

A close-up photograph of a silver car's side mirror and door. The mirror is black with a yellow light at its base. The car's body is highly reflective, showing highlights and shadows. The background is a plain, light-colored surface.

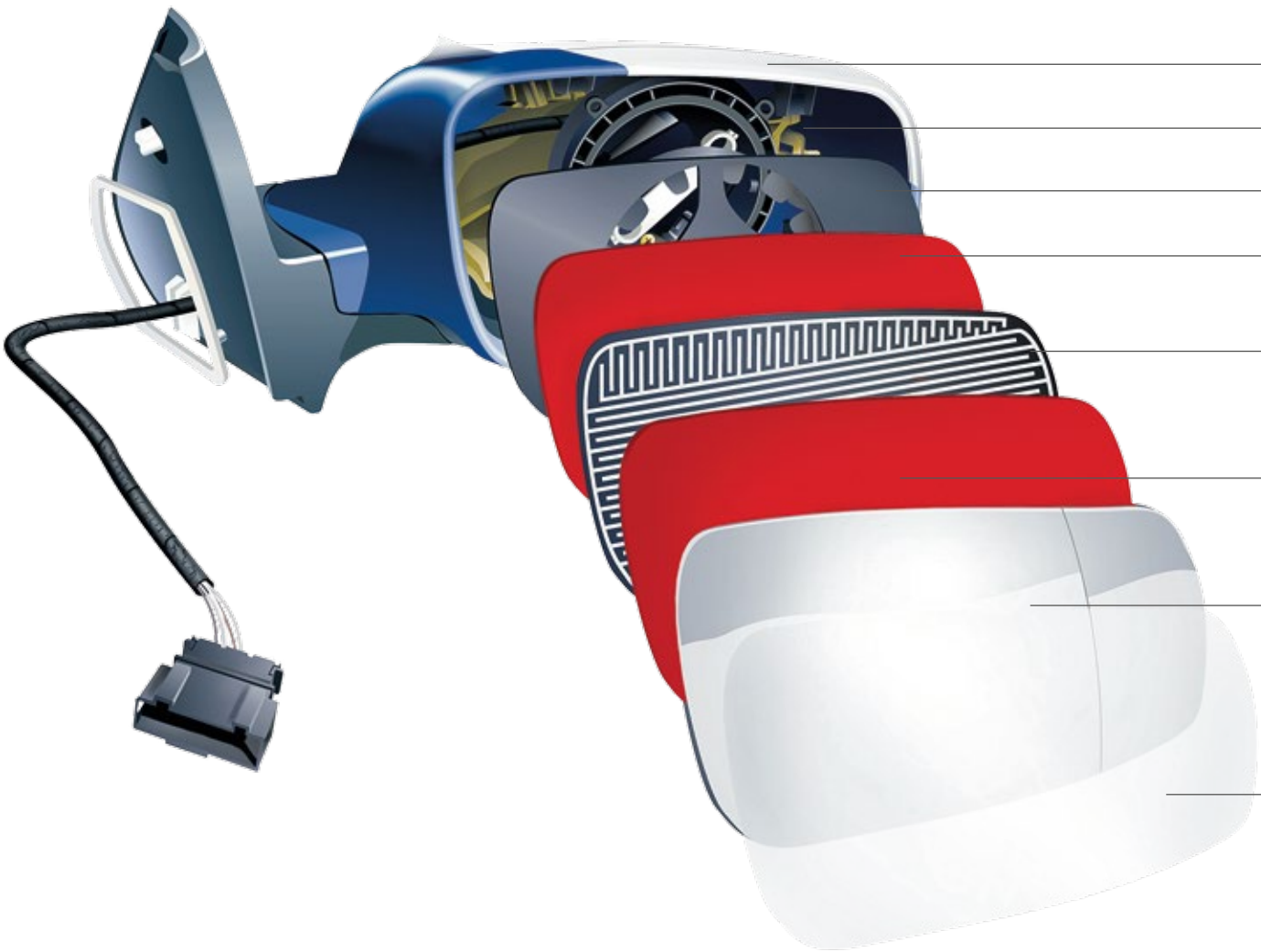
# TAPE SOLUTIONS FOR OPTIMUM VISION

**Our Mirror-Assembling Assortment for the Automotive Industry**

# REFLECTING QUALITY

## Our professional tape solutions for safe driving

Our success of automotive mirror assembling goes back to the late 1970's when we were the first to replace the traditional clipping attachment method with double-sided tapes. Compared with clipping, tape solutions offer a lot of advantages, such as weight reduction, secured component mounting, splintering protection, more design flexibility, and gap filling.



## Everything in View

### Always stay in fashion

Today, heated exterior mirrors have become more and more popular to increase convenience and allow for immediate clear vision. For heated and non-heated exterior mirrors as well as interior mirrors, we offer a comprehensive assortment for the individual applications required.

As the trend goes toward integrating more electrical components like an antenna, camera, and display into mirrors, with proved success in the electrical industry, we are your innovative partner to offer the right solution for more complex design of mirrors.

