mounting of emblems and number plates.

### Surface protection



Our protection films minimize the risks of dirt and damage on interior and exterior surfaces. They guarantee surface protection during the production and transportation of the vehicle.

### Masking and protection



Adhesive tapes are invaluable for masking in applications such as spray-painting, powder coating, and sandblasting. Our products play a decisive role in the optimization of your coating processes, which saves both time and money.

### Repairs



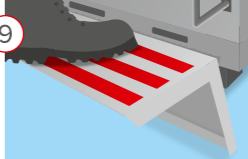
Fabric tapes improve production procedures in many areas and provide "first aid" in emergencies by enabling you to repair minor damage yourself with minimal effort.

### Foaming



Our special adhesive tapes seal holes and gaps to ensure that no PU-foam leaks out during foam injection into body panels. As the adhesive tapes are air-permeable, they prevent overpressure and ensure even distribution of the foam.

### Safety markings



Our solutions increase safety on slippery surfaces or in places where access is difficult, thus contributing to the prevention of accidents.

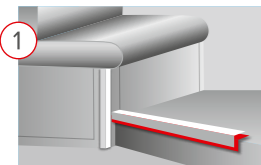
# RECREATIONAL VEHICLES AND CARAVANS

## New Construction Options

Adhesive tapes are ideal for many different bonding applications in recreational vehicles and caravans. Our adhesive tapes are easy to use and precisely matched to the respective requirements. They provide first class bonding strengths that meet the manufacturer's specifications.



### Mounting of add-on components



Our adhesive tape solutions for mounting add-on components such as panels, trims and profiles enable invisible, clean, and secure bonding.

### Mounting of mirrors and components



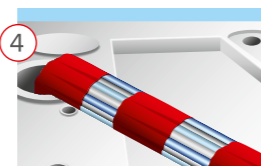
In comparison with conventional solutions using liquid adhesives and clip-on connectors, our adhesive tape solutions for mounting mirrors offer considerable advantages in terms of time and effort.

### Fitting floor coverings



Our double-sided adhesive tapes offer reliable bonding of floor coverings together with easy removal.

### Cable installation and marking



We offer an extensive range of adhesive tapes to bundle, mount, and mark wires and cables. They ensure reliable fixing, noise reduction, and protection against abrasion.

### Permanent surface protection



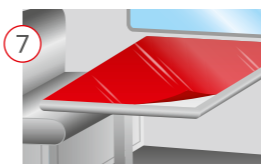
Our highly UV-resistant, thin, and nearly invisible paint protection films protect the vehicle's finish from stone-chip damage and scratches.

### Masking and protection



Adhesive tapes are invaluable for masking in applications such as spray-painting, powder coating, and sandblasting. Our products play a decisive role in the optimization of your coating process, which saves both time and money.

### Temporary surface protection



Our protection films for interior applications minimize the risks of dirt and damage – and thus guarantee an easy handover of vehicles to end-customers.

### Foaming



Our special adhesive tapes seal holes and gaps to ensure that no PU-foam leaks out during foam injection into body panels. As the adhesive tapes are air-permeable, they prevent overpressure and ensure even distribution of the foam.

### Hole covering



We offer a variety of sealing solutions for excellent corrosion protection. Our tapes are suitable for the most demanding of applications and can reduce weight and interior noise.



# SPECIALTY VEHICLES

## Custom Solutions for a Wide Range of Vehicle Types



### Mounting

Double-sided adhesive tapes are increasingly used as an alternative to traditional mounting methods and offer numerous advantages. They are suitable not only for fitting floor coverings, but also for the mounting of interior and exterior add-on components. They are used, for example, in vehicles for emergency and rescue services and for agricultural and construction vehicles.

### Surface protection

Our temporary protection films guarantee perfect surfaces. They minimize the risk of dirt and damage to interior and exterior areas during manufacturing and delivery. Permanent protection films can provide reliable protection of paintwork against abrasion, environmental influences, and harmful deposits.

