

The background image shows a modern, light-colored house with a dark roof covered in solar panels. A large, white, industrial-looking BESS unit stands in the yard. In the background, there are wind turbines and trees under a cloudy sky. The scene is lit with warm, golden-hour light.

Empowering stationary battery energy storage systems (BESS)

Comprehensive adhesive solutions for battery cells,
modules, and packs

Committed to your success – The power of partnership

We at tesa believe that progress comes from the power of close partnerships and a backbone of profound innovation capabilities.

More efficient, more sustainable, more reliable, more precise, lighter, smarter, safer – we continuously move our adhesive solutions forward to solve our customers’ challenges of today and innovate for tomorrow.

We never take “impossible” for an answer and use our deep expertise and global network of product and technology development to create sustainable value for our customers. We truly value our customer relationships, collaborating as equals, sharing and enriching expertise, market and industry knowledge to set new standards together.

It is more than just a business relationship: we innovate to make visions a reality. Advancing progress together.



Your reliable partner for batteries

Battery tape solutions for efficient production
Battery production is a complex process with multiple steps. Our tapes, made from premium, sustainable materials, ensure reliable insulation, mechanical stability, and efficient heat dissipation for cells, modules, and packs in high-performance applications.

Process optimization
Benefit from a cost-effective tape process with easy handling, form stability, and low investment costs. Our tapes are delivered pre-cured—ready to use without additional curing or special equipment. This streamlines your workflow, eliminates heat-up time, and removes the need for safety gloves, making the process safer and more efficient.

Fast and easy preparation with tesa battery solutions

Save time
Fast and efficient manual or robotic preparation of tape tailored to your process requirements.

Accelerate high-end production
Run even complex and time-intensive processes efficiently at high speeds.

Customer Solution Center
The tesa Customer Solution Center supports your company in finding the perfect tape and application solution for your individual requirements. We offer complete solutions—including sealing patches, consulting, and application equipment. We work with you to identify the best fit, collaborating with integrators and equipment suppliers to set up your production line with fully automated solutions.

Here at tesa, we test our tapes extensively to ensure they meet the highest standards of quality and performance. We use state-of-the-art testing facilities and equipment to simulate real-life conditions and scenarios. We also follow international norms and guidelines, such as IEC, UL, and ISO.



Die-cuts



Our solutions



Electrical insulation

Adhesive tapes with high breakdown voltage guarantee secure electrical insulation for highly automated production processes.



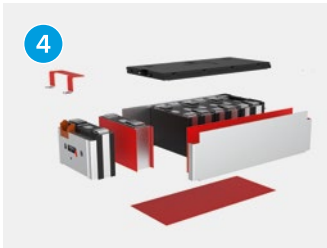
In-cell fixation

Maintaining adhesive performance for adhesive tapes in contact with electrolyte inside battery cells and making sure that battery performance and aging are not affected by testing our tapes in commercial electrolytes.



Assembly

Reliable and strong bonding over the entire battery energy storage system lifetime.



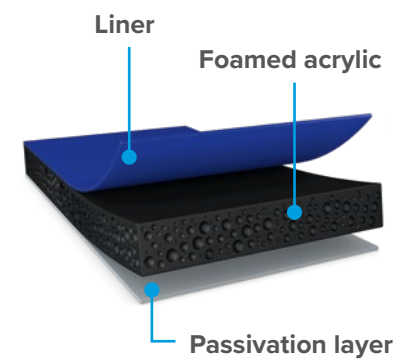
Fire protection

Adhesive solution: tesa offers products for any substrate, enabling fire protection and matching battery energy storage system safety requirements.



Collaborative innovations

Here are some examples of products developed in close collaboration with our customers. By combining our expertise with their unique insights, we create innovative solutions that drive success.



tesa® Box Seal

tesa® ACX^{plus} 76730 Box Seal

- Reliable sealing of boxes and protection against corrosion
- Simple, clean and fast automated application in one step
- No curing time needed – move your part instantly after application
- Easy reopening for checks and rework
- **Blue PE liner PV29:** High tear resistance securing stable processes

Foamed acrylic ACX^{plus}

- Extremely compressible for flexible gap filling
- Good adhesion to various substrates providing proper sealing
- Viscoelasticity tolerating thermal expansion differences of different materials

Passivation layer

- Non-sticky at beginning of application allowing for reopening and reworking
- Adhesion builds up after application ensuring reliable sealing
- Highly flexible permitting narrow curve designs

tesa® Bond & Detach



Stretch-release tapes for residue-free removability

- Enables the permanent mounting of components
- Option of residue-free removal
- Unique adhesive technology for demanding bonding applications, that can be removed without leaving any residue by stretching it
- Useful for temporary fixation
- Simple and secure debonding during the entire product life cycle
- Good impact resistance and bonding strength, even on LSE substrates.

tesa® BESS core product range*

Product	Application	Description	Thickness [µm]	Backing	Adhesive	Color	Adhesion /steel [N/cm]
In cell							
tesa® 58337	Stack fixation	Single-sided	45	PP	AC	Blue	2.5
tesa® 58316	Stack wrapping	Single-sided	33	PCR/PET	AC	Tawny	1.9
Insulation							
tesa® 58352	Cell wrapping	Single-sided	85	PCR/PET	AC	Blue	4.5
Mounting							
tesa® 4953	Battery assembling	Double-coated	100	PET	AC	Transparent	11.0
tesa® 8853	FPC mounting	Double-coated	50	Non woven	AC	Translucent	5.3
Fire protection MICA							
tesa® 58335	Laminating of MICA	Double-coated	150	PET	AC	Transparent	9.0
Fire protection							
tesa® 58373	Flame retardant mounting	Double-coated	80	PET	AC FR	Transparent	7.2
tesa® 58311	Lid protection	Single-sided	1.150	Fiberglass	AC	White	4.0
Debond on demand							
tesa® 76565	Bond and detach	Double-coated	500	Synt. rubber		Black	28.0
Sealing							
tesa® 76730	Box seal	Double-coated	2.800	PU film	AC	Black	5.0
tesa® 76754	Box seal	Double-coated	5.400	PU film	AC	Black	4

*Other products in different thicknesses and backings are available on request.



Certifications

Our company is focused on international quality, environmental, and occupational safety standards.

Please find more information regarding our certifications at:
www.tesa.com/certifications

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