

tesa HAF® 8401

Product Information



200 µm amber reactive HAF mounting tape

Product Description

tesa HAF® 8401 is a reactive heat activated film based on phenolic resin and nitrile rubber. This amber double sided tape has no backing. It is protected by a strong paper liner and can easily be slit and die cut.

At room temperature tesa HAF $^{\odot}$ 8401 is not tacky. It is activated for pre-lamination by heat and starts to become tacky at 90 $^{\circ}$ C/194 $^{\circ}$ F. In a second application step heat and pressure is applied over a certain period of time.

After curing tesa HAF® 8401 reaches:

- · Very high bonding strength
- · High temperature resistance
- · Excellent chemical resistance
- · Bonds remain flexible and elastic

Application Fields

It is suitable for bonding of all thermal resistant materials such as metal, glass, plastic, wood and textiles.

- High-strength splicing (overlap splice)
- · Structural bonding
- · Magnet bonding in electric motors
- · Friction liners for clutches

Technical Information (average values)

The values in this section should be considered representative or typical only and should not be used for specification purposes.

Product Construction

•	Backing material	none	•	Total thickness	200 μm
•	Type of adhesive	nitrile rubber /			7.9 mils
		phenolic resin	•	Color	amber
•	Type of liner	glassine			

Properties/Performance Values

•	Bonding strength (dynamic	12 N/mm ²
	shear)	

Additional Information

Processing:

1.Pre-lamination:

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tesa HAF® 8401 is laminated before curing. For this process we recommend a temperature between 120 $^{\circ}$ C/248 $^{\circ}$ F and 140 $^{\circ}$ C/284 $^{\circ}$ F.

2. Bonding:

The bonding conditions temperature, pressure and time depend on the application. Following parameters can be regarded as a guideline:

Splicing application:

• Temperature: 120-220 °C (248-428 °F)

Pressure: >2barTime: 15 – 90 s

Friction liners for clutches:

• Temperature: 180 – 230 °C (356-446 °F)

Pressure: > 8 barTime: 3 min – 30 min

Magnet bonding:

• Temperature: 140 - 180 °C (284-356 °F)

Pressure: > 6-10 barTime: 2 min - 5 min

Structural bonding:

• Temperature: 180 – 220 °C (356-428 °F)

Pressure: > 10-15 barTime: > 3 - 30 min

Bonding strength values were obtained under standard laboratory conditions. Value is guaranteed clearance limit checked with each production batch (Material: Etched aluminium test specimen / Bonding conditions: Temp. = $120 \, ^{\circ}\text{C}/248 \, ^{\circ}\text{F}$; p = $10 \, \text{bar}$; t = $8 \, \text{min}$)

To reach maximum bonding strength surfaces should be clean and dry. Storage conditions according to tesa HAF® shelf life concept.



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