



# tesa HAF® 9402

## Product Information



125µm amber reactive HAF mounting tape

### Product Description

tesa HAF® 9402 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® 9402 is not tacky. It is activated by heat and starts to become tacky at 90 °C for pre-lamination. In a second application step heat and pressure is applied over a certain period of time.

After curing tesa HAF® 9402 reaches:

- \*Very high bonding strength
- \*High temperature resistance of up to 350°C
- \*Excellent chemical resistance
- \*Resistance against oil and solvents
- \*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.

- \*Friction linings for clutch discs
- \*Friction linings for synchronizer rings

### 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          | none                            | • Total thickness | 125 µm |
| • Type of adhesive | nitrile rubber / phenolic resin | • Color           | amber  |
| • Type of liner    | glassine                        |                   |        |

For latest information on this product please visit <http://l.tesa.com/?ip=09402>



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### Properties/Performance Values

- Bonding strength (dynamic shear) 12 N/mm<sup>2</sup>
- Bonding strength (push-out) 12 N/mm<sup>2</sup>

### Additional Information

Processing:

#### 1. Pre-lamination:

tesa HAF® 9402 is laminated before curing. For this process we recommend a temperature between 90°C and 140°C.

#### 2. Bonding:

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

Friction linings for synchronizer rings:

\*Temperature: 180 – 230°C

\*Pressure: > 6 bar

\*Time: 3 min

#### 3. Tempering (optional)

To reach maximum bonding strength the bonded parts can be tempered at 180 - 230°C for 30 - 60 min without pressure.



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Bonding strength values were obtained under standard laboratory conditions. Value is guaranteed clearance limit checked with each production batch (Material: Etched aluminum test specimen / Bonding conditions: Temp. = 120°C; p = 10 bar; t = 8 min)

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

### Disclaimer

tesa<sup>®</sup> products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All information and recommendations are provided to the best of our knowledge on the basis of our practical experience. Nevertheless 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. Therefore, the user is responsible for determining whether the tesa<sup>®</sup> 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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