



09/2024

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



Our cloth tape assortment

High-quality solutions for industrial trade

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

tesa.com

Structure of a cloth tape

Top coat

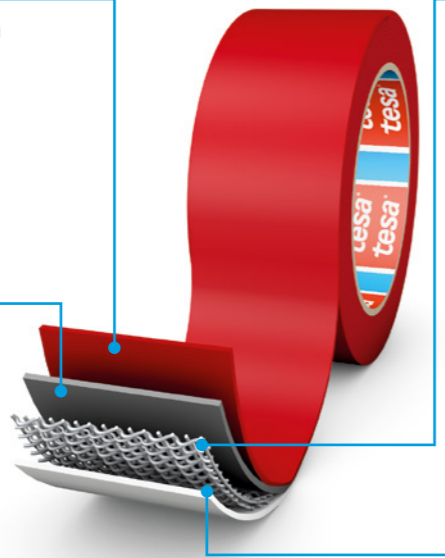
The type of top coat has a big influence on the following tape properties:

- Level of gloss: shiny or matt
- Ability to write, print, or coat the tape
- Resistance against solvents/ moisture/humidity
- Unwinding behavior

Plastic layer

The layer affects major characteristics of the cloth tape:

- Color
- Barrier function
- Creates abrasion resistance
- Stiffness



Fabric

The backing is responsible for different features of the adhesive tape:

- Flexibility and conformability
- Mechanical properties, such as tensile or elongation
- Abrasion resistance
- Enables the removal of the tape

Adhesive system

Depending on the specific adhesive system the following features are affected:

- Adhesion/peel resistance
- Cohesion/shear resistance
- Initial bond/tack

As a multinational company, tesa develops innovative adhesive tapes and self-adhesive system solutions for various industries, commercial customers, and end consumers. The age of technical adhesive tapes began 125 years ago, and there are already more than 7,000 tesa adhesive solutions that help improve the work, products, and lives of our customers. Today, the focus is on sustainability and energy-saving processes. tesa invests in the development of environmentally friendly products and solvent-free manufacturing processes, as well as in the use of renewable energy sources at its locations.

Our cloth tapes are ideal products for the daily demands encountered in industry and by craftsmen – the applications are endless, including usage in extreme temperature and climatic conditions.

Specialties and Premium tapes: For sophisticated applications with a high level of properties: highly temperature-resistant, excellent abrasion resistance, and straight longitudinal and horizontal tear edges.

Gaffer tapes: Ideal tapes for temporary applications. They can be used on rough surfaces and can be

removed quickly and residue-free after usage.