### Masking and protection

Our masking solutions provide reliable surface masking and protection. At the same time, you enjoy the benefits of easy and optimized painting processes – whether for painting agricultural vehicles or for extreme applications such as exceedingly thick paint coatings or sandblasting on excavators.

### Special applications

We offer an extensive range of adhesive tape solutions for special applications. For example, adhesive tapes for the wrapping of cable harnesses on agricultural vehicles or laser safety labels for construction and security vehicles.

## Our Products

Application	Product	Benefit	Backing	Adhesive type	Total thickness [µm]	Adhesion to steel [N/cm]	Temp. resistance [°C]	Elongation at break [%]	Tensile strength [N/cm]	Color
Mounting										
Mounting of tracks and stiffening bars	tesa® ACX <sup>plus</sup> 707x	<ul style="list-style-type: none"> <li>For demanding outdoor bonding applications</li> <li>High-performance acrylic system combines a very good temperature resistance with an outstanding cold shock resistance up to -40°C</li> </ul>	Foamed acrylic	Pure acrylic	500 – 5800	20.0 – 45.0	220 s.t./ 120 l.t.	1000	–	●
	tesa® ACX <sup>plus</sup> 706x	<ul style="list-style-type: none"> <li>Very high adhesion levels</li> <li>Very good resistance against plasticizer migration</li> </ul>	Foamed acrylic	Tackified acrylic	400 – 3600	24.0 – 60.0**	170 s.t./ 70 l.t.	600	–	●
Mounting of add-on components	tesa® 625xx	<ul style="list-style-type: none"> <li>High ultimate adhesion level for a reliable bonding performance</li> <li>Suitable for Gap filling due to PE foam core with high inner strength</li> </ul>	PE foam	Tackified acrylic	500 – 1600	9.5 – 13.5	80 s.t./ 80 l.t.	150 – 190	5 – 12	●○
	tesa® 629xx	<ul style="list-style-type: none"> <li>Versatile adhesive for high immediate adhesion on numerous substrates</li> <li>Fully outdoor suitable: UV, water and ageing resistant</li> </ul>	PE/EVA foam	Tackified acrylic	500 – 1600	17.0 – 19.0	80 s.t./ 80 l.t.	175 – 270	8 – 9	●○
	tesa® 4970	<ul style="list-style-type: none"> <li>High initial tack and immediate adhesion</li> <li>Reliable bond even to nonpolar surfaces</li> <li>Good adhesion on rough surfaces</li> </ul>	PVC film	Tackified acrylic	225	13.0*/ 13.6***	70 s.t./ 60 l.t.	20	38	○
	tesa® 4965	<ul style="list-style-type: none"> <li>Suitability for most demanding applications such as heavy stress, high temperatures or hard to bond to materials</li> </ul>	PET film	Tackified acrylic	205	11.5*/ 11.8***	200 s.t./ 100 l.t.	50	20	○
Mounting of floor and roof	tesa® ACX <sup>plus</sup> 707x	<ul style="list-style-type: none"> <li>For demanding outdoor bonding applications</li> <li>High-performance acrylic system combines a very good temperature resistance with an outstanding cold shock resistance up to -40°C</li> </ul>	Foamed acrylic	Pure acrylic	500 – 5800	20.0 – 45.0	220 s.t./ 120 l.t.	1000	–	●
	tesa® 625xx	<ul style="list-style-type: none"> <li>High ultimate adhesion level for a reliable bonding performance</li> <li>UV, water, and ageing resistance</li> </ul>	PE foam	Tackified acrylic	500 – 1200	13.5*/ 13.5***	80 s.t./ 80 l.t.	150 – 190	5 – 11.5	●○
	tesa® 66022	<ul style="list-style-type: none"> <li>Very low total VOC values</li> <li>Lamination of critical substrates/sheets to mount on demanding surfaces (e.g. LSE)</li> </ul>	None	Water-based acrylic	220	12.3*/ 17.3**	-40 to +200 i.a.	–	–	○
