

# 8474

## **Product Information**



## Heat Activated FilmSolutions for the Consumer Electronics Industry

# **Product Description**

tesa® HAF 8474 is a thermosetting film based on phenolic resin and nitrile rubber. This brown double-sided tape has no backing. It is protected by a strong paper liner.

tesa® HAF 8474 is free of halogen and compliant with current ROHS standards.

At room temperature tesa® HAF 8474 is not tacky. It is activated by heat and pressure during defined intervals.

tesa® HAF 8474 enables extremely strong and ageing-resistant bonds between different materials.

tesa® HAF 8474 features especially:

- Excellent conformability for flat and narrow substrate surfaces
- · Produces very low oozing ratio
- · Reliable and ageing-resistant bonds between plastic and metal surfaces, even on very small bonding areas
- Suitable for long-term applications that are exposed to heavy stress
- Bonds remain elastic

#### **Product Features**

- · Extremely high performance, even on small bonding areas and thin design gaps
- · Reliable and ageing-resistant bonds
- Very low oozing ratio
- Suitable for long-term applications that are exposed to heavy stress
- · Free of halogen and compliant with current ROHS standards

#### **Application Fields**

tesa® HAF 8474 is especially recommended for bonding of metal components to various plastic or metal surfaces, e.g. SUS or AL to PMMA, PC or ABS:

- · Bonding of window frames and front covers of mobile phone housings
- · Constructive bonding inside handhelds
- · Multi media card applications

### Technical Information (average values)

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



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#### **Product Construction**

phenolic resin

• Type of liner glassine

## **Properties/Performance Values**

• Bonding strength 7 N/mm<sup>2</sup>

#### **Additional Information**

Technical recommendations:

tesa® HAF 8474 is not self adhesive. It is activated by heat and pressure over a certain interval. The following values are recommendations for machine parameters to start with.

#### 1. Pre-lamination:

During pre-lamination, the adhesive tape is laminated onto the metal substrate. This step does not affect the shelf life time of the adhesive tape. Pre-laminated components can be stored over the same period of time as the adhesive tape.

#### Machine setting:

- Temperature<sup>1</sup> 90 120 °C
- Pressure<sup>2</sup> 2 6 bar
- Time 1,5 3,0 s

#### 2. Bonding:

Remove the liner from tape after pre-lamination step. Place the plastic part onto the metal component. Apply sufficient temperature through the metal part while applying pressure for the bonding time to reach sufficient bonding strength.

### Machine setting:

- Temperature<sup>1</sup> 180 220 °C
- Pressure<sup>2</sup> 2 10 bar
- Time 3.0 10.0 s

To achieve optimum performance a cooling step (while applying pressure) directly after the bonding step is recommended.

Storage conditions according to tesa® HAF shelf life concept.

Note: Bonding strength values (mean values) were obtained under standard laboratory conditions. (Material: AL & AL test specimen / Bonding conditions: Temperature = 180 °C; Pressure = 10 bar; Time = 7 sec).

<sup>&</sup>lt;sup>1</sup> 'Pre-lamination' and 'Bonding' temperature refer to the data that is measured at the surface of heating mould.

<sup>&</sup>lt;sup>2</sup> 'Pre-lamination' and 'Bonding' pressure refer to the force that is transformed from mould surface directly to the bonding area.



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## Disclaimer

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