



adhesives & sealants



THERMAL MANAGEMENT, BONDING AND SEALING SOLUTIONS FOR BATTERY APPLICATIONS

a strong bond



SOLVING THE CHALLENGES OF SAFER, FASTER AND MORE EFFICIENT BATTERIES

The next generation of batteries will do more than store energy. They are safer, charge faster, last longer and fit into increasingly compact designs. Managing heat, preventing thermal propagation and reducing flammability risks have become critical requirements. At the same time, battery systems must withstand environmental influences like water and dust, while maintaining maximum energy density and reliability throughout their lifetime.

POWER YOUR BATTERY PRODUCTION WITH SABA

Thermal management is one of the most critical aspects of battery design. As batteries come more powerful and charging speeds increase, maintaining stable operating temperatures becomes essential for performance, safety and service life. With our Sabatack® structural bonding and sealing solutions and Thermobridge® Thermal Interface Materials, SABA helps battery manufacturers overcome these challenges and deliver safer, more reliable and higher-performing battery systems.



compact design



fast charging



fire safety



durability

Our battery portfolio consists of two complementary technology platforms:

Sabatack®

High-performance moisture-curing MS polymer adhesives and sealants for structural bonding and sealing applications.

Designed to withstand vibration, thermal cycling, and mechanical stress, Sabatack® delivers long-lasting performance under the most demanding conditions, making it the ideal choice for next-generation battery packs.

Thermobridge®

Advanced silicon or polyurethane based Thermal Interface Materials (TIMs) for efficient heat management and thermal safety

ThermoBridge® comprises advanced thermal management materials, including gap fillers, gap pads, Thermal Conductive Adhesives and encapsulants, designed to efficiently dissipate heat from battery cells, modules and electronic components.

Together, these technologies enable battery manufacturers to optimize assembly processes, helping them reduce downtime and optimize production flow, enhance product performance, and improve battery durability throughout the product lifecycle.

OUR SOLUTIONS ACROSS THE BATTERY PACK

SABATAACK®

Structural bonding adhesives
Designed for demanding battery applications, Sabataack® structural adhesive delivers outstanding strength and durability under vibration, thermal cycling and mechanical stress.

- Battery cover
- Battery housing
- Tray to chassis/body

Environmental Sealants
Sabataack® provides durable air- and watertight bonding and sealing for reliable protection in demanding battery applications.

- Battery cover
- Gap sealing
- Seam sealing

ThermoBridge

Thermal conductive adhesives (TCA)
A thermally conductive structural adhesive that combines thermal conductivity with superior strength, durability and reliable performance across diverse substrates and temperatures.

- Battery cover
- Power Converting System
- Battery cells (cooling plate)

Gap fillers & Gap pads
ThermoBridge® Gap Fillers and Gap Pads bridge gaps and uneven surfaces to enhance heat transfer between components and cooling systems.

- Battery Management System
- Printed Circuit Board
- Battery cells to plate

Encapsulants
Flame-retardant potting and encapsulation materials that enhance battery module power density while delivering efficient thermal conductivity.

- Battery Cells
- Battery Management System
- Power Converting System

SABATAK® ADVANTAGES FOR BATTERY PACK ASSEMBLY

Every product in the Sabatak® range is completely solvent-free, VOC-free, and free from silicones and isocyanates, ensuring maximum safety for your workforce and compliance with the strictest environmental standards.

- Designed to withstand vibration & thermal cycling
 - Durable under stress & no deformation
 - Protects against moisture, dust & contaminants
- Reliable application on vertical surfaces
 - No bubbling
 - Adheres to many different surfaces without using pretreatment

SABATAK® SPECIFICATIONS

Sabatak®	Application	Curing	Viscosity	Skin Time	Hardness Shore A	Tensile strength (MPa)
710	sprayable	1C	low	15	60	1,6
712	self-leveling	1C	low	30	30	1,4
755HL3	fire safe	1C	medium	15	55	3,0
750	bonding and sealing	1C	medium	10	55	3,6
780	bonding and sealing	1C	high	10	55	3,6
950 Boost	easy booster	booster	medium	25	45	3,0
Fast-series	booster	booster	medium	flexible	55	3,2

THERMOBRIDGE® - THERMAL MANAGEMENT FOR NEXT-GENERATION BATTERIES

ThermoBridge® combines a broad TIM portfolio with application-driven engineering support. By offering solutions with different thermal, mechanical and processing characteristics, we help manufacturers identify the best fit for their battery design and production process.

