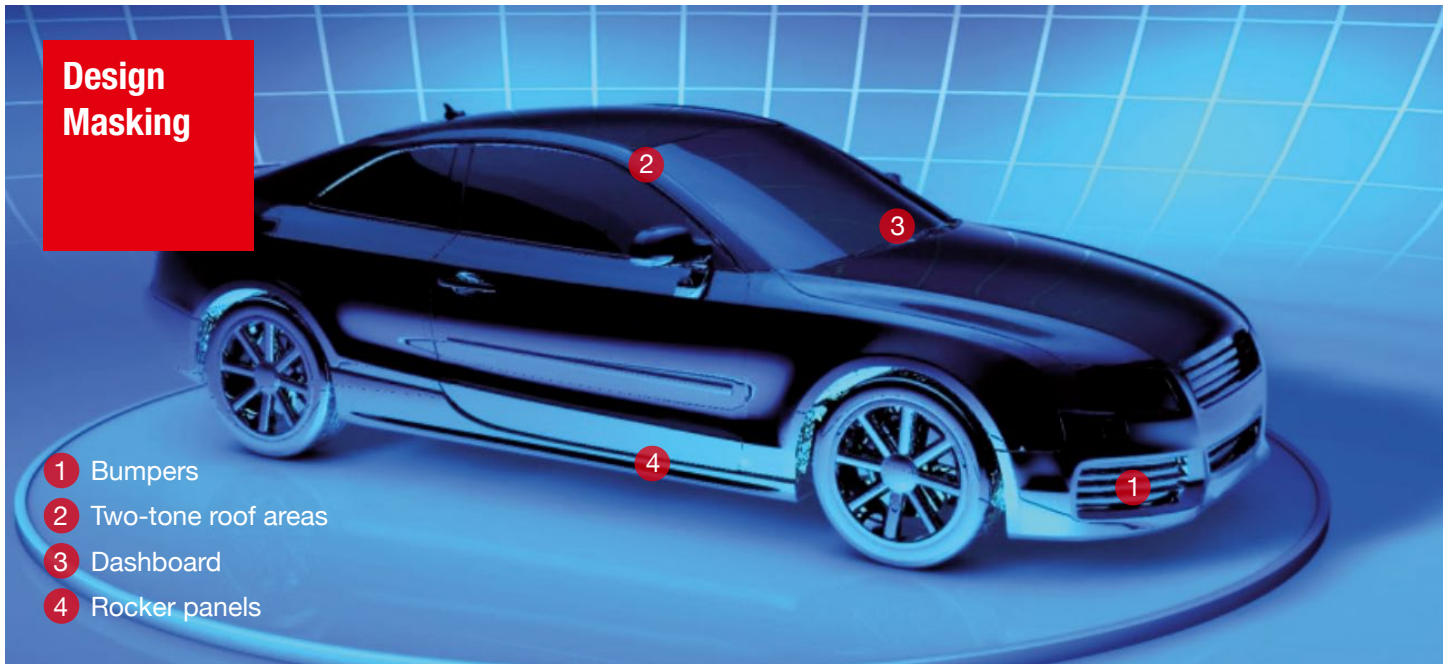


tesa® Automotive Design Masking – Precision at its finest

Tape technology for the automotive industry
APPLICATION FOLDER





- 1 Bumpers
- 2 Two-tone roof areas
- 3 Dashboard
- 4 Rocker panels

Precise Design Masking for all two-tone applications

Multicolor paintwork, such as two-tone bumper painting and multicolor design effects on the car body, on dashboards and rocker panels, requires particularly precise masking to provide excellent color line separation. During the complete paint process, all masking products have to maintain their properties when exposed to a variety of influences, such as heat, chemicals and humidity. As a global leader in masking solutions for painting vehicles and vehicle parts, tesa Automotive provides first-class quality and cost-efficient solutions.

Features and benefits of tesa® Automotive Design Masking Tapes

tesa® Automotive Design Masking Tapes combine different backing materials and adhesives to fulfill all process requirements:

- Temperature resistance
- Resistance against surface treatment steps
- Good paint anchorage
- One piece and residue-free removal

This ensures excellent color line separation and a perfect result of two-tone paint jobs.

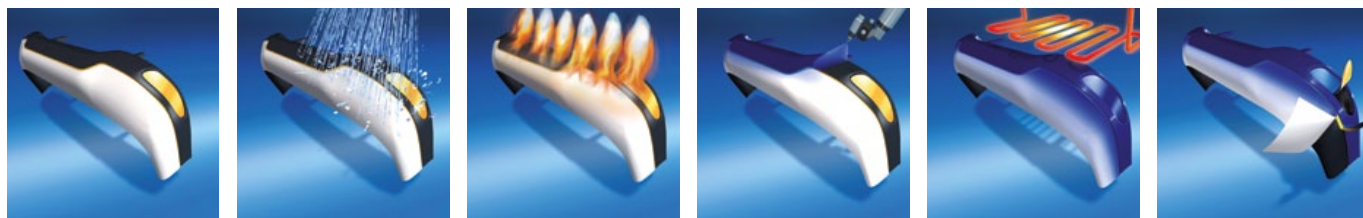


tesa® Automotive Design Masking Tapes for immaculate results of two-tone paintwork.

tesa® Automotive Design Masking

Process and requirements

During the multicolor painting of metal and plastic surfaces, several process steps can become necessary. For two-tone bumper painting, these steps are depicted below. It is good to know that tesa® Automotive tapes withstand exposure to a variety of physical or chemical influences, such as power wash, flaming, priming, painting and heat exposure during oven drying.