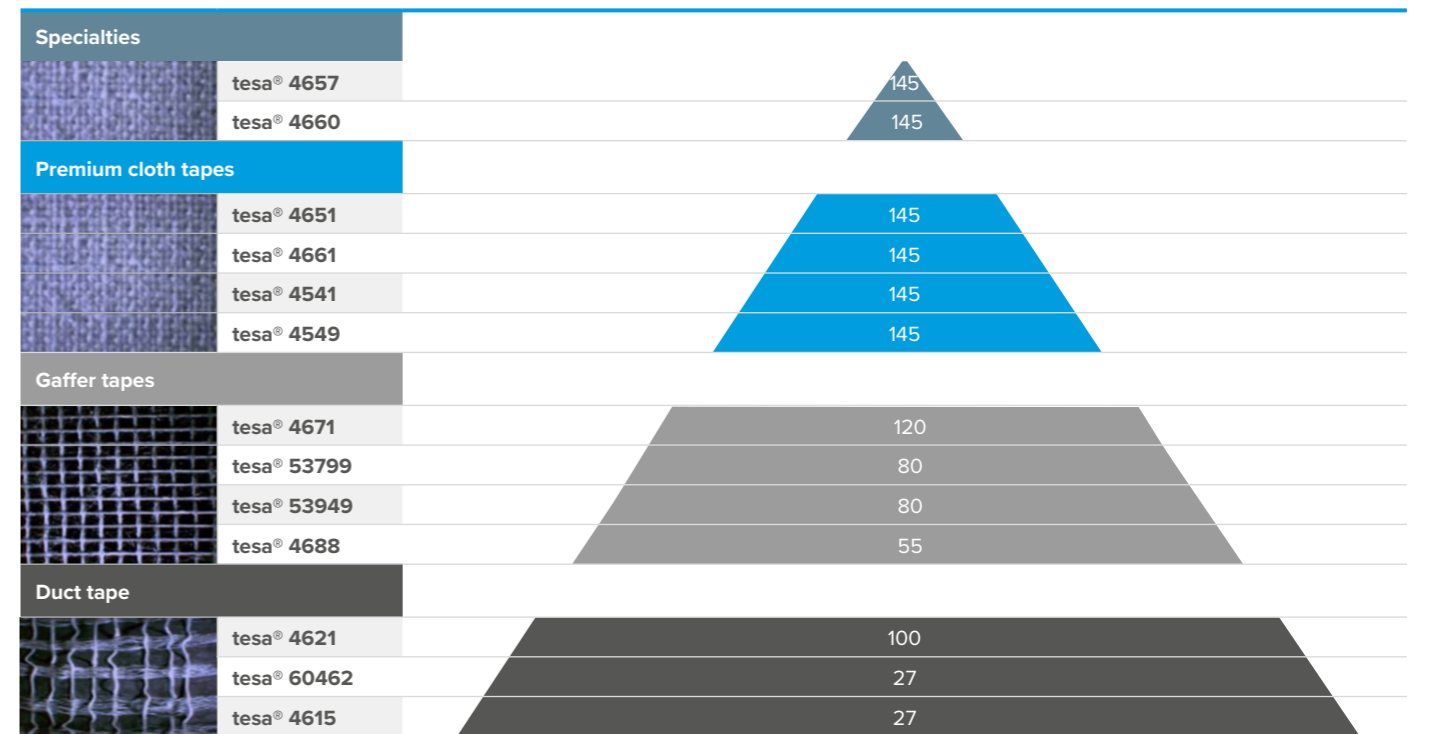
Duct tapes: The universal helper – especially suitable for general purpose and temporary applications. They have a lower tensile strength and limited resistance to weathering.

This folder will assist you in finding the perfect tape solution for your specific requirement: for any maintenance, repairing, or overhaul task in technical and industrial plants, for technical services in industry, or for competent and supportive solutions in arts and entertainment.



Our cloth tape qualities

Product and classification



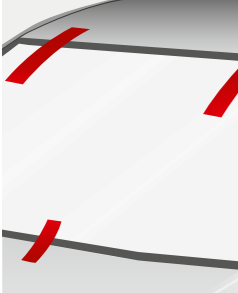




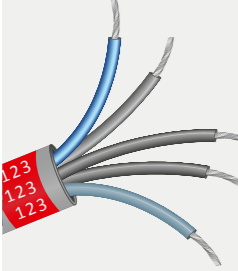




* Mesh is the measure for quality and performance of woven fabric and counted by the sum of the threads in machine (warp) and cross (weft) direction per square inch.

