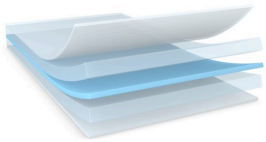
tesa® UV epoxy 8484 Chemical Resistance



Product Information

100 µm transparent UV-activated structural bonding tape

Product Description

tesa® UV epoxy 8484 is a transparent light-activated structural bonding tape with high chemical resistance, especially suited for temperature-sensitive substrates. The curing process starts upon exposure to UV light. Before curing, tesa® UV epoxy 8484 has initial tack for easy application like a common PSA tape. After activation, there is an open time in which the substrates can be bonded. Thus, bonding of translucent and opaque substrates is possible. tesa® UV epoxy 8484 comes with a high immediate bonding strength which makes additional fixation after bonding unnecessary.

Product Features

- High chemical resistance and bonding performance, even on small bonding areas and thin design gaps
- Light-activation at room temperature, suited for temperature-sensitive substrates
- Structural bonding performance for stiffening applications
- Good tack and immediate bonding strength
- Bonding of translucent or opaque substrates
- PET backing to facilitate the die-cutting process

Application Fields

tesa® UV epoxy 8484 is especially recommended for bonding various substrates and components within electronic devices that are sensitive to elevated temperatures and require high chemical resistance:

- Component mounting in electronic devices
- Back cover and display module mounting
- Applications with stiffening requirements, small bonding areas or thin design gaps

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
Type of adhesive	UV-curable
Type of liner	PET
Post-consumer recycled content of liner	88 %
Total thickness	100 µm
Color	transparent

Properties/Performance Values

Bonding strength (push-out)	4.5 N/mm²

For latest information on this product please visit http://l.tesa.com/?ip=8484

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Product Information

Additional Information

tesa® UV epoxy is a reactive adhesive. It is activated by UV light and can be used for bonding of opaque or translucent substrates.

Bonding of opaque substrates

The open time of tesa® UV epoxy enables the bonding of opaque substrates like plastics and metals. tesa® UV epoxy can be activated by UV light before or after bonding to the first substrate.

Activation before bonding: The die-cut of tesa® UV epoxy is activated by UV 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 bonded onto the first substrate. The second substrate is then bonded within 10 minutes by applying pressure (≥ 3 bar).

Activation after bonding to the first substrate: The die-cut of tesa® UV epoxy is bonded onto the first substrate. After activation by UV light, the second substrate is bonded within 10 minutes by applying pressure (≥ 3 bar).

Bonding of translucent substrates

Translucent substrates such as clear plastics can be bonded before activation by UV light. At least one substrate must be light-permeable to allow the activation of tesa® UV epoxy. After applying tesa® UV epoxy to the first substrate, the second substrate is bonded by applying pressure (≥ 3 bar). The bonded parts are then exposed to UV light to start the curing of the adhesive.

Pre-lamination conditions

- Before curing, tesa® UV epoxy has initial tack and can be applied like a common PSA tape
- A pressure of ≥ 1 bar should be applied to ensure proper wet-out to the surface

Activation and bonding parameters

- Light source: 365 nm UV-A
- Light dose: 2.5-5 J/cm^2
- Recommended pressure: ≥ 3 bar
- Recommended bonding time: ≥ 10 s

Bonding strength values were obtained under standard laboratory conditions. (Material: SUS test specimen / bonding conditions: UV dose: 4.5 J/cm^2 at 365 nm; pressure: 5 bar for 30 s). To reach maximum bonding strength surfaces should be clean and dry.

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Product Information

Disclaimer

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