- Efficient heat dissipation
 - Improved cell temperature uniformity
 - Reduced hotspots
 - Enhanced thermal safety
 - Supports fast-charging performance
- Helps prevent thermal runaway propagation
 - Extends battery lifetime
 - Improves system reliability

THERMOBRIDGE® SPECIFICATIONS

Thermobridge®	Thermal Conductivity ASTM D7984 (W/mK)	Hardness (ASTM D2240)	Density ASTM D792 (g/ml)	Viscosity ASTM D2555 (cps)	Cure Condition 25°C (hours)	Adhesion ASTM D1002 (MPa)	Thickness (ASTM D374)
Encapsulants OM Series	0.8 – 3.2	37 – 60 (shore A)	1.6 – 2.75	1,500 – 6,000	1 - 24		
Gap fillers OF series	2.2 – 7.5	55 – 80 (shore 00)	1.85 – 3.1	110,000 – 350,000	3 - 7		
Thermal Grease OG series	1 – 7.4		1.7 – 3.2	120,000 – 340,000	evaporation loss (ASTM D972): <0.1%		
Thermal conductive adhesives (PU) OUA series	>2 - >3	>30 - >70 (shore D)	>2.2 - >2.6	<150,000 – 200,000		>1 - >7	
Thermal conductive adhesives (Silicones) OUA series	4.7	75 – 90 (shore 00)	3.0 – 3.1	150,000	125°C, 30min 150°C, 60min	0.8 – 2.5	
Putty OPF series	6.7 – 7.7		3.2 – 3.4	1,500,000 – 2,300,000	non cure		
Thermal Gap Pad OP series	2.0 – 6.5	>0 - >60 (shore 00)	2.5±0.1 - 3.3±0.1				0.5 ~ 13mm ±10%

Our ThermoBridge® products can be tailored to meet specific thermal conductivity, dispensability, hardness, density and processing requirements, enabling an optimal fit for each battery design and manufacturing process.

DISCOVER SABA'S TRUSTED THERMAL MANAGEMENT AND BONDING SOLUTIONS

For more than 90 years, SABA has been a name synonymous with trust and reliability in Europe. As a family-owned company, we combine decades of expertise with a strong commitment to quality and partnership. Our roots go back to 1933, and since then we have grown into a leading specialist in high-performance adhesives and sealants for demanding industries.

Today, we bring this heritage and know-how to the battery manufacturing sector. We understand the challenges you face and we deliver solutions that meet the highest standards. Our Sabatack® MS polymer adhesives and Thermobridge® Thermal Interface Materials help manufacturers improve battery safety, durability and production efficiency while supporting the transition towards electrification and sustainable mobility.

At SABA, we don't just supply products, we build long-term relationships. As a family business, we value trust and collaboration, and we take pride in helping our partners succeed. When you choose SABA, you choose a partner who knows what it takes to keep your production moving and your battery packs performing.

THE SABA STANDARD



Tailor-made solutions: We don't believe in one-size-fits-all. Every product recommendation is customized to your specific application.



Collaborative approach: We work closely with your engineering and production teams to understand your challenges and objectives.



Process-driven thinking: Our experts analyze your production process to ensure seamless implementation and maximum efficiency.



Continuous optimization: From dispensing and curing to thermal performance and long-term reliability, we support continuous improvement.



Partnership mindset: Your success is our success! We see every project as a long-term collaboration.



ENABLING PERFORMANCE AT EVERY INTERFACE

To complement its battery solutions portfolio, SABA collaborates with OCSmaterials, combining advanced thermal management technologies with decades of application expertise in bonding, sealing and battery manufacturing.



GET IN TOUCH



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