	tesa® 521xx (transfer)	<ul style="list-style-type: none"> <li>Very low total VOC values</li> <li>Lamination of critical substrates/sheets to mount on demanding surfaces (e.g. LSE)</li> </ul>	None	Water-based acrylic	50 – 100	8.5 – 13.0*/ 9.5 – 13.0**	-40 to +180 i.a.	–	–	○
	tesa® 522xx (non Woven)	<ul style="list-style-type: none"> <li>Very low total VOC values</li> <li>Lamination of critical substrates/sheets to mount on demanding surfaces (e.g. LSE)</li> </ul>	Non-woven	Water-based acrylic	100 – 150	6.0*/ 11.5 – 13.0**	-40 to +180 i.a.	–	–	○
Mirror Mounting	tesa® 4952	<ul style="list-style-type: none"> <li>Strong PE foam for constructive mounting</li> <li>High thickness compensates for gaps and uneven surfaces</li> </ul>	PE foam	Tackified acrylic	1150	6.5*/ 8.0***	80 s.t./ 80 l.t.	200	10	○
Mounting of emblems and number plates	tesa® ACX <sup>plus</sup> 7808	<ul style="list-style-type: none"> <li>Visco-elastic acrylic foam core to compensate for different thermal elongation of bonded parts</li> <li>Excellent cold shock performance</li> </ul>	Foamed acrylic	Modified acrylic	800	26.0**	120 s.t./ 80 l.t.	–	–	●
Masking										
High temperature	tesa® 4304	<ul style="list-style-type: none"> <li>Excellent handling (low unwinding forces)</li> <li>Recommended for multiple drying cycles</li> </ul>	Slightly-creped paper	Natural rubber	145	4.0	163	13	43	●
Mid-temperature	tesa® 4309	<ul style="list-style-type: none"> <li>For spray painting with oven drying up to 120°C</li> <li>High adhesion and tear resistance</li> <li>Reliable hold even on masking sheets</li> </ul>	Slightly-creped paper	Natural rubber	170	3.5	120	12	47	●
Low temperature	tesa® 4317	<ul style="list-style-type: none"> <li>For spray painting with oven drying up to 80°C</li> <li>Good adhesion and tear resistance</li> <li>Reliable hold also on masking sheets</li> </ul>	Slightly-creped paper	Natural rubber	140	3.3	80/1h	10	38	●
Large area masking	tesa® 4378	<ul style="list-style-type: none"> <li>For efficient masking of large areas</li> <li>Convenient 3-in-1 solution: masking tape 4309 (flexible) – additional paper edge (perfect paint absorption) – HDPE film</li> </ul>	Slightly-creped paper	Natural rubber	170	3.5	120	12	47	●
Curved fine-line masking	tesa® 4174	<ul style="list-style-type: none"> <li>Very flexible</li> <li>Good conformability to multidimensional surfaces</li> <li>No shrinkage at high temperatures</li> </ul>	PVC film	Natural rubber	110	3.7	150	200	25	●○
Straight-line masking	tesa® 4334	<ul style="list-style-type: none"> <li>Extremely sharp and flat paint edges</li> <li>Sticks flush to the surface and prevents paint tears</li> </ul>	Flat paper	Acrylic	90	1.9	120/ 30 min	4	30	●
Sand blasting	tesa® 4432	<ul style="list-style-type: none"> <li>Strong and resistant paper backing</li> <li>For masking applications during sandblasting</li> <li>Good durability (6 sec/4 bar)</li> </ul>	Flat paper	Natural rubber	330	8.0	100	6	93	●
	tesa® 4434	<ul style="list-style-type: none"> <li>Very strong and resistant paper backing</li> <li>For masking applications during sandblasting</li> <li>Very good durability (50 sec/4 bar)</li> </ul>	Flat paper	Natural rubber	670	2.7	60	6	180	●

s.t. = short term l.t. = long term i.a. = for interior applications \*initial \*\*after 3 days \*\*\*after 14 days

