

High-quality solutions for industrial trade

Structure of a cloth tape

Top coat

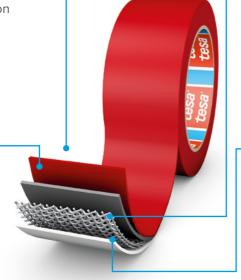
The type of top coat has a big influence on the following tape properties:

- · 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 (woven/knitted)

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 residuefree after usage.

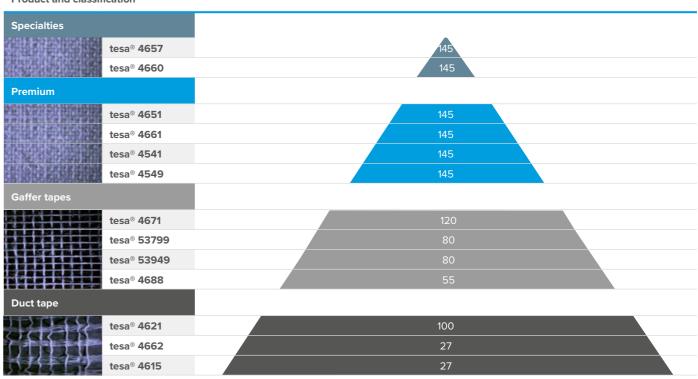
Duct tapes: The universal helper – especially suitable for general purpose and temporary applications. They have a lower tensile strength and limited resistance to weathering.

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.

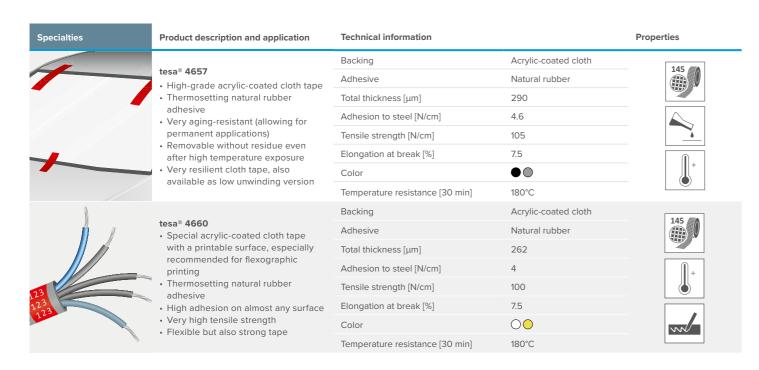
Application factors

	Specialties Premium		Gaffer tapes			Duct tape							
Product characteristics	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	••••	••••	•••	•••	••	•••	•••	••	•••	••	••••	••	•

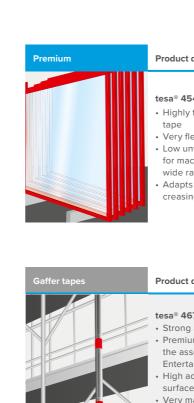
•••• Very good ••• Good •• Medium • Low

2 Introduction Overview 3

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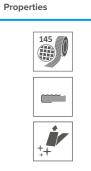