Masking

All primary colored surfaces are masked off with fineline tapes or die cuts and overmasking films

Power wash

Tapes resist moisture, high pressure, and chemicals

Flaming

Tapes resist high temperatures and chemicals

Painting

Tapes prevent paint seepage and ensure accurate paint lines

Oven drying

Tapes withstand temperatures up to 160 °C

Demasking

Tapes ensure one piece and residue-free removal

Color line separation

Paintwork involving several colors or designs calls for particularly precise masking. tesa Automotive offers a complete fineline tape assortment specially suited to these needs.

The tesa® Automotive fineline products fulfill the requirements of a variety of two-tone paint processes (please also see the product table for more details).

tesa® Automotive Fineline Tapes

- Outstanding color line separation for straight lines, on curves and on structured surfaces
- Safe adhesion on various surfaces, yet clean removal
- Resistance against pressure washing as well as flame, corona and plasma treatment
- Good paint anchorage, moisture and solvent resistance
- Made for oven drying up to 160 °C
- Easily hand tearable



Masking of large-area surfaces

Self-adhesive masking films protect large-area surfaces and are applied on top of the fineline tape. The specially designed adhesives keep the overmasking tapes in place throughout the complete process to ensure precise results.

All tesa® Automotive Overmasking Tapes meet the rigorous standards of multiple color applications (please also see the product table for more details).



tesa® Automotive Overmasking Tapes

- Safe adhesion on various surfaces, yet clean removal
- Resistance against power washing as well as flame, corona and plasma treatment
- Good paint anchorage, moisture and solvent resistance
- Made for oven drying up to 120 °C



Tailor-made solutions for precise and efficient application

tesa® Automotive Fineline Tapes are also available as die cuts to allow for precise and quick masking of individual and more complicated shapes. To increase productivity during multicolor paint processes, tesa® Automotive die cuts are tailored to customer-specific requirements.

The tesa® roll masker is a tailor-made converted product combining a fineline tape with non-adhesive overmasking material in one cost-effective solution. The tesa® Automotive Fineline Tape is either applied on one or on both sides of the overmasking film or paper, ensuring efficient, reliable and high-temperature resistant application.



tesa® Automotive Finline Tapes (also available as tailor-made die cuts upon request)

	Key Characteristics	Temperature Resistance PP-EPDM [°C/1hr]*	Conform-ability	Backing/ Color	Adhesive	Thickness of Tape [µm]	Adhesion to Steel [N/cm]	Tensile Strength [N/cm]	Elongation at Break [%]
tesa® 50888	high temp acrylic fineline tape, conformable	160	+	PVC/blue	acrylic	132	2.0	30	150
tesa® 4174	high temp fineline tape, conformable	150	+	PVC/olive	natural rubber	110	3.4	25	200
tesa® 4244 PV0	conformable fineline tape	140	+	PVC/yellow	natural rubber	110	3.7	27	237
tesa® 4244 PV2	very conformable and highly adhesive fineline tape	140	++	PVC/yellow	natural rubber	137	4.2	36	252
tesa® 4215	very conformable PVC-free fineline tape	120	++	PE/green	natural rubber	130	2.5	19	350
tesa® 50587	very conformable fineline tape	100	++	PVC/yellow	natural rubber	130	1.7	25	170

* value is part of application tests

tesa® Automotive Overmasking Tapes

	Key Characteristics	Temperature Resistance PP-EPDM [°C/1hr]*	Conform-ability	Backing/ Color	Adhesive	Thickness of Tape [µm]	Adhesion to Steel [N/cm]	Tensile Strength [N/cm]	Elongation at Break [%]
tesa® 7133	conformable self-adhesive overmasking film, also applicable for long straight fineline application	120	+	PP/blue	natural rubber	80	2.0	133	30
tesa® 51136 PV2	conformable self-adhesive overmasking film	100	+	PE/green	acrylic	110	2.6	19	300
tesa® 51134	conformable self-adhesive overmasking film	90	+	PE/transparent	acrylic	84	2.4	15	200

* value is part of application tests

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All information and recommendations are provided to the best of our knowledge on the basis of our practical experience. Nevertheless tesa SE can make no warranties, expressed or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. Therefore, 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 advise you.

Maximized efficiency for Design Masking applications

tesa Automotive offers tailor-made applicators to apply fineline tapes as precisely and fast as possible. These are customized by the tesa Application System Engineers to fulfill all individual needs. Dispensers set up close to workstations allow for fast and precise dispensing and cutting of all tesa® Design Masking products.



In combination with the tesa® Automotive Design Masking Tapes, a complete system solution is offered to maximize efficiency in multicolor paint processes.



tesa Automotive: from tradition, passion and conviction

For the past 75 years tesa Automotive has been a constant generator of ideas and a reliable partner to automobile manufacturers and their suppliers. tesa's high-performance self-adhesive tape solutions and pioneering inventions impress customers worldwide. tesa Automotive is working on the future of adhesive tape technology, a key technology of the 21st century, with enthusiasm.



NEW: the tesa® ACX technology

Time and again tesa has been able to set milestones in adhesive tape technology. tesa® ACX is a new, future-oriented technology, specially developed by tesa for constructive bonding. This development will open up a new dimension of possibilities for automobile manufacturers and suppliers in the future. tesa Automotive is equipped to collaboratively find new ideas for constructive bonding applications.



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

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