

## tesa® UV epoxy 8684

## **Product Information**



## 100µm white UV-activated structural bonding tape

## Deskripsi Produk

tesa® UV epoxy 8684 is a white UV-activated structural bonding tape. The curing process starts upon exposure to UV light. Before curing tesa® UV epoxy has initial tack for easy pre-lamination. 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 comes with immediate bonding strength which makes additional fixation after bonding unnecessary.

### Main features

- High bonding strength, even on small bonding areas and thin design gaps
- Tacky at room temperature for easy pre-lamination
- · Activation by common light curing equipment
- Bonding of translucent or opaque substrates
- · Immediate bonding strength after activation
- The PET backing facilitates the die-cutting process

## Penerapan

tesa® UV epoxy is especially recommended for bonding of various substrates and components inside electronic devices which are sensitive to processing temperatures:

- · 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.

### Konstruksi Produk

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<ul> <li>Penyangga</li> <li>PET</li> <li>Ketebalan total</li> </ul>	• .	is perekat	UV-curable	•	Warna	white
	•	yangga	PET	•	Ketebalan total	100 μm

• Jenis liner PET

### Berbagai macam produk

Liner yang tersedia
 PET

### Properti / Nilai Kinerja

Kekuatan ikatan (dorong keluar)
 2.5 N/mm<sup>2</sup>



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### **Additional Information**

tesa® UV epoxy is a reactive adhesive. It is activated by UV light. tesa® UV epoxy can be used for bonding of translucent or opaque 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 as a die-cut or already pre-laminated onto the first substrate.

Activation of die-cuts: First 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 pre-laminated onto the first substrate. The second substrate is then bonded by applying sufficient pressure (≥3 bar). Pre-lamination and bonding must take place within 5 min after activation.

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

#### 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 enable the activation of tesa® UV epoxy. First remove the covering liner of tesa® UV epoxy and prelaminate the tape onto the first substrate. The second substrate is then bonded by applying sufficient pressure (≥3 bar). The bonded parts are then exposed to UV light to start curing of the adhesive.

### Pre-lamination conditions

- Before curing tesa® UV epoxy has initial tack and can be pre-laminated 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: Lamp of 365 nm
- Light dose: 2.5 5 J/cm<sup>2</sup> UV-A
- Activation time: ≥ 5 s
- Pressure: ≥ 3 bar
- Bonding time: ≥ 30 s

Bonding strength values were obtained under standard laboratory conditions. (Material: PC test specimen / bonding conditions: UV dose:  $4.5 \text{ J/cm}^2$  UV-A; activation time: 10 s; pressure: 5 bar for 30 s). To reach maximum bonding strength surfaces should be clean and dry.



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## Disclaimer

tesa® 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® 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.

