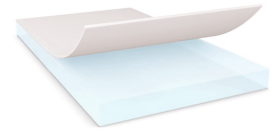




8742

Product Information



50µm Low Temperature Thermoplastic Structural Bonding Film

Product Description

tesa® Low Temperature Thermoplast (LTT) 8742 is a non-reactive structural bonding film activated at moderate temperatures. This translucent film has no backing. It is protected by a dark-grey PE liner. tesa® LTT 8742 is free of halogen and compliant with current RoHS directive. At room temperature tesa® LTT 8742 is not tacky. It is activated by moderate heat and pressure applied during the assembly process.

Main features

- High peel adhesion on wide variety of fabrics
- Low pre-lamination temperature starting from 60 °C
- No yellowing
- Good re-workability from smooth substrates

Application Fields

tesa® LTT 8742 is especially recommended for bonding of fabrics to various substrates.

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 | 50 µm |
| • Type of adhesive | polyurethane | • Color | translucent |
| • Type of liner | PE | | |

Additional Information

Adhesion properties:

Peel adhesion to polyester fabric: 11 N/cm

Technical recommendations:

tesa® LTT 8742 is not self-adhesive. It is activated by heat and pressure over a certain interval. The following values are recommendations for bond line parameters to start with.

1) Pre-lamination

During pre-lamination, laminate the film onto the first component.

Setting:

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Additional Information

- Temperature¹ 60 – 90 °C
- Pressure² 1 – 5 bar
- Time 5 – 20 s

2) Bonding

Remove the liner from the film after the pre-lamination step. Position the second component. Apply temperature and pressure for the bonding time to reach sufficient bonding strength.

Setting:

- Temperature¹ 80 – 120 °C
- Pressure² 1 – 5 bar
- Time 10 – 480 s

Temperature, pressure and time will depend upon the type and thickness of the substrates. Generally, thicker substrates or lower bonding temperatures will require longer bonding times.

Short cycle times can be achieved at 110 °C bond line temperature. For activation at lower temperatures, increase the heat-press time or combine a short heat-press step with oven curing.

Peel adhesion values were obtained under standard laboratory conditions (reinforcement backing 23 µm PET; bonding conditions: temperature = 90 °C; pressure = 5 bar; time = 120 sec).

To reach maximum bonding strength, surfaces should be clean and dry. Allow at least 1-2 hours dwell-time after bonding before performance testing. Final bonding strength will be reached after 24 hours.

¹ 'Pre-lamination' and 'Bonding' temperature refer to the data that is measured in the bond line. ² 'Pre-lamination' and 'Bonding' pressure refer to the force that is transferred from jig surface directly to the bonding area.



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Disclaimer

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