Application	Product	Benefit	Backing	Adhesive type	Total thickness [µm]	Adhesion to steel [N/cm]	Temp. resistance [°C]	Elongation at break [%]	Tensile strength [N/cm]	Color
Masking										
Powder coating	tesa® 50600	<ul style="list-style-type: none"> <li>High tear resistance and adhesion</li> <li>Easy to remove without residue</li> <li>Also available with liner</li> </ul>	PET	Silicone	80	4.0	220/30 min	110	75	●●
General purpose	tesa® 4323	<ul style="list-style-type: none"> <li>For easy painting works indoors</li> <li>For fixation during masking</li> <li>Suitable for bundling, packaging, marking</li> </ul>	Slightly-creped paper	Natural rubber	125	3.0	50/1h	10	33	●
Surface protection										
Temporary inside	tesa® 51136	<ul style="list-style-type: none"> <li>Interior protection tape for smooth and rougher surfaces</li> <li>Residue-free removability</li> <li>Very good paint anchorage</li> </ul>	PE film	Acrylic	105	2.4	100	300	19	●
	tesa® 4848	<ul style="list-style-type: none"> <li>Protection against dirt and damage during painting, plaster-/stucco-work and facade-work</li> </ul>	PE film	Acrylic	48	0.8	60	200	12	○
Temporary outside	tesa® 50530	<ul style="list-style-type: none"> <li>Reliable protection</li> <li>Secure adhesion during transport</li> <li>Cost savings as polishing or repair after demasking is eliminated</li> </ul>	Polyolefinic film	EVA	79	0.9	–	800	30	○
Permanent outside	tesa® 52994	<ul style="list-style-type: none"> <li>High optical clarity and virtually invisible when applied</li> <li>Premium protection against abrasion, corrosion and stone-chipping</li> </ul>	PU film	Acrylic	260 – 360	–	–	–	–	○
Cables and wires										
Cable mounting	tesa® 50118	<ul style="list-style-type: none"> <li>Suitable for irregular, rough, and critical interior surfaces</li> <li>Excellent damping properties</li> <li>Good peel resistance</li> </ul>	PET fleece	Acrylic	540	10.1 (to PET)	160 s.t.	43	35	○
	tesa® 50204	<ul style="list-style-type: none"> <li>Excellent shear and peel resistance</li> <li>Suitable for common irregular, rough and critical interior surfaces</li> </ul>	PE	Tackified acrylic	180	8.7 (to PET)	200	28	17.5	○
Wire harnessing	tesa® 51036	<ul style="list-style-type: none"> <li>High temperature resistance</li> <li>High abrasion resistance</li> </ul>	PET cloth	Advanced acrylic	485	5.5	150 (max)/-40 (min)	40	275	●
Cable marking	tesa® 4651	<ul style="list-style-type: none"> <li>High-quality acrylic-coated cloth tape</li> <li>Very strong adhesion, even to rough surfaces</li> <li>High abrasion resistance</li> </ul>	Acrylic-coated cloth	Natural rubber	310	3.3	130	13	100	●●●●● ●●●●●
Safety										
Anti-slip	tesa® 6095x	<ul style="list-style-type: none"> <li>Very good adhesion – suitable for demanding floors</li> <li>Strong and durable adhesive coating</li> <li>Tearable by hand</li> </ul>	PVC film	Acrylic	810	5.8	-5 to +50	25	–	●●●●●
Temporary marking	tesa® 60760	<ul style="list-style-type: none"> <li>Good adhesion on many different surfaces</li> <li>Tearable by hand</li> <li>Perfect suitability for temporary marking and low-duty hazard warning</li> </ul>	Soft PVC	Natural rubber	150	2.0	–	220	33	●●●●● ●●●●●
Permanent marking	tesa® 4169	<ul style="list-style-type: none"> <li>Excellent for permanent and heavy-duty marking</li> <li>Thick, strong vinyl backing</li> <li>Good adhesion on various surfaces</li> </ul>	Soft PVC	Acrylic	180	1.8	–	200	30	○●
Repairing tapes										
High grade	tesa® 4651	<ul style="list-style-type: none"> <li>High-quality acrylic-coated cloth tape</li> <li>Very strong adhesion, even to rough surfaces</li> <li>High abrasion resistance</li> <li>Easy to tear by hand, straight tear edge</li> </ul>	Acrylic-coated cloth	Natural rubber	310	3.3	130	13	100	●●●●● ●●●●●
Mid grade	tesa® 4688	<ul style="list-style-type: none"> <li>Strong adhesion</li> <li>Waterproof</li> <li>Easy to unwind</li> </ul>	PE extruded cloth	Natural rubber	260	4.5	110	9	52	●●●●● ●●●●●
Low grade	tesa® 4613	<ul style="list-style-type: none"> <li>Good adhesion even on rough surfaces</li> <li>Easy to tear by hand</li> <li>Water repellent</li> </ul>	PE laminated cloth	Natural rubber	180	4.3	95/30 min	18	30	●●●
Foaming process										
Venting tape	tesa® 4580	<ul style="list-style-type: none"> <li>Excellent air permeability due to special adhesive coating</li> <li>Special acrylic dispersion adhesive with well-balanced properties</li> </ul>	Non-woven	Acrylic	160	1.5	160	–	–	○
Hole covering										
Temporary hole covering	tesa® 4657 (54657)	<ul style="list-style-type: none"> <li>Residue-free removal, even after exposure to high temperatures</li> <li>Available in die cuts as tesa® 54657</li> <li>High resistance to paint solvents</li> </ul>	Acrylic-coated cloth	Thermosetting natural rubber	290	4.6	180	7.5	105	●●
Permanent hole covering	tesa® 54338	<ul style="list-style-type: none"> <li>Reliable corrosion protection and a high puncture resistance</li> <li>Very good temperature resistance up to 160°C</li> <li>Good paint and PVC compatibility</li> </ul>	PET film	Modified acrylic	95	4.0	160/30 min	165	138	○

