



Sport & Lifestyle Adhesive Solutions

**MONOLITHIC BREATHABLE MEMBRANE,
SPECIALTY HOT MELTS & STITCHLESS HMPUR**





As apparel, footwear and equipment applications evolve in the sport and lifestyle industry, it is up to brands like you to provide products that:

- **Enhance sustainability**
- **Increase comfort and aesthetics**
- **Improve versatility**

With a large portfolio for all soft lamination adhesives, Bostik can provide the right solution to address your specific needs.

Monolithic Breathable Membrane

Designed to provide breathability to outdoor apparel, footwear and technical textile applications, Bostik's IRA7US membrane based off Pebax® Rnew® TPE material offers an innovative, alternative solution to traditional membranes while maintaining the same durable, environmental protection. In particular, it:

- **ENHANCES SUSTAINABILITY:** Partially bio-based out of castor oil, Bostik's membrane is produced without fluorinated additives. As a result, it reduces environmental impact while still providing required performance associated with traditional membranes.
- **INCREASES COMFORT:**
 - **Waterproof protection:** This membrane has waterproofing capabilities while allowing water vapor to diffuse by dissipation and absorption.
 - **High breathability:** The monolithic structure enables permeability while being formulated to provide flexibility and impact resistance for footwear or sports.
- **STREAMLINES PROCESSING:** Commonly applied via gravure lamination, this membrane allows you to utilize equipment you already own.

DID YOU KNOW?

Bostik's Supergrip® HMPURs, based on one-component, moisture curing urethane technology, enable you to rely on one supplier for your textile lamination needs. Suitable for textile applications that require flexibility, Supergrip® HMPURs provide strong bonding to rigid and non-rigid textiles.

Additionally, Bostik also offers breathable TPU and TPE membranes.

- **TPU** membranes offer increased softness when flexibility and elasticity are important for your application
- **TPE** membranes provide breathability for applications that need excellent thermal resistance



Specialty Hot Melt Adhesives

Available in powders, pellets, films and webs, specialty hot melt (SHM) adhesives offer multi-substrate adhesion across melt tank extrusion and applied heat pressure methods for apparel, footwear and accessory applications. They are solid at room temperature and quickly set upon heat activation to form a strong, durable bond to:

- **ENHANCE SUSTAINABILITY:** As 100% solid adhesives that offer fast setting times, SHM solutions help improve sustainable production practices.
- **INCREASE COMFORT AND AESTHETICS:** SHM solutions offer the versatility to choose desired characteristics such as soft-hand feel, thermal stability or high-breathability based on your application needs.
- **STREAMLINE PROCESSING:** SHM solutions are compatible with synthetic, natural, mineral and leather textile substrates and equipment processes. They also offer short set-up time and automation opportunities to reduce manufacturing steps.



POWDER ADHESIVES

Key Features:

- Soft-hand feel
- Available in different particle sizes

Processing Method:

Coating and lamination, as well as binders or dispersions



PELLET ADHESIVES

Key Features:

- Excellent thermal stability
- Raw material for webs, films and specialty compounds

Processing Method:

Ultra-precise application dispensing



FILM ADHESIVES

Key Features:

- Excellent functionality and coverage
- Suitable for multi-layer substrates

Processing Method:

Full-coat lamination



WEB ADHESIVES

Key Features:

- High breathability
- Suitable for open foams

Processing Method:

Formed into a non-woven materials

How to Choose the Right Specialty Hot Melt Adhesive Solution

Use this chart to understand what substrates are most compatible with certain chemistries to help you determine your specific application applications needs before choosing a SHM adhesive:

Substrate Compatability Chart

Chem.	TEXTILE				FOAM		PLASTIC						ELASTOMERS	OTHER	
	Synthetic	Natural	Mineral	Leather	PE	PU	PE	PP	ABS	PS	PET	PVC	Rubber	Metal	Wood
EVA	+	++	+	+	++	+	++	+		+	+		++	+	+
PO - PE&PP	+	+	++		+	++	++	+	+		+		++	++	+
TPU	++	++	+	++	+	++			+			++	+		+
PES	++	++	++	+		+	+	+	+		++	++	+		+
PA	++	++	++	+		+	+	+	++	+	++	++	+	+	+

++ Excellent + Good

Disclaimer: The values contained in this chart resulted from trials and measures conducted in our laboratory under specific, R&D-controlled conditions. They are given as an indication. Please test these characteristics for your own applications and uses.

