

**SynFlex**

Electrical adhesive tapes



## SynFlex

# Electrical adhesive tapes of strong brands

Adhesive tapes are used very differently in the electrical industry. Their main task is the electrical insulation and mechanical protection of current-carrying components, whereby the electrical adhesive tapes become a safety-relevant component. They protect individual components from electric shock both to each other and to the environment.

We offer you various brands of best quality.





# SynTape® – Intertape® – Isotape®

## Electrical adhesive tapes versatile in use

### **SynTape®**

Adhesive tapes are used very differently in the electrical industry. In addition to protecting against mechanical stress, they are also used for bundling or marking.

You can choose between different material combinations and adhesive types to ensure that our adhesive tapes exactly meet your requirements.

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### **Intertape®**

Electrical adhesive tapes of the brand Intertape® are used in the electric and electronic industry for most demanding applications. Various material combinations allow a high variance in use. Intertape® electrical adhesive tapes are used from simple marking to electrical insulation.

Adhesive tapes have to withstand high loads. They are manufactured according to the strictest standards and tested for their reliability.

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### **Isotape®**

The requirements for adhesive tapes in the electrical and electronics industry are manifold and range from marking and fixing to electrical insulation. The selection of the right adhesive tape always depends on the individual application. With Isotape® we offer you a wide range of different backing materials and adhesive coatings to meet the exact requirements of your industry.



# Areas of application

## Reliable and individual

Typical use for our electrical adhesive tapes is in electric motors, transformers and generators. But there is also a variety of application in other industries:

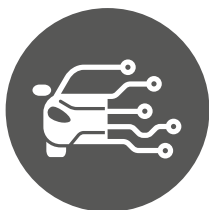


### Medical technology

In medical technology, our acetate fabric tapes are used, among other things, for taping cable harnesses in medical end devices. Our factory in Schramberg produces blanks made of the copper adhesive tape Scut.36 2560 for EMC protection.

Product examples:

- SynTape® B107/P.31
- Intertape® 4560
- Isotape® 56228 PV3



### Automotive

Use of adhesive tapes in the automotive industry is versatile. Besides cable bandages or electrical insulation, the adhesive tapes serve as surface protection and sound insulation.

Product examples:

- SynTape® F 562/ GL.94
- Intertape® 4617
- Isotape® 4238 PV3



### Screen printing

In screen printing our adhesive tapes SynTape® B/ P.355 and Isotape® 51350 PV3-2 are used to cover large surfaces during printing process to protect them against colour application.

Product examples:

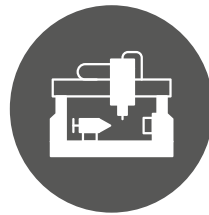
- SynTape® B/PM.099
- SynTape® B/ P.355
- Isotape® 51350 PV3-2

### Pad printing

For cleaning the pads SynFlex offers you two different pad cleaning tapes, called TRB16 Eco and TRB19 Optimo that reliably remove dirt and remaining colour without leaving any adhesive residues.

Product examples:

- TRB 16
- TRB 19



### White goods

Especially non-woven polyester adhesive tapes with acrylic adhesive are suitable for vibration protection in white goods. For this purpose we recommend SynTape® F/PT.20-20 or Intertape® 51595. In addition, various adhesive tapes are suitable for cable bandages or as edge protection.

Product examples:

- SynTape® F/ PT.20-20
- Intertape® 51595
- Isotape® 4350 PV3



### Surface technology

Adhesive polyester tapes of our range are used as surface protection in soldering baths or as protection during impregnating processes to avoid contamination of non-processed surfaces. After the processing step, the adhesive tape can be removed without residue due to the silicone adhesive and you save subsequent cleaning.

Product examples:

- SynTape® H 428/ H.20
- Intertape® 4118
- Isotape® 4428 PV3-32



# Electrical adhesive tapes of best quality with UL certification, on request

In our in-house laboratory SynLab® we carry out many analyses and tests and thus guarantee the best quality. Just like Isotape® and Intertape® electrical adhesive tapes, also some of our SynTape® adhesive tapes have UL certification.

If you require further testing, please contact our experts at SynLab®. In addition to material analyses and life cycle measurements, we offer a broad portfolio of tests and measuring methods to ensure the quality of the materials. We also support you with new approvals, extensions or adaptations of existing UL systems.

## Variable use

- for electrical insulation
- for mechanical protection
- for fixing
- for masking
- for labelling
- for bundling
- for marking





# Your benefits

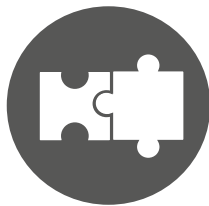
## At a glance



Decades of experience in the production of electrical adhesive tapes.



Continuously expanded state-of-the-art machinery.