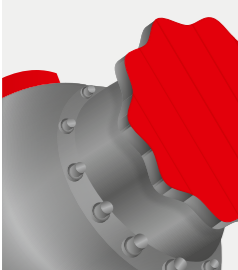




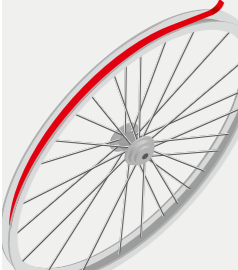









Application factors






Product characteristics	Specialties		Premium cloth tapes				Gaffer tapes				Duct tape		
	tesa® 4657	tesa® 4660	tesa® 4651	tesa® 4661	tesa® 4541	tesa® 4549	tesa® 4671	tesa® 53799	tesa® 53949	tesa® 4688	tesa® 4621	tesa® 4662	tesa® 4615
Humidity resistance	••••	••••	••••	••••	••	••	•••	••••	••••	••••	••••	••••	•••
Aging resistance (UV)	•••	•••	••	••	•	•	••	••	••	••	••••	•	•
Solvent resistance	••••	••••	••••	••••	•	•	•••	•••	•••	•••	••••	••	••
Abrasion resistance	••••	••••	••••	••••	•••	•••	•••	••	••	••	•	••	•
Flexibility	•••	•••	•••	•••	••••	••••	•••	••	••	•••	•••	••	•••
Hand-tearability	••••	••••	••••	••••	••	••	••••	•••	•••	•••	••••	•••	•••
Writable surface	••••	••••	••••	••••	••	••	•••	••	••	••	••	••	••
Residue-free removability	••••	••••	•••	•••	••	•••	•••	••	•••	••	••••	•	•






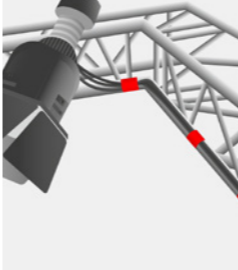











•••• Very good •••• Good •••• Medium •••• Low

High-quality solutions for industrial trade

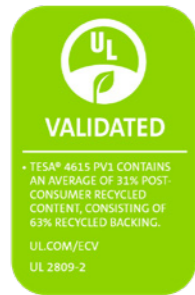
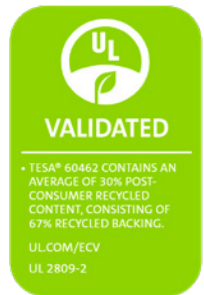
Specialties	tesa sustainability marker	Product description and application	Technical information	Properties																
		tesa® 4657 <ul style="list-style-type: none"> 76% bio-based content in total product excluding liner (by weight) Very aging-resistant (allowing for permanent applications) Very conformable tape which adapts to uneven and shaped surfaces without creasing Removable without residue even after high temperature exposure 	<table border="1"> <tr><td>Backing</td><td>Acrylic-coated cloth</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>290</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>4.6</td></tr> <tr><td>Tensile strength [N/cm]</td><td>105</td></tr> <tr><td>Elongation at break [%]</td><td>8</td></tr> <tr><td>Color</td><td>●●</td></tr> <tr><td>Temperature resistance [30 min]</td><td>180°C</td></tr> </table>	Backing	Acrylic-coated cloth	Adhesive	Natural rubber	Total thickness [µm]	290	Adhesion to steel [N/cm]	4.6	Tensile strength [N/cm]	105	Elongation at break [%]	8	Color	●●	Temperature resistance [30 min]	180°C	  
Backing	Acrylic-coated cloth																			
Adhesive	Natural rubber																			
Total thickness [µm]	290																			
Adhesion to steel [N/cm]	4.6																			
Tensile strength [N/cm]	105																			
Elongation at break [%]	8																			
Color	●●																			
Temperature resistance [30 min]	180°C																			
		tesa® 4660 <ul style="list-style-type: none"> 68% bio-based content in total product excluding liner (by weight) Printable surface, especially recommended for flexographic printing High adhesion on almost any surface Ideal solution for high temperature label in metal industry 	<table border="1"> <tr><td>Backing</td><td>Acrylic-coated cloth</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>260</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>4.0</td></tr> <tr><td>Tensile strength [N/cm]</td><td>100</td></tr> <tr><td>Elongation at break [%]</td><td>8</td></tr> <tr><td>Color</td><td>○●</td></tr> <tr><td>Temperature resistance [30 min]</td><td>180°C</td></tr> </table>	Backing	Acrylic-coated cloth	Adhesive	Natural rubber	Total thickness [µm]	260	Adhesion to steel [N/cm]	4.0	Tensile strength [N/cm]	100	Elongation at break [%]	8	Color	○●	Temperature resistance [30 min]	180°C	  
Backing	Acrylic-coated cloth																			
Adhesive	Natural rubber																			
Total thickness [µm]	260																			
Adhesion to steel [N/cm]	4.0																			
Tensile strength [N/cm]	100																			
Elongation at break [%]	8																			
Color	○●																			
Temperature resistance [30 min]	180°C																			

