tesa® ACX^{plus} Technical information sheet

tesa

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Properties and performance characteristics



Assortment overview

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	tesa® ACX ^{plus} 70	04x	tesa® /	ACX ^{plus} 705x	tesa [®] ACX ^{plus} 706	¢	tesa® AC	X ^{plus} 707x	
Key features	 Invisible, seamless bonding of decorative elements Both colors adapt very well to metal and plastic surfaces Avoids reflections on translucent material 		 Constructive bonding of transparent and translucent materials Ideal for glass and acrylic substrates 		 High adhesion levels on hard-to-bond substrates Resistance to plasticizer migration 		 Outst perfo -40° Best of in cor adhest 	anding cold shock rmance down to C* putdoor performance nbination with our sion promoters*	
Product design	and a	econtrativit							
Adhesive characteristics	Filled pure acrylic		Solid pure acrylic		Foamed tackified acrylic		Foamed	pure acrylic	
Thickness [µm]	500, 640, 1000, 1200, 2000		500, 1000, 1500, 2000, 3000		500, 800, 1200, 1500		500, 100 2000, 24	0, 1500, 100, 2900, 3900	
Density [kg/m ³]	ca. 790		ca. 1030		ca. 825		ca. 710		
Color	Gray & white		Transparent		Black		Black		
Liner	PV26, PV28, PV48		PV12, PV26, PV28, PV48		PV22, PV24		PV22, PV24		
Recommended for	Indoor		Indoor & outdoor		Indoor		Indoor &	Indoor & outdoor	
							* applicable	for all tapes $\leq 2000 \ \mu m$	
Liner	PV12	PV22		PV24	PV26	PV28		PV48	
Category	Siliconized PET	PE-coated	paper	Siliconized film	PE-coated paper	Silicone	-free film	Silicone-free film	
Color	Transparent	White		Blue	White	Blue		White	

Did you know?

Branding

tesa® flameXtinct 4506x is a double-sided acrylic core tape with proven flame retardent characteristics. The white product with a PV26 liner is available in 800 μm and 1200 μm and recommended for indoor & outdoor applications. Our tesa® flameXtinct family also includes a double-sided PE foam, a thin filmic and three non-woven tapes.

No

No

No

Yes

The products offer the following:

- Halogen-free
- UL94 and FMVSS 302 compliant

No



Yes



tesa® Adhesion Promoter

	tesa [®] 60150 Universal	tesa® 60151 Glass	tesa® 60153 Fast Cure
Color	Light yellow	Transparent	Yellow
Available in	1 I & 100 ml	1 I & 100 ml	1 I & 100 ml
Spreading rate	≥ 15 m²/l	≥ 15 m²/l	≥ 15 m²/l
UV traceability	Yes	No	Yes
Solvent evaporation time*	30 sec - 5 min	2-cloth method**	30 sec - 5 min
Open time for bonding	Several hours	15 min	Several hours
Flash point	-18 °C	13 °C	-18 °C
Recommended substrates	Metals, plastics, coated glass	Glass	Metals, plastics, coated glass
Application tools	Melamin sponge, lint-free cloth	Lint-free cloth	Melamin sponge, lint-free cloth
Recommended for	Indoor & outdoor	Indoor & outdoor	Indoor & outdoor
Shelf life***	≥ 12 month at room temperature	≥ 12 month at room temperature	≥ 12 month at room temperature
Hazard symbols		(1)	 (1) (1)

* depends on ambient temperature & humidity | ** please check the product information sheet for a detailed explanation on how to apply | *** from date of delivery

A surface pre-treatment may be necessary depending on your substrate





Test methods

	Peel adhesion	Dynamic normal tensile	Dynamic shear	Static shear	Temperature resistance	
Test method						
Based on	ASTM D3330	ASTM D-897	ASTM D-1002	ASTM D3654	tesa internal	
Substrate	Stainless steel	Aluminum	Stainless steel	Stainless steel	Aluminum	
Temperature	23 °C	23 °C	23 °C	23 °C & 70 °C	Various	
Dwell time	72 hours	72 hours	72 hours	72 hours	72 hours	
Bonding area	N/A	6.25 cm ²	6.25 cm ²	3 cm ²	4 cm ²	
Speed	300 mm/min	50 mm/min	12.7 mm/min	N/A	N/A	
Load	N/A	N/A	N/A	Various	0.2 N/cm ²	
Result	90° peel adhesion [N/cm]	Normal tensile strength [N/cm ²]	Shear strength [N/cm²]	Static shear strength [g]	Temperature [°C]	
	Average force	Maximum stress	Maximum stress	Maximum weight Time: ≥ 10.000 min	Maximum temperature Short term: 15 min Long term: 3 months	



Note: The following technical information provides typical values and cannot be used for specification purpose.