s.t. = short term    l.t. = long term    \*initial    \*\*after 3 days    \*\*\*after 14 days

# MORE EFFICIENT BONDING

Our Dispensers and Applicators Help to Optimize Your Production Workflows



Technical features	tesa® 6003 Special Taper	tesa® 6400 Comfort	tesa® 6056
Product description	Handheld dispenser for ACX <sup>plus</sup> products	Handheld dispenser for packaging tapes	Tabletop dispenser
Roll core diameter [inch]	3	3	3
Length [mm]	280	185	340
Width [mm]	40 – 100	70	150
Height [mm]	300	270	140
Weight [g]	710	600	5.5
Max. roll diameter [mm]	300	130 – 140	180
Max. roll width [mm]	50	50	50
Dispensing method	Manual	Manual	Semi-automatic

As one of the world's leading manufacturer of self-adhesive products and system solutions, we offer an enormous variety of adhesive tapes. In addition, we support your workflows with professional dispensers and applicators. These are

perfectly matched to tesa® adhesive tapes and have been developed in close collaboration with users to guarantee perfect handling and ergonomics.



## Pre-Treatment with Adhesion Promoter

We recommend the use of an adhesion promoter, especially for outdoor areas and on hard to bond to surfaces with poor adhesion properties. tesa® adhesion promoters are available for a wide range of surface types. Please contact us for more information.

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All technical information and data above mentioned are provided to the best of our knowledge on the basis of our practical experience. They shall be considered as average values and are not appropriate for a specification. Therefore tesa SE can make no warranties, express or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. The user is responsible for determining whether the tesa® product is fit for a particular purpose and suitable for the user's method of application. If you are in any doubt, our technical support staff will be glad to support you.



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