Premium cloth tapes	tesa sustainability marker	Product description and application	Technical information	Properties																
		tesa® 4651 <ul style="list-style-type: none"> 68% bio-based content in total product excluding liner (by weight) Very strong adhesion even on rough and slightly oily surfaces Flexible and conformable Easy to write on Ideal solution for sandblasting 	<table border="1"> <tr><td>Backing</td><td>Acrylic-coated</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>310</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>3.3</td></tr> <tr><td>Tensile strength [N/cm]</td><td>100</td></tr> <tr><td>Elongation at break [%]</td><td>13</td></tr> <tr><td>Color</td><td>●○●●●●●●</td></tr> <tr><td>Temperature resistance [30 min]</td><td>130°C</td></tr> </table>	Backing	Acrylic-coated	Adhesive	Natural rubber	Total thickness [µm]	310	Adhesion to steel [N/cm]	3.3	Tensile strength [N/cm]	100	Elongation at break [%]	13	Color	●○●●●●●●	Temperature resistance [30 min]	130°C	  
Backing	Acrylic-coated																			
Adhesive	Natural rubber																			
Total thickness [µm]	310																			
Adhesion to steel [N/cm]	3.3																			
Tensile strength [N/cm]	100																			
Elongation at break [%]	13																			
Color	●○●●●●●●																			
Temperature resistance [30 min]	130°C																			
		tesa® 4661 <ul style="list-style-type: none"> 60% bio-based content in total product excluding liner (by weight) Highest adhesion level in premium cloth assortment Available as spool for automated processes, such as bicycle wheel production 	<table border="1"> <tr><td>Backing</td><td>Acrylic-coated</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>300</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>5.8</td></tr> <tr><td>Tensile strength [N/cm]</td><td>100</td></tr> <tr><td>Elongation at break [%]</td><td>12</td></tr> <tr><td>Color</td><td>●○●●●●●●</td></tr> <tr><td>Temperature resistance [30 min]</td><td>140°C</td></tr> </table>	Backing	Acrylic-coated	Adhesive	Natural rubber	Total thickness [µm]	300	Adhesion to steel [N/cm]	5.8	Tensile strength [N/cm]	100	Elongation at break [%]	12	Color	●○●●●●●●	Temperature resistance [30 min]	140°C	  
Backing	Acrylic-coated																			
Adhesive	Natural rubber																			
Total thickness [µm]	300																			
Adhesion to steel [N/cm]	5.8																			
Tensile strength [N/cm]	100																			
Elongation at break [%]	12																			
Color	●○●●●●●●																			
Temperature resistance [30 min]	140°C																			
		tesa® 4541 <ul style="list-style-type: none"> 87% bio-based carbon content in total product (tested acc. to EN 16640) Extremely flexible and conformable tape Adapts to uneven surfaces without creasing 	<table border="1"> <tr><td>Backing</td><td>Uncoated cloth</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>270</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>3.6</td></tr> <tr><td>Tensile strength [N/cm]</td><td>90</td></tr> <tr><td>Elongation at break [%]</td><td>16</td></tr> <tr><td>Color</td><td>●○</td></tr> <tr><td>Temperature resistance [30 min]</td><td>130°C</td></tr> </table>	Backing	Uncoated cloth	Adhesive	Natural rubber	Total thickness [µm]	270	Adhesion to steel [N/cm]	3.6	Tensile strength [N/cm]	90	Elongation at break [%]	16	Color	●○	Temperature resistance [30 min]	130°C	  
Backing	Uncoated cloth																			
Adhesive	Natural rubber																			
Total thickness [µm]	270																			
Adhesion to steel [N/cm]	3.6																			
Tensile strength [N/cm]	90																			
Elongation at break [%]	16																			
Color	●○																			
Temperature resistance [30 min]	130°C																			