		Dynamic adhesion performance			Static shear	Temperature resistance	
Product	Thickness [µm]	90° peel adhesion [N/cm]	Normal tensile strength [N/cm ²]	Shear strength [N/cm²]	Static shear strength at 23 °C / 70 °C [g]	Short / long term temperature [°C]	
tesa [®] ACX ^{plus} 704x							
tesa [®] ACX ^{plus} 7042	500	24	90	190	2000 / 500	200 / 110	
tesa [®] ACX ^{plus} 7043	640	29	95	170	2000 / 500	200 / 110	
tesa [®] ACX ^{plus} 7044	1000	36	100	125	2000 / 500	200 / 110	
tesa [®] ACX ^{plus} 7045	1200	38	105	120	2000 / 500	200 / 110	
tesa [®] ACX ^{plus} 7048	2000	44	115	105	2000 / 500	170 / 110	
tesa [®] ACX ^{plus} 705x							
tesa [®] ACX ^{plus} 7054	500	18	90	40	1250 / 1000	200 / 100	
tesa [®] ACX ^{plus} 7055	1000	24	100	35	750 / 500	200 / 110	
tesa [®] ACX ^{plus} 7056	1500	26	100	35	750 / 500	200 / 110	
tesa [®] ACX ^{plus} 7058	2000	27	60	30	500 / 250	200 / 110	
tesa [®] ACX ^{plus} 75530	3000	30	30	30	500 / 250	200 / 110	
tesa [®] ACX ^{plus} 706x							
tesa [®] ACX ^{plus} 7062	500	32	110	150	1500 / 250	170 / 70	
tesa [®] ACX ^{plus} 7063	800	40	110	130	1500 / 250	170 / 70	
tesa [®] ACX ^{plus} 7065	1200	48	110	100	1250 / 250	170 / 70	
tesa [®] ACX ^{plus} 7066	1500	54	110	85	1250 / 250	170 / 70	
tesa [®] ACX ^{plus} 707x							
tesa [®] ACX ^{plus} 7072	500	27	60	85	1750 / 1000	220 / 120	
tesa [®] ACX ^{plus} 7074	1000	33	55	50	1500 / 1000	220 / 120	
tesa [®] ACX ^{plus} 7076	1500	34	50	45	1250 / 750	220 / 120	
tesa [®] ACX ^{plus} 7078	2000	37	45	40	1250 / 750	220 / 120	
tesa [®] ACX ^{plus} 70725	2400	37	40	35	750 / 500	220 / 120	
tesa [®] ACX ^{plus} 70730	2900	38	40	35	750 / 500	220 / 120	
tesa [®] ACX ^{plus} 70740	3900	38	35	30	500 / 250	220 / 120	
tesa® flameXtinct 4506x							
tesa® flameXtinct 45063	800	32	75	60	1000 / 250	*	
tesa® flameXtinct 45065	1200	37	75	55	1000 / 250	*	

* Temperature resistance test for tesa® flameXtinct 4506x still pending



tesa® Customer Solution Center

Let us help you shape the future

To make industrial processes as efficient as possible, it is crucial to choose the right tape. Depending on the substrate, environmental conditions, and the method of application, tapes with very different characteristics may be required. Our tesa[®] Customer Solution Center supports your company in finding the perfect tape and application solution for your individual requirements.

Interested in tape support? Reach out to our acrylic core tape experts!

We work closely with our sales team to identify the key specifications of your project. Whether you are looking for a way to replace traditional fastening techniques (e.g. screws, rivets, or liquid glue) with a high performance doublesided acrylic foam tape or having problems to identify the ideal tape for your application, our tape consultants can offer the right advice and expertise. Feel free to reach out to your local tesa[®] sales representative or check out our webpage.

Material models for numerical methods

Today's construction designs are becoming more and more complex. Joint designs get smaller whereas load requirements and movements go to the extremes. In certain cases the use of well known analytical formulas are no longer sufficient to exhaust the systems capabilities. In order to reduce testing effort during the design phase, which is time consuming and costly, numerical methods come into play. Numerical methods like finite element analysis (FEA) are used to analyze the behavior of engineering structures and components under different conditions. It is widely accepted in many engineering disciplines and can be in addition or prior to tape tests. We have extensive experience in that area and are able to assist our customers with an interpretation of simulation results.





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® 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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