### Mirror-assembling process

Our double-sided tapes are ideally suited for the different steps of mirror assembling. When assembling a non-heated mirror, the mirror glass can be directly mounted onto the base plate with our double-sided tape. In the case of heated mirrors, the heating element is securely mounted to the mirror glass on one side and to the base plate on the other. For mounting electrical components, we offer tape die cuts with various materials, thicknesses, and colors to fulfill design requirements.

#### Surface protection

- Protect the surface from scratches, dust, and dirt when on the road

#### Permanent mounting

- Reduced weight, particularly for smaller, lighter exterior mirror designs
- Secure component mounting, even in differing climatic, physical, and chemical conditions
- Excellent gap filling and wet-out performance

#### Permanent mounting and antisplintering

- Reduced weight, particularly for smaller, lighter exterior mirror designs
- Secure component mounting, even in different climatic, physical, and chemical conditions
- Black color perfectly enhances the visibility of the separation line of aspheric mirrors
- Splintering protection to fulfill customer specifications

#### Surface protection

- Protect the surface from scratches, dust, and dirt when on the road

### Product finder

For passenger cars, we offer individual solutions for all design variations. As electrochromic mirrors are heavier than standard mirrors, it is recommended to use PE-foam-based tape. In the case of heated mirrors, it is necessary to use filmic tape, which ensures not only secured mounting of heating elements on the glass, but also heat conductivity and splintering protection. Even for clipped mirrors, where mounting tape is not needed, an antisplintering tape is essential.

For light and heavy trucks and buses with much bigger sizes of mirrors, tape solution offers significant process advantages when compared with traditional liquid-glue solutions.

Below are the typical products which are recommended for the different designs. Thanks to the broad range of our product portfolio, we can provide other individual solutions for customers as well.

	Passenger car		Light and heavy trucks, buses
	Standard mirror	EC mirror*	

Solutions for mirror assembling					
Exterior mirror	Non-heated mirror	Mounting of glass on base plate and splintering protection	tesa® 64993	tesa® 66108	tesa® 66108
	Heated mirror	Mounting of heating element on base plate	tesa® 64993	tesa® 66108	tesa® 66108
		Mounting of heating element on glass and splintering protection	tesa® 51965 tesa® 51980		
Interior mirror	Mounting of glass on base plate and splintering protection		tesa® 62904		
	Splintering protection of glued or clipped mirror		tesa® 4432		
Mirror in sun visor	Mounting of glass on base plate and splintering protection		tesa® 64993		
	Splintering protection of glued mirror		tesa® 4432		

Solutions for electronic components		
Camera	Mounting of electrical components in mirror housing	tesa® 62510
Antenna		tesa® ACX <sup>plus</sup> 7815
Display	Optical bonding	tesa® 69607
	Optical lamination	tesa® 69402

Complementary solutions		
Exterior mirror housing	Surface protection	tesa® 50560
Mirror glass		tesa® 50550

\* Electrochromic

Mirror-assembling product range						Ultimate peel adhesion* on			
		Adhesive	Backing	Color	Thickness of tape [μm]	Steel [N/cm]	ABS [N/cm]	PC [N/cm]	PET [N/cm]
Mounting and splintering protection tapes									
Foam tapes	tesa® 62904	Tackified acrylic	PE foam	Black	400	21.0**	21.0**	21.0**	21.0**
	tesa® 66108	Tackified acrylic	PE foam	Black	800	10.0**	10.0**	10.0**	10.0**
	tesa® 62510	Tackified acrylic	PE foam	Black White	1000	13.5**	13.5**	13.5**	13.5**
	tesa® ACX <sup>plus</sup> 7815	Modified acrylic	Foamed acrylic	Black	1500	40.0	32.0	40.0	14.0
Filmic tapes	tesa® 51980	Tackified acrylic	PET	Black	80	9.7	8.0	9.4	7.7
	tesa® 51965	Tackified acrylic	PET	Black	205	14.0	11.9	13.4	11.9
	tesa® 64993	Tackified acrylic	PP	White	240	13.0	12.0	13.0	10.0
Optically clear adhesive	tesa® 69607	Pure acrylic	None	Transparent	175	N/a	N/a	18.4	10.9
	tesa® 69402	Pure acrylic	None	Transparent	50	N/a	N/a	7.2	5.3
Splintering protection tapes									
tesa® 4432		Natural rubber	Paper	Beige	330	8.0	No relevant for the application		
Temporary protection tapes									
tesa® 50560		Synthetic rubber	PE/PP	White	52	No relevant for the application			
tesa® 50550		EVA	PP	Crystal clear	72				
						* peel angle 90° foam tape/ 180° all other tapes    ** foam splitting			

\* peel angle 90° foam tape/ 180° all other tapes    \*\* foam splitting

## Customized solutions for maximum efficiency

For most applications, we provide a custom solution utilizing converting capabilities and unique dispensing systems. Our automotive-mirror-assembling tapes are available in customer specific sizes and formats, including rolls, die cuts, and dispensers. Our application-process engineers analyze production processes and provide the best solution possible.



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.



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Our management system is certified according to the standards ISO 9001, ISO/TS 16949, and ISO 14001. All our products delivered to automotive customers are listed in the International Material Data System (IMDS).