Premium cloth tapes	tesa sustainability marker	Product description and application	Technical information	Properties																
		tesa® 4549 <ul style="list-style-type: none"> 71% bio-based carbon content in total product (tested acc. to ASTM D6866-21) Very conformable tape which adapts to uneven and shaped surfaces without creasing Designed for clean removal For edge protection in glass production 	<table border="1"> <tr><td>Backing</td><td>Uncoated cloth</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>300</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>3.6</td></tr> <tr><td>Tensile strength [N/cm]</td><td>90</td></tr> <tr><td>Elongation at break [%]</td><td>16</td></tr> <tr><td>Color</td><td>○</td></tr> <tr><td>Temperature resistance [30 min]</td><td>140°C</td></tr> </table>	Backing	Uncoated cloth	Adhesive	Natural rubber	Total thickness [µm]	300	Adhesion to steel [N/cm]	3.6	Tensile strength [N/cm]	90	Elongation at break [%]	16	Color	○	Temperature resistance [30 min]	140°C	  
Backing	Uncoated cloth																			
Adhesive	Natural rubber																			
Total thickness [µm]	300																			
Adhesion to steel [N/cm]	3.6																			
Tensile strength [N/cm]	90																			
Elongation at break [%]	16																			
Color	○																			
Temperature resistance [30 min]	140°C																			