Numerous options of various material combinations.



Short lead time thanks to the SynFlex Group network.



High product availability and product variance due to high storage capacities.

# SynFlex Electrical adhesive tapes

## Notes

### Type of adhesive

**Acrylate adhesives** are resistant to temperature and ageing. They are also characterized by their good resistance when used in connection with impregnating agents.

Thermal class F: Resistant to impregnants

**Rubber adhesives** have a high initial adhesive strength and can be processed very well. However, they are not resistant to impregnating agents.

Thermal class B: Very high initial tack

**Silicone adhesives** are characterized by high resistance to temperature and ageing. They are well suited for bonding to anti-adhesive, i.e. poorly adhering surfaces and can be removed without leaving residues.

Thermal class H: High temperature and ageing resistance

### Carrier materials

Depending on the application you will need a different electrical adhesive tape. The properties of the different base materials in combination with the respective adhesive result in a completely new, highly technical product that is used in a wide variety of applications in the electrical industry.

When first-class heat resistance and dielectric strength are required, polyimide-based tapes are the best choice. Our polyester film adhesive tapes are particularly flexible and have high dielectric strength despite low material thickness.

Electrical adhesive tapes made of glass fibre fabric are extremely flexible and at the same time highly tear-resistant. In addition, they offer high temperature resistance and are available with rubber, acrylic or silicone adhesives.

#### Examples:

Films (polyester, PEN, polyimide et al.), polyester non-woven, acetate fabric, aramid paper, paper, metals and many more

We will be happy to advise you in order to find the right product for your project. Please contact us. Together we will find the adhesive tape that meets your requirements.

**Storage**

SynFlex adhesive tapes should always be stored in a cool and dry place at approx. 20 °C and 50-60 % relative humidity.

**Insulating material classification**

The electrical adhesive tape from SynFlex can be allocated to specific insulating material classes. The respective letter in the adhesive tape name states the highest permanent temperature at which the adhesive tapes can be used. The classification is realised by determining the limit temperature.

**Cutting tolerance**

Standard tolerance of SynFlex adhesive tapes is  $\pm 0.3$  mm. Smaller tolerances are available on request.

**Resins and varnishes**

Due to the variety of impregnants, it is impossible to make general statements. Especially impregnants containing styrene can be problematic. Please carry out autonomous testing. We will gladly provide you with samples. When using impregnants, it is recommended to apply adhesive tapes with acrylate adhesive.

**Technical data sheets**

Our technical data sheets contain detailed technical information. Download the data sheets at [www.synflex.com](http://www.synflex.com) or request them from us.

**Processing instructions**

The surface of components to which tapes are to be applied should be dry, free of grease and clean. The adhesive surface of the tapes should not be soiled when being applied.

Favourable processing temperatures are room temperatures (approx. 18 - 24 °C). The initial bonding strength is poor at lower temperatures.

The adhesive force depends on the contact developed by the adhesive on the surface.

Higher contact pressure will press the adhesive into the surface and increases the adhesive force considerably.

**Note**

Our technical data information is based on the information provided by our suppliers. This information is intended for specialists who should use it at their own discretion and at their own risk. Unfortunately, we cannot guarantee favourable results and shall not be responsible or liable for specified details or results based on this information.

Therefore, we recommend that you carry out test on the products which we supply to ensure their suitability for the intended processes and applications.

We guarantee the perfect quality of our products in accordance with our general sales terms and delivery conditions.

At highest level.  
The complete **SynFlex** product range.

## Winding

**Premium Winding Wires**  
SHWire

**Winding Wires**  
SynWire

**Litz & Special Wires**  
SynWire WW

**Copper &  
Aluminium Foils**  
SynShield®

## Insulate

**Insulating Materials**  
SynTherm®

**Electrical Adhesives Tapes**  
SynTape®-Intertape®-Isotape®

**Electrical Insulating  
Sleeving**  
SynSleeve

**Resins & Varnishes**  
SynChem

**Stamped & Shaped  
Components**  
SynPrep

**Wrapping Tapes**  
SynWrap

## Connect & Equip

**Connecting Cables &  
Transformer Terminals**  
SynCon®

**Temperature Monitoring**  
SynTemp®

**FRP Profiles**  
SynProf

**Special Components &  
Accessoires**  
SynParts

## SynFlex Group

**Laboratory Services &  
UL Services acc. to 1446**  
SynLab®

**Consulting & Services**  
SynServ

**SynFlex International**

Common Goal – Joint Progress:  
The Resource of Power.



Insulation Systems, [www.synflex.com](http://www.synflex.com)



Magnet Wires, [www.sh-wire.de](http://www.sh-wire.de)



Electric Insulation, [www.isotek-gmbh.de](http://www.isotek-gmbh.de)