Premium	Product description and application	Technical information		Properties
		Backing	Acrylic-coated	145 🦚
	tesa® 4651	Adhesive	Natural rubber	
	Powerful high-quality acrylic-coated cloth tape	Total thickness [μm]	310	
	 Very strong adhesion even on rough 	Adhesion to steel [N/cm]	3.3	
	and slightly oily surfaces Highly abrasion-resistant	Tensile strength [N/cm]	100	
a f	Flexible and conformable	Elongation at break [%]	13	
G	Easy to write on Excellent tensile strength	Color	$\bullet \bigcirc \bullet \bigcirc \bullet \bullet \bullet \bullet \bigcirc$	m
		Temperature resistance [30 min]	130°C	
	tesa® 4661	Backing	Acrylic-coated	145 @A
	Strong acrylic-coated cloth tape All-round cloth tape for a wide range of applications, often used for wrapping components High adhesion, even on rough surfaces Very flexible and conformable backing Highly water- and abrasion-resistant Available as SAF roll	Adhesive	Natural rubber	
		Total thickness [μm]	300	
		Adhesion to steel [N/cm]	5.8	
		Tensile strength [N/cm]	100	<u> </u>
		Elongation at break [%]	12	
		Color	$\bullet \bigcirc \bullet \bigcirc \bullet \bullet \bullet \bullet$	
		Temperature resistance [30 min]	140°C	
		Backing	Uncoated cloth	145
	tesa® 4541 • Highly tear-resistant uncoated cloth	Adhesive	Natural rubber	(#) V
	tape	Total thickness [μm]	270	
	Very flexible, smooth, and conformable tape, convenient for a wide range of applications	Adhesion to steel [N/cm]	3.6	
		Tensile strength [N/cm]	90	
	 Good adhesion even on rough and slightly oily surfaces 	Elongation at break [%]	16	
	Adapts to uneven surfaces without creasing	Color	•0	m
	Creasing	Temperature resistance [30 min]	130°C	



n	Product description and application	Technical information	
		Backing	U
	tesa® 4549	Adhesive	N
	Highly tear-resistant uncoated cloth tape	Total thickness [μm]	3
	Very flexible and conformable tape	Adhesion to steel [N/cm]	3
	 Low unwinding force makes it ideal for machine-driven processes and a 	Tensile strength [N/cm]	10
	wide range of other applications	Elongation at break [%]	1:
	 Adapts to uneven surfaces without creasing 	Color	
		Temperature resistance [30 min]	14

king	Uncoated cloth	145
esive	Natural rubber	145
thickness [µm]	300	
esion to steel [N/cm]	3.6	
ile strength [N/cm]	100	
gation at break [%]	12.5	
r	ullet	++
perature resistance [30 min]	140°C	+*



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r tapes	Product description and application	Technical information		Properties	
		Backing	Acrylic-coated cloth	120	
	tesa® 4671 • Strong acrylic-coated cloth tape	Adhesive	Natural rubber		
	Premium gaffer tape in	Total thickness [μm]	280		
	the assortment for "Arts & Entertainment" applications	Adhesion to steel [N/cm]	3.5		
	High adhesion even on rough surfaces	Tensile strength [N/cm]	70		
	Very matt surfaces for black and	Elongation at break [%]	9		
	fluorescent colors • Solvent-free adhesive	Color (neon)	$\bullet \bigcirc \bigcirc \bigcirc \bullet \bigcirc \bigcirc \bigcirc$	w.	
	- Solvent live dulicaive	Temperature resistance [30 min]	140°C		
		Backing	PE-extruded cloth	90	
4	tesa® 53799 • Polyethylene-coated mid-grade cloth	Adhesive	Natural rubber		
	tape	Total thickness [μm]	310		
	Very good adhesion, even on rough surfaces	Adhesion to steel [N/cm]	4.7		
	Excellent tensile strength	Tensile strength [N/cm]	77		
	Water-repellent Easy to tear by hand All-rounder used for repairing and construction applications	Elongation at break [%]	11		
		Color			
	construction applications	Temperature resistance [30 min]	110°C	/	
		Backing	PE-extruded cloth	80	
	tesa® 53949	Adhesive	Natural rubber		
	 Matt gaffer tape especially designed for "Arts & Entertainment" industry 	Total thickness [μm]	310		
	Ideal solution for a wide range	Adhesion to steel [N/cm]	1.6		
	of applications whenever a light- absorbing and non-reflective surface	Tensile strength [N/cm]	85		
	is important • Covers shiny and glossy surfaces	Elongation at break [%]	14		
	Easy to tear by hand	Color	$\bigcirc lackbox{} \bigcirc$	+1	
		Temperature resistance [30 min]	125°C	+T	
	tesa® 4688	Backing	PE-extruded cloth	55	
	Standard PE-coated cloth tape	Adhesive	Natural rubber	55	
	Typical repairing tape, convenient for a variety of needs with very good	Total thickness [μm]	260	4	
	handling characteristics	Adhesion to steel [N/cm]	4.5		
	Certified by AREVA according to the requirements of the Siemens AG	Tensile strength [N/cm]	52		
	standard TLV 9027/01/06 for nuclear power stations	Elongation at break [%]	9		
	Very good adhesion to multiple	Color	$\bullet \bigcirc \bullet \bigcirc \bullet \bigcirc \bullet \bigcirc$		
	surfaces	Temperature resistance [30 min]	110°C		