Gaffer tapes	tesa sustainability marker	Product description and application	Technical information	Properties																
		tesa® 4671 <ul style="list-style-type: none"> 51% bio-based carbon content in total product (tested acc. to ASTM D6866-21) Premium gaffer tape for exhibitions and on stage Available in fluorescent neon colors Solvent-free production 	<table border="1"> <tr><td>Backing</td><td>Acrylic-coated cloth</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>280</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>3.8</td></tr> <tr><td>Tensile strength [N/cm]</td><td>70</td></tr> <tr><td>Elongation at break [%]</td><td>9</td></tr> <tr><td>Color (neon)</td><td>●○●●●●●●</td></tr> <tr><td>Temperature resistance [30 min]</td><td>140°C</td></tr> </table>	Backing	Acrylic-coated cloth	Adhesive	Natural rubber	Total thickness [µm]	280	Adhesion to steel [N/cm]	3.8	Tensile strength [N/cm]	70	Elongation at break [%]	9	Color (neon)	●○●●●●●●	Temperature resistance [30 min]	140°C	  
Backing	Acrylic-coated cloth																			
Adhesive	Natural rubber																			
Total thickness [µm]	280																			
Adhesion to steel [N/cm]	3.8																			
Tensile strength [N/cm]	70																			
Elongation at break [%]	9																			
Color (neon)	●○●●●●●●																			
Temperature resistance [30 min]	140°C																			
		tesa® 53799 <ul style="list-style-type: none"> Polyethylene-coated mid-grade cloth tape Very good adhesion, even on rough surfaces Excellent tensile strength Water-repellent Easy to tear by hand All-rounder used for repairing and construction applications 	<table border="1"> <tr><td>Backing</td><td>PE-extruded cloth</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>310</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>4.7</td></tr> <tr><td>Tensile strength [N/cm]</td><td>77</td></tr> <tr><td>Elongation at break [%]</td><td>11</td></tr> <tr><td>Color</td><td>●●●●●●●○</td></tr> <tr><td>Temperature resistance [30 min]</td><td>110°C</td></tr> </table>	Backing	PE-extruded cloth	Adhesive	Natural rubber	Total thickness [µm]	310	Adhesion to steel [N/cm]	4.7	Tensile strength [N/cm]	77	Elongation at break [%]	11	Color	●●●●●●●○	Temperature resistance [30 min]	110°C	  
Backing	PE-extruded cloth																			
Adhesive	Natural rubber																			
Total thickness [µm]	310																			
Adhesion to steel [N/cm]	4.7																			
Tensile strength [N/cm]	77																			
Elongation at break [%]	11																			
Color	●●●●●●●○																			
Temperature resistance [30 min]	110°C																			
		tesa® 53949 <ul style="list-style-type: none"> Matt gaffer tape for fair and exhibitions Ideal solution on stage or when non-reflective surface is important Easy to tear by hand 	<table border="1"> <tr><td>Backing</td><td>PE-extruded cloth</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>310</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>1.6</td></tr> <tr><td>Tensile strength [N/cm]</td><td>85</td></tr> <tr><td>Elongation at break [%]</td><td>14</td></tr> <tr><td>Color</td><td>○●●</td></tr> <tr><td>Temperature resistance [30 min]</td><td>125°C</td></tr> </table>	Backing	PE-extruded cloth	Adhesive	Natural rubber	Total thickness [µm]	310	Adhesion to steel [N/cm]	1.6	Tensile strength [N/cm]	85	Elongation at break [%]	14	Color	○●●	Temperature resistance [30 min]	125°C	  
Backing	PE-extruded cloth																			
Adhesive	Natural rubber																			
Total thickness [µm]	310																			
Adhesion to steel [N/cm]	1.6																			
Tensile strength [N/cm]	85																			
Elongation at break [%]	14																			
Color	○●●																			
Temperature resistance [30 min]	125°C																			
		tesa® 4688 <ul style="list-style-type: none"> Universal cloth tape, convenient for a variety of needs with very good handling characteristics Very good adhesion to multiple surfaces 	<table border="1"> <tr><td>Backing</td><td>PE-extruded cloth</td></tr> <tr><td>Adhesive</td><td>Natural rubber</td></tr> <tr><td>Total thickness [µm]</td><td>260</td></tr> <tr><td>Adhesion to steel [N/cm]</td><td>4.5</td></tr> <tr><td>Tensile strength [N/cm]</td><td>52</td></tr> <tr><td>Elongation at break [%]</td><td>9</td></tr> <tr><td>Color</td><td>●○●●●●●●</td></tr> <tr><td>Temperature resistance [30 min]</td><td>110°C</td></tr> </table>	Backing	PE-extruded cloth	Adhesive	Natural rubber	Total thickness [µm]	260	Adhesion to steel [N/cm]	4.5	Tensile strength [N/cm]	52	Elongation at break [%]	9	Color	●○●●●●●●	Temperature resistance [30 min]	110°C	  
Backing	PE-extruded cloth																			
Adhesive	Natural rubber																			
Total thickness [µm]	260																			
Adhesion to steel [N/cm]	4.5																			
Tensile strength [N/cm]	52																			
Elongation at break [%]	9																			
Color	●○●●●●●●																			
Temperature resistance [30 min]	110°C																			

Duct tape	tesa sustainability marker	Product description and application	Technical information	Properties
		tesa® 4621 <ul style="list-style-type: none"> Effortlessly tearable by hand in both vertical and horizontal directions Gentle unwinding without curling Waterproof and weather resistant for up to 8 weeks Withstands wear and tear from tools Ideal solution for outdoor masking 	Backing: PE-extruded cloth Adhesive: Acrylic Total thickness [µm]: 125 Adhesion to steel [N/cm]: 2.6 Tensile strength [N/cm]: 54 Elongation at break [%]: 22 Color: ● Temperature resistance [30 min]: 95°C	
		tesa® 60462 <ul style="list-style-type: none"> 67% of the backing is made from post-consumer recycled plastics, which accounts for 30 % of the total product Bonds instantly with excellent adhesion on a variety of materials, including rough surfaces The product is mainly used in construction industry for a variety of heavy duty applications 	Backing: PE-laminated cloth, 67% PCR content Adhesive: Synthetic rubber Total thickness [µm]: 215 Adhesion to steel [N/cm]: 8.0 Tensile strength [N/cm]: 40 Elongation at break [%]: 16 Color: ●●○ Temperature resistance [30 min]: 60°C	
		tesa® 4615 <ul style="list-style-type: none"> 63% of the backing is made from post-consumer recycled plastics, which accounts for 31 % of the total product Bonds instantly with high adhesion on a variety of materials For a variety of basic applications 	Backing: PE-laminated cloth, 63% PCR content Adhesive: Synthetic rubber Total thickness [µm]: 175 Adhesion to steel [N/cm]: 7.0 Tensile strength [N/cm]: 40 Elongation at break [%]: 18 Color: ●● Temperature resistance [30 min]: 60°C	



