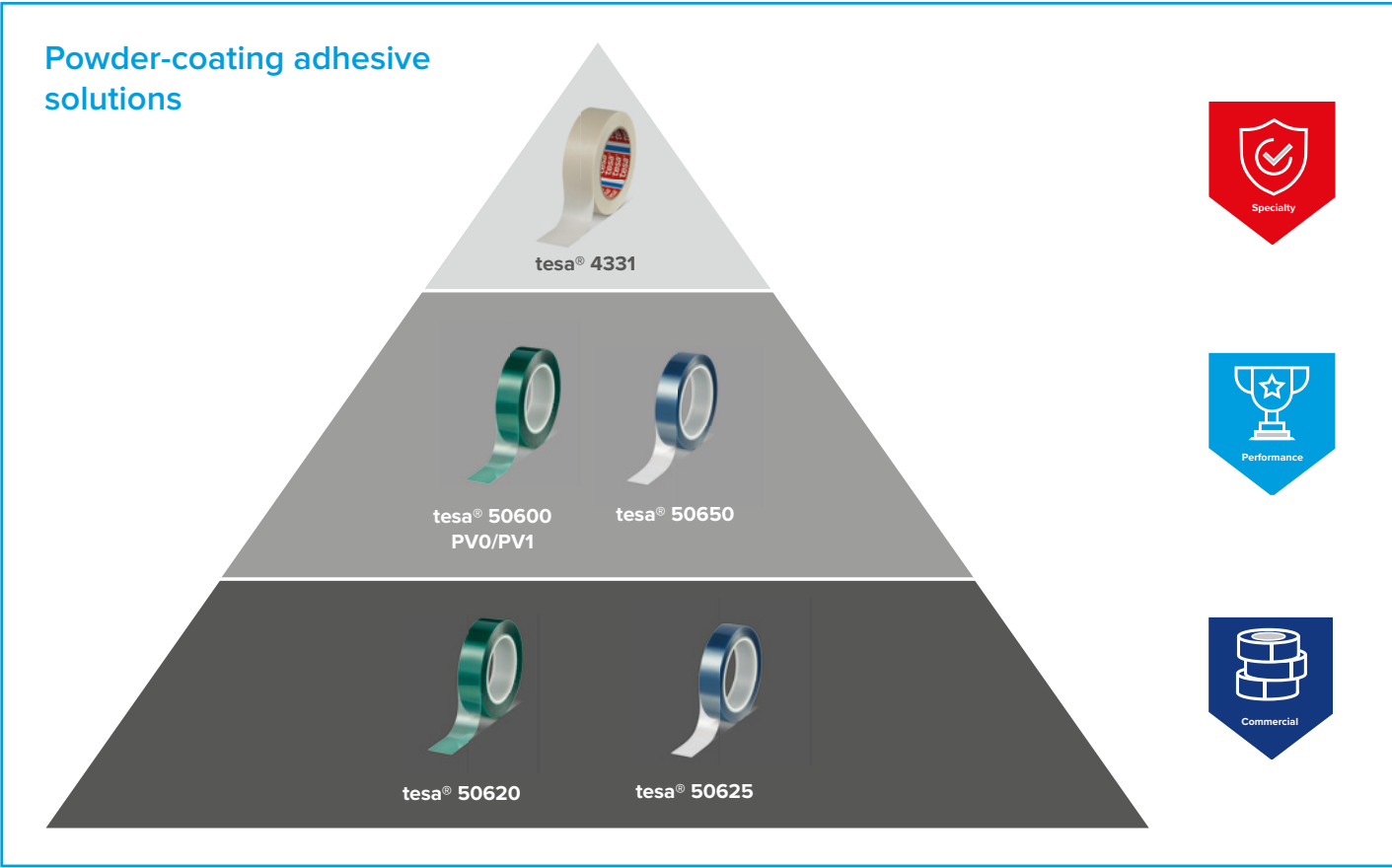


Adhesive solutions for elevated temperatures

Our high-temperature tapes featuring a heat-resistant backing with a silicone adhesive provide the perfect solution for demanding high-temperature applications such as masking during powder-coating, galvanizing, and wave-soldering processes. It is also used in autoclave bonding operations during composite production or thermal insulation and cable-wrapping applications. Selection of an appropriate product depends on the substrate to be coated, the employed materials in the process, as well as the temperature and duration of the application.