4 Products Products 5

ct tape	Product description and application	Technical information		Properties
		Backing	PE-extruded cloth	
		Adhesive	Acrylic	100
	tesa® 4621 • Effortlessly tearable by hand in both vertical and horizontal directions	Total thickness [µm]	125	
		Adhesion to steel [N/cm]	2.6	
ON TO	Gentle unwinding without curling Waterproof and weather resistant for	Tensile strength [N/cm]	54	
2205-2400. Coexisted Louis and Application an	up to 8 weeks	Elongation at break [%]	22	
dament negro dictional magni- icipus.	Withstands wear and tear from tools	Color		
		Temperature resistance [30 min]	95°C	,,,
		Backing	PE-laminated cloth	27 @A
	tesa® 4662 • Strong duct tape with typical duct tape features • Suitable for general purpose applications • Good adhesion to multiple materials • High initial tack • Water-repellent	Adhesive	Natural rubber	
		Total thickness [μm]	230	
		Adhesion to steel [N/cm]	4.4	
		Tensile strength [N/cm]	30	
		Elongation at break [%]	18	
		Color	000	
		Temperature resistance [30 min]	95°C	
		Backing	PE-laminated cloth	27 🙈
		Adhesive	Synthetic rubber	
	tesa® 4615	Total thickness [μm]	175	
	 Bonds instantly with high adhesion on a variety of materials 	Adhesion to steel [N/cm]	7.0	
	Unwinds gently and is easy to tear	Tensile strength [N/cm]	40	
	by hand • Water-repellent and durable	Elongation at break [%]	14	
		Color	$\bigcirc lackbox{lack}$	
		Temperature resistance [30 min]	60°C	

Technical data

Product	Backing	Mesh [threads/ inch ²]	Adhesive	Total thickness [μm]	Adhesion to steel [N/cm]	Tensile strength [N/cm]	Elongation at break [%]	Temperature resistance short/long term [°C/30 min]
Specialties								
tesa® 4657	Acrylic-coated cloth	145	Natural rubber	290	4.6	105	7	180
tesa® 4660	Acrylic-coated cloth	145	Natural rubber	262	4.0	100	7	180
Premium								
tesa® 4651	Acrylic-coated cloth	145	Natural rubber	310	3.3	100	13	130
tesa® 4661	Acrylic-coated cloth	145	Natural rubber	300	5.8	100	12	140
tesa® 4541	Uncoated cloth	145	Natural rubber	270	3.6	90	16	130
tesa® 4549	Uncoated cloth	145	Natural rubber	300	3.6	100	12.5	140
Gaffer tapes								
tesa® 4671	Acrylic-coated cloth	120	Natural rubber	280	3.5	70	9	140
tesa® 53799	PE-extruded cloth	80	Natural rubber	310	4.7	77	11	110
tesa® 53949	PE-extruded cloth	80	Natural rubber	310	1.6	85	14	125
tesa® 4688	PE-extruded cloth	55	Natural rubber	260	4.5	52	9	110
Duct tape								
tesa® 4621	PE-extruded cloth	100	Acrylic	125	2.6	54	22	95
tesa® 4662	PE-laminated cloth	27	Natural rubber	230	4.4	30	18	95
tesa® 4615	PE-laminated cloth	27	Synthetic rubber	175	7.0	40	14	60

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.

6 Products Technical data 7





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

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