UL-Certificate

A third-party environmental claim validated against the UL Environmental Claim Validation Procedure 2809 for recycled content. The UL Environmental Claim Validation Program falls under UL's ISO/IEC 17025 accreditation.

Post-Consumer Recycled (PCR) material is made from waste collected after products can no longer be used –either by households or businesses. PCR use is critical to achieving a circular economy in the plastics industry. While it is challenging to separate the variety of dissimilar materials in post-consumer waste, recycling processes for clean and homogenic materials such as PET plastic bottles for drinks are already highly efficient.

Scan here for more infos!



Technical data

Product	tesa sustainability marker	Sustainable product aspect ¹	Backing	Mesh [threads/inch ²]	Adhesive	Total thickness [µm]	Adhesion to steel [N/cm]	Tensile strength [N/cm]	Temperature resistance [°C/30 min]
Specialties									
tesa® 4657		76% bio-based ² content by weight	Acrylic-coated cloth	145	Natural rubber	290	4.6	105	180
tesa® 4660		68% bio-based ² content by weight	Acrylic-coated cloth	145	Natural rubber	260	4.0	100	180
Premium									
tesa® 4651		68% bio-based ² content by weight	Acrylic-coated cloth	145	Natural rubber	310	3.3	100	130
tesa® 4661		60% bio-based ² content by weight	Acrylic-coated cloth	145	Natural rubber	300	5.8	100	140
tesa® 4541		87% bio-based carbon ³ content	Uncoated cloth	145	Natural rubber	270	3.6	90	130
tesa® 4549		71% bio-based carbon ³ content	Uncoated cloth	145	Natural rubber	300	3.6	90	140
Gaffer tapes									
tesa® 4671		51% bio-based carbon ³ content	Acrylic-coated cloth	120	Natural rubber	280	3.8	70	140
tesa® 53799		-	PE-extruded cloth	80	Natural rubber	310	4.7	77	110
tesa® 53949		-	PE-extruded cloth	80	Natural rubber	310	1.6	85	125
tesa® 4688		-	PE-extruded cloth	55	Natural rubber	260	4.5	52	110
Duct tape									
tesa® 4621		-	PE-extruded cloth	100	Acrylic	125	2.6	54	95
tesa® 60462		30% recycled content ⁴ (PCR)	PE-laminated cloth, 67% PCR content	27	Synthetic rubber	215	8.0	40	60
tesa® 4615		31% recycled content ⁴ (PCR)	PE-laminated cloth, 63% PCR content	27	Synthetic rubber	175	7.0	40	60



tesa Sustainability Marker Industry

This icon identifies our more sustainable products. We continually strive to make our products and assortment more sustainable. To demonstrate our initiatives and efforts in the industrial segment, this marker highlights our more sustainable products.

Scan here for more infos!



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.

1) All values describe the total product excluding any liner component.

2) Bio-based content includes the total weight of all bio-based components, including e.g. carbon, hydrogen and oxygen content.

3) Bio-based carbon content includes total organic carbon, while inorganic carbon content (e.g. carbon in chalk/CaCO₃) is either included (DIN EN 16640) or excluded (ASTM D6866).

4) PCR: post-consumer recycled material