

tesa® L-tape 8694

Product Information



100 µm translucent light curable structural bonding tape

Product Description

tesa® L-tape 8694 is a translucent light curable structural bonding tape. The curing process starts upon exposure to UV or blue light (standard 365 nm or 460 nm lamps). tesa® L-tape has initial tack for easy application of the adhesive before curing. Sufficient open time after activation allows bonding of both transparent and opaque components. tesa® L-tape comes with an immediate high bonding strength, which avoids additional fixation steps after initial bonding.

Product Features

- · High bonding performance, even on small bonding areas and thin design gaps
- · Tacky at room temperature
- Bonding of translucent or opaque substrates
- · Immediate bonding strength after activation
- · Easy die-cutting process (PET Reinforced)

Application Fields

tesa® L-tape is especially recommended for:

- Bonding of temperature sensitive substrates
- · Component mounting in electronic devices

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
 PET
 Total thickness
 100 μm

Type of adhesive UV-curable
 Color yellow translucent

Type of liner

PET

Properties/Performance Values

Bonding strength (push-out)
 4 N/mm²

Additional Information

tesa® L-tape is a reactive adhesive tape, which can be activated by wavelengths of 365 nm or 460 nm. tesa® L-tape can be used for bonding of transparent or opaque substrates. tesa® L-tape can be activated before or after lamination onto the first substrate. Transparent substrates such as clear plastics can be bonded before activation by light. At least one substrate must be light-permeable to enable the activation of tesa® L-tape. The bonded parts are then exposed to light to start curing of the adhesive.



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Bonding of opaque substrates:

a) activation after lamination on the first substrate

At first, remove the covering liner of tesa® L-tape and laminate the tape onto the first substrate. The laminated parts are then exposed to light. The second substrate is bonded by applying sufficient pressure (≥3 bar) within 5 min after activation.

b) activation before lamination on the first substrate

At first, the die-cut of tesa® L-tape is activated by light. The covering liner of the die-cut must be light-permeable (e.g., clear PET) to enable the activation of the tape. After activation the die-cut is laminated onto the first substrate. The second substrate is then bonded by applying sufficient pressure (≥3 bar). Lamination and bonding must take place within 5 min after activation.

Lamination conditions

- Before curing tesa® L-tape has initial tack and can be laminated like a common PSA tape
- · For any lamination step a pressure of at least 1 bar is recommended to ensure proper wet-out of the adhesive

Bonding and curing conditions

- Light source: Lamp of 365 nm or 460 nm
- Light dose: 20-50 J/cm² at 365 nm or 30-60 J/cm² at 460 nm
- Activation time: ≥30 s
- Pressure: ≥3 bar
- Bonding time: ≥30 s

Bonding strength values were obtained under standard laboratory conditions. (Material: PC test specimen / bonding conditions: Light dose: 52 J/cm² at 460 nm; activation time: 45 sec; pressure: 10 bar for 30 sec).

To reach maximum bonding strength surfaces should be clean and dry.



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