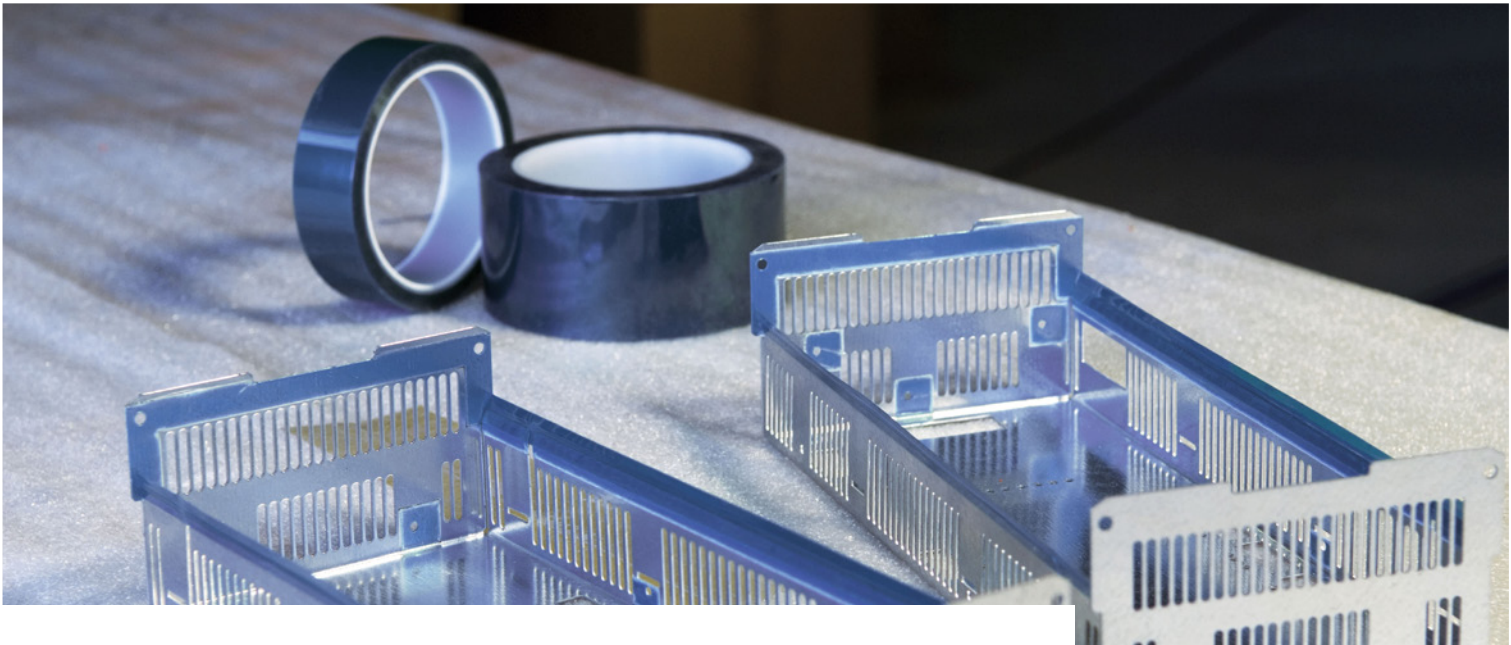
Auxiliaries

To enhance your powder-coating process, we've developed a range of specialized products designed to provide you with optimal support.

Specialty offer Performance offer Commercial offer

Recommendations:

- tesa® ACX^{plus} adhesive hooks
- tesa® 4414
- tesa® 60428
- tesa® 4848



Certifications

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

Please find more information regarding our certifications at: www.tesa.com/certifications

tesa SE
Phone: +49 40 88899 0
tesa.com/company/locations

tesa.com



Powder Coating tapes
that redefines precision

Discover our growing
powder-coating assortment

One-stop solution for precise powder coating applications

Powder coating is a highly demanding application that requires special masking tapes that can withstand high curing temperatures and are tear-resistant to be easily removed afterwards. The process is used to create a highly precise and uniform finish for protection or aesthetics on metal surfaces.

In the first step, the free-flowing, dry powder is applied to the material electrostatically, so it is drawn into the tiniest gaps. In the second step, the coating is typically cured by heat, for example at 200°C. This causes the powder, which often contains a thermoplastic or thermoset polymer, to melt into a durable finish that is tougher than conventional paint. This exceptional resilience makes powder coating the preferred choice for metal working industries from household appliances to transportation and aerospace industries by far. In addition, powder coating does not release any volatile organic compounds (VOCs) making it a preferred choice.

Our powder-coating assortment is designed for various applications with dwell time of up to 30 minutes. **tesa® 4331** of 110 µm total thickness, is a PET/nonwoven tape with a laminate backing, provides a combination of high tear resistance, minimal curling and excellent paint adhesion with a temperature resistance of 200° C. **tesa® 50600** of 80 µm total thickness, is highly tear resistant ideal for masking flat surfaces, while **tesa® 50650** of 55 µm total thickness offers great conformability making it suitable for non-flat surfaces. Both tapes are made of polyethylene (PET) with a 30 µm silicone adhesive and is suitable for temperatures up to 220 °C

The recent **tesa® 50620** our offering for basic powder coating tape of 70 µm total thickness and a temperature resistance of 200 °C combines high tear resistance, tensile strength and residue-free removal. It is color- coded for easy identification and positioning, like the **tesa® 50600** and **tesa® 50650**.


Further complementing the tesa® 50620, our brand new offering **tesa® 50625** of 50 µm total thickness offers excellent conformability and is resistant to temperatures up to 200 °C with residue free removal.







