

ADHESIVE SOLUTIONS FOR BATTERY APPLICATIONS

Supporting the Electrification of Vehicle Powertrains

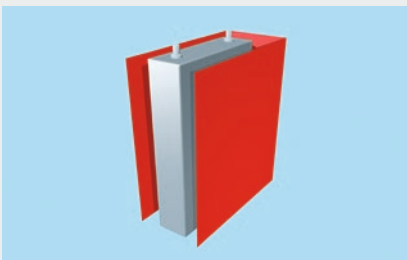
Our state-of-the-art adhesive solutions are used in battery manufacturing worldwide to improve production lines, increase safety, and ensure reliability.

As a **long-term and experienced partner** of the automotive industry with a **global supply network**, we are supporting the transformation towards the electrification of vehicle powertrains. We are constantly developing new **adhesive tapes specifically for electric and hybrid vehicles** in close cooperation with the world's leading OEMs and tiered suppliers.

Our full assortment of **functional tapes** enables the **reliable and long-lasting mounting** of parts and offers functionalities like insulating, grounding, shielding, cushioning, and thermal management, providing adhesive solutions for each step of the value chain.

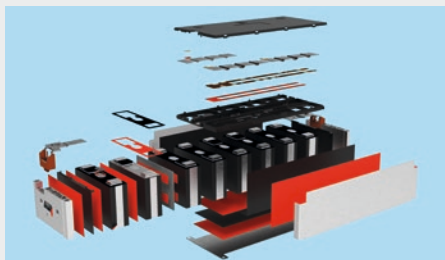
Our experts located around the world will support you on-site in developing the optimal process to suit your production requirements. Our easy-to-apply tapes are have been optimized to be mounted by **robot-assisted automated solutions**.

Reliable
Solutions
for a Longer
Battery Life



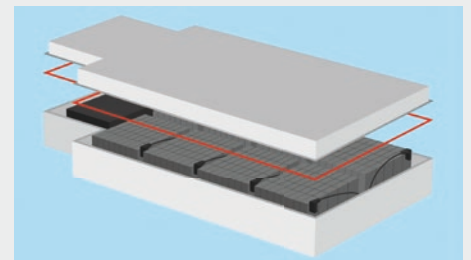
Applications for Cells

We provide tape solutions for highly automated processes and reliable production.



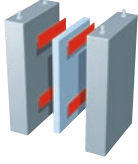

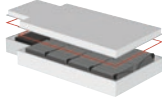

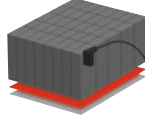
Applications for Battery Modules

From thermal management to electrical insulation – we support your applications.



Applications for Battery Packs

Our adhesive tape solutions seal and protect battery packs.

	Area of Application Features and benefits	tesa® Solution Assortment available in a wide range of thicknesses			Customer Value
MOUNTING	General Mounting				
	Mounting of insulation sheets, battery cells, flame barriers or heating plates <ul style="list-style-type: none"> Highly conformable Secure bonding on LSE materials Gap filling Electrical insulation Flame retardant 	Hybrid and acrylic ACX ^{plus} foams	tesa® 92108, 7815, 77715	200 - 2000 µm	Reliable and strong bonding during the battery assembly and lifetime. Streamline your process with tapes which fulfill both mounting and insulating requirements.
		Non-woven and transfer tapes	tesa® 68105, 4985, 52215, 58323, 68645	50 - 150 µm	
		d/s PET film	tesa® 58363, 68547, 68594, 4965	5 - 300 µm	
	Cushioning				
	Cushioning and fixations of pouch and prismatic cells <ul style="list-style-type: none"> Excellent conformability Reliable mechanical properties Flame retardant 	Flexible PE and PUR foams	tesa® 62932, 62508, 4976, 62904, 62712	200 - 2000 µm	Compensating deformation and compression between neighboring cells, increasing the lifetime of the cell package.
Acrylic foam ACX ^{plus}		tesa® 7808, 61053	200 - 2000 µm		
Sealing					
Sealing of battery packs in highly automated processes <ul style="list-style-type: none"> Non-flammable Reliable bonding to aluminium and fibre reinforced plastic 	Hybrid and acrylic ACX ^{plus} foams	tesa® 70730, 7815, 77715, 77808, 92108	400 - 4000 µm	Protection against moisture entry and corrosion, whilst also allowing the re-opening of battery packs for service and maintenance.	
INSULATION	Insulation and Wrapping				
	Electrical insulation of battery cells or cooling components <ul style="list-style-type: none"> Non-flammable Secure wrapping around edges High breakdown voltage Cleanliness (VDA 19.1) 	s/s PET and PP films	tesa® 58353, 7250, 7100, 64250	50 - 220 µm	Adhesive tapes with high breakdown voltage guarantee secure electrical insulation for highly automated production processes.
THERMAL MANAGEMENT	Thermal Management				
	Thermal management and conduction of battery modules and power electronics <ul style="list-style-type: none"> Silicone free Highly flame retardant Secure bonding 	Thermally conductive tapes	tesa® samples available on request	125 - 2000 µm	Keeping your sensitive battery components at just the right temperature. Increased production efficiencies through automation.
Complimentary Assortment PROTECTION	Grounding and Shielding				
	Grounding and shielding of sensitive electronic components <ul style="list-style-type: none"> Reliable EMI shielding Superior grounding 	Electrically conductive tapes: non-woven, filmic, foam, and foil	tesa® 60381, 60372, 60687, 60231	25 - 1000 µm	Reliable protection of electronic components, such as sensors and battery management systems.
	NVH and Anti-Corrosion				
	Minimizing noise and corrosion to extend the lifetime of the battery <ul style="list-style-type: none"> Vibration insulation Bridging larger gaps Friction prevention 	Anti-vibration and harshness	tesa® 50118, 60606, 54221, 54236, 54907	240 - 5000 µm	Thick fleece, foam and filmic tapes for last minute fixes.
		Abrasion protection	tesa® 54335, 51206	114 - 1000 µm	
Wire Management					
Wrapping and abrasion protection of cables and wires <ul style="list-style-type: none"> Secure bundling and fixation Superb abrasion protection Clear marking of high voltage wires 	Cable mounting	tesa® 50118, 50204	540 µm	Enabling clean and efficient handling of wires within the battery packs.	
	Wire harnessing	tesa® 51036, 51026, 51618	260 - 650 µm		

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All technical information and data above mentioned are provided to the best of our knowledge on the basis of our practical experience. They shall be considered as average values and are not appropriate for a specification. Therefore 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. 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.