



Structural bonding solutions

The best reliability for the toughest demands

tesa® structural bonding solutions provide high bonding performance to a wide variety of substrates. They withstand the harshest conditions by combining outstanding chemical and aging resistance. The processing of these adhesive systems is simplified due to excellent die cuttability, immediate handling stability after activation, and low oozing.

Heat-activated films

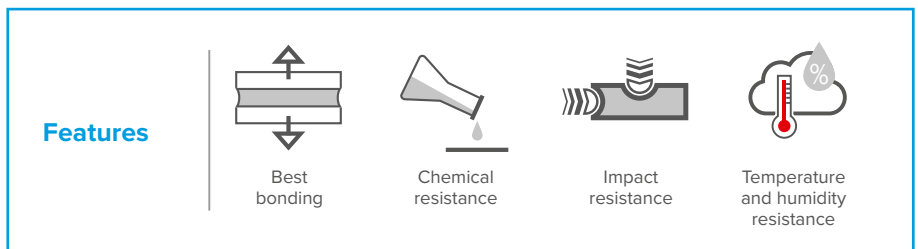
tesa® HAF is a thermosetting adhesive system. An irreversible cross-linking reaction is initiated by heat and pressure starting at temperatures above 120°C, resulting in extremely strong bonds.

Low-temperature activated films

Our low-temperature reactive films tesa® LTR and tesa® LTC have been designed for activation at moderate temperatures. The cross-linking starts at a bond-line temperature above 75°C. tesa® LTT is a low temperature thermoplastic film designed for soft goods assembly requiring low processing temperatures.

Light-curing tapes

tesa® UV epoxy and tesa® L-tape are our latest developments that will cure at room temperature when exposed to light. They achieve significantly higher bonding strengths compared to PSAs. They come with high initial tack and immediate holding strength after bonding.



Typical applications



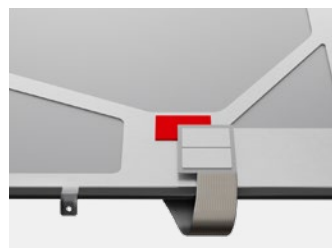
Component mounting



Cover lens mounting



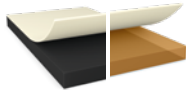
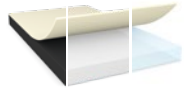
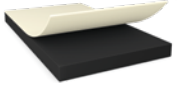
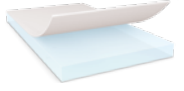

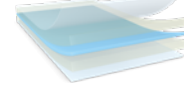


Soft goods bonding



FPC mounting

Assortment overview

	Heat-activated films		Low-temperature activated films			Light-curing tapes	
	tesa® HAF	tesa® LTR	tesa® LTC	tesa® LTT	tesa® UV epoxy 	tesa® L-tape 	
Design							
Color	Black, amber	Black, white, translucent	Black	Translucent	White	Translucent	
Adhesive	Nitrile rubber/phenolic resin	Cross-linkable polyurethane	Cross-linkable polyurethane	Thermoplastic polyurethane	Light curable	Light curable	
Activation temperature [°C]	>120	>75	>75	>80	Room temperature	Room temperature	
Special features	Temperature resistance, chemical resistance	Impact resistance, wettability on fabrics	Impact resistance, chemical resistance	High peel adhesion to fabrics	Activation at room temperature, reworkability	Activation at room temperature, impact resistance	
Thickness	10 µm	● 58469					
	20 µm	● 58477					
	25 µm						
	30 µm	● 58471 ● 8471	○ 8711		○ 8741		
	50 µm	● 58470	● 58480 ○ 8710 ○ 8722	● 58722	○ 8742	○ 8692	
	60 µm	● 8472					
	80 µm	● 58473 ● 8473					
	100 µm	● 58474 ● 8474	● 58484 ○ 8714	● 58724		○ 8684 ○ 8694	
	125 µm	● 58475 ● 8475					
	150 µm	● 58476 ● 8476	● 58486				
	200 µm	● 58478 ● 8478	● 58488			○ 8698	
	300 µm		● 58489				
	Product performance	Reference product	● 58474	● 58484	● 58724	○ 8742**	○ 8684 ○ 8694
Reference substrate		SUS/SUS	PC/PC	Al/Al	PC/PC	PC/PC Al/PC	
Push-out [MPa]		>5.5	>5.5	>4.0	>2.5	>2.5 >3.0	
DuPont [J; xy/z]		>0.5	>4.0	>1.0	n.a.	>0.5 >1.0	
Reliability*		●●●●	●●●	●●●●	●●	●●● ●●●	
Chemical resistance*		●●●●	●●	●●●	●	●● ●●	

* Assessment is done in relation to other products in this assortment

** Deviating thickness

● Amber ○ Translucent ○ White ● Black