Benefits of our products

- All your powder coating adhesive needs from one hand
- Precise, stable and reliable quality that has been proven multiple times
- Technical customer service by experienced and highly skilled engineers
- Hassle free solution for every application
- Optimal lead times and minimum order quantities

In detail

Product description and application	Technical information				
tesa® 4331 <ul style="list-style-type: none">• Extremely high tear resistance• Residue-free removability for masking applications such as wave soldering e.g. circuit board assembly• High adhesion for secure bonding, even adheres to surfaces containing silicone	Backing	PET / nonwoven	Tensile strength [N/cm]	60	
	Adhesive	Silicone	Elongation at break [%]	100	
	Total thickness [µm]	110	Color	○	
	Adhesion to steel [N/cm]	4.0	Temperature resistance (30 min) [°C]	200	

Product description and application	Technical information				
tesa® 50600 <ul style="list-style-type: none">• Residue-free removability for masking and surface protection applications• Easy application and easy one-piece removal	Backing	PET	Tensile strength [N/cm]	75	
	Adhesive	Silicone	Elongation at break [%]	110	
	Total thickness [µm]	80	Color	●	
	Adhesion to steel [N/cm]	4.0	Temperature resistance (30 min) [°C]	220	
tesa® 50650 <ul style="list-style-type: none">• Good conformability, thin backing for sharp color edge• Easy application and easy one-piece removal-offers excellent paint anchorage	Backing	PET	Tensile strength [N/cm]	50	
	Adhesive	Silicone	Elongation at break [%]	120	
	Total thickness [µm]	55	Color	●	
	Adhesion to steel [N/cm]	3.2	Temperature resistance (30 min) [°C]	220	

Product description and application	Technical information				
tesa® 50620 <ul style="list-style-type: none">• Ideally suited for masking off areas during general powder coating applications• Residue-free removability for masking and surface protection applications• Enables sharp color edges and offers good paint anchorage	Backing	PET	Tensile strength [N/cm]	75	
	Adhesive	Silicone	Elongation at break [%]	110	
	Total thickness [µm]	70	Color	●	
	Adhesion to steel [N/cm]	3.6	Temperature resistance (30 min) [°C]	200	
tesa® 50625 <ul style="list-style-type: none">• Ideally suited for masking off irregular surfaces during general powder coating applications• Good conformability due to thin backing• Residue-free removability, sharp color edges and good paint anchorage	Backing	PET	Tensile strength [N/cm]	50	
	Adhesive	Silicone	Elongation at break [%]	130	
	Total thickness [µm]	50	Color	●	
	Adhesion to steel [N/cm]	3.2	Temperature resistance (30 min) [°C]	200	

Auxiliaries

Product description and application	Technical information			
tesa® ACX^{plus} adhesive hooks <ul style="list-style-type: none">• Easy hanging of components without the need for drilling holes or using screws• High bond strength and shear resistance on metal substrates• High resistance to temperatures up to 220°C• Resistant to UV, moisture, and chemicals• Easily removable after painting or coating• Available for order via article number 7072-00011-22	Backing	Foamed acrylic	Normal tensile strength [N/cm²]	60
	Adhesive	Pure acrylic	Shear strength [N/cm²]	85
	Total thickness [µm]	500	Color	●
	Adhesion to steel [N/cm]	27	Short-/long-term temperature [°C]	220 / 120
tesa® 4414 <ul style="list-style-type: none">• Ideally suited for surface protection after coating or painting• Excellent visibility due to blue translucent color• The high-tack adhesive provides good and quick sticking to a wide range of surfaces• Residue-free removal for up to 6 months even after continuous outdoor use• Strong PE backing for good resistance against mechanical damage• Easy to apply due to low backing elongation when unwound	Backing	PE film	Tensile strength [N/cm²]	23
	Adhesive	Water-based acrylic	Elongation at break [%]	400
	Total thickness [µm]	150	Color	●
	Adhesion to steel [N/cm]	2.2	Temperature resistance (60 min) [°C]	70
tesa® 60428 <ul style="list-style-type: none">• Ideally suited for surface protection after coating or painting• High mechanical and chemical resistance• Wide range of masking requirements• Easy to apply and residue-free removal• Thin and conformable• Suitable for converting and die cutting• UV resistant for 3 months	Backing	PVC film	Tensile strength [N/cm²]	43
	Adhesive	Natural rubber	Elongation at break [%]	78
	Total thickness [µm]	60	Color	●
	Adhesion to steel [N/cm]	0.3	UV resistance (month)	3
tesa® 4848 <ul style="list-style-type: none">• Ideally suited for surface protection after coating or painting• Thin and transparent film• UV resistance allows outdoor use• Sensitive adhesive with low bonding strength• Very versatile in terms of surfaces that can be protected• Easy, residue-free removal within four weeks of application, even after UV exposure during outdoor usage	Backing	PE film	Tensile strength [N/cm²]	12
	Adhesive	Acrylic	Elongation at break [%]	200
	Total thickness [µm]	48	Color	○
	Adhesion to steel [N/cm]	0.8	UV resistance (weeks)	4

Can't find the right solution?

If you have not found the right product, please contact us. Together we will find a suitable solution for you. **To learn more about our masking tapes, visit our website: www.tesa.com/en/industry/general-applications/masking**

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.