Once you understand your substrate and chemistry needs for your application, this chart can help you see which SHM adhesive technology works best with equipment you already own:

MELT TANK/EXTRUDER	PELLETS	POWDER	WEB	FILM
Slot Die and Extrusion Coating	●			
Spiral Spray	●			
Rotogravure	●	●		
Roll Coating	●			
HEAT AND PRESSURE	PELLETS	POWDER	WEB	FILM
Rotary Screen Printing		●		
Knife Coating		●		
Scatter Coating		●		
Faly Bed/Belt Laminator		●	●	●
Drum Calender		●	●	●
Flame Lamination			●	●
Hot Injection/Compression Molding			●	●
Cold Injection/Compression Molding			●	●
IR Oven Preheat		●	●	●

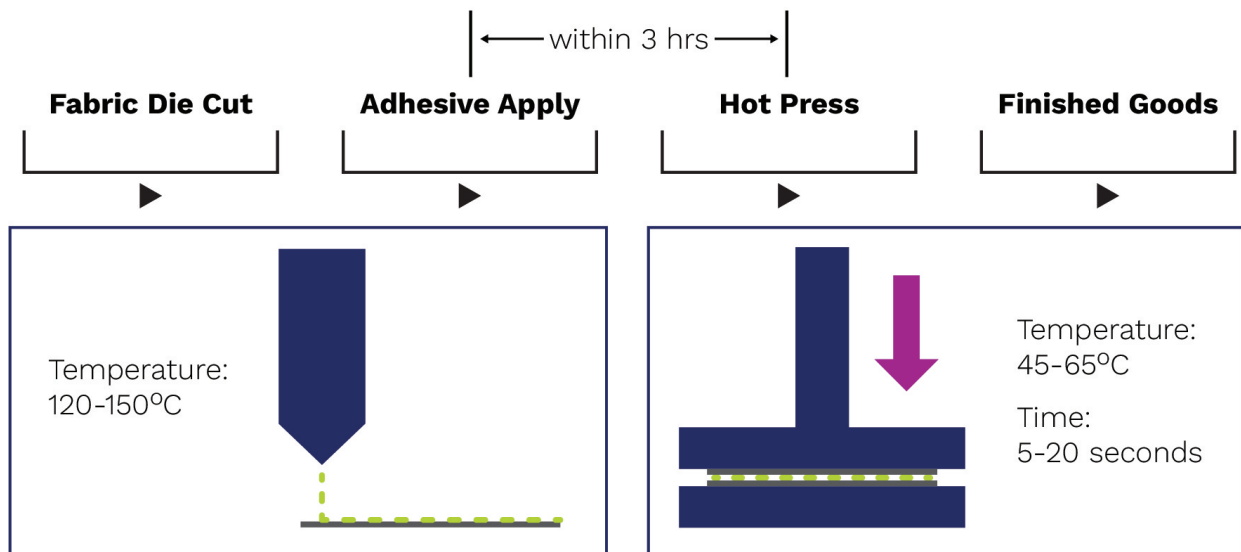
Stitchless HMPUR

Suitable for applications including intimate garments, shapewear, apparel and footwear, hot melt polyurethane (HMPUR) adhesives offer new design options by laminating layers together to remove stitching lines. They also:

- **ENHANCE SUSTAINABILITY:** HMPURs can be applied at low applications temperatures to help reduce overall facility energy usage.
- **INCREASE COMFORT AND AESTHETICS:** With good wash resistance, HMPURs are typically used with high-stretch, breathable textiles to improve overall comfort and allow for a seamless appearance by removing stitching.
- **STREAMLINE PROCESSING:** HMPURs are applied with jet dispensing automatic machinery, offering precise, consistent and increased processing for end-use products.

Use this chart to understand the step-by-step process applying HMPUR adhesives to provide stitchless materials.

Process with HMPUR Jet Dispensing



What to Consider When Selecting Your Adhesive

Consider the following factors to help ensure your chosen adhesive is optimized for your end-use application.

ADHESIVE APPLICATION METHOD

- Confirm you have the proper application equipment available to utilize the desired adhesive.
- PRO TIP: Bostik has a network of converters that can help you connect with the right option if not.

RECYCLABLE CAPABILITIES

- Your adhesive may have the ability to increase recyclability levels. If this is important to you, consider how it can influence your selection process and discuss it with your supplier.

SUBSTRATE HEAT REQUIREMENTS

- By understanding substrates such as EVA, TPU, PE and PA and their specific heat profiles, you can decrease the likelihood that the substrate will distort during an adhesive application that requires heat.

NEW PRODUCT DEVELOPMENT OPPORTUNITIES

- Your adhesive selection may provide performance capabilities that allow you to expand your offering. If this is important to you, consider how it can influence your selection process and discuss it with your supplier.

Why Work With Us

At Bostik, we are vertically integrated as an Arkema company with global support to address your specific adhesive needs across the sport and lifestyle industry. With a large portfolio, we bring new opportunities for innovation while helping you enhance performance and processing speeds.

- **TECHNICAL EXPERTISE:** We work with you through every step to help find a suitable solution; we also offer customized formulations should your needs require it.
- **KEY CONNECTIONS:** Our network of converting and lamination partners allow you to easily utilize the equipment options necessary to deliver your end-use products.
- **SUSTAINABLE DESIGN:** We offer bio-based and thermoplastic solutions that help you reduce environmental impact or enhance recyclability capabilities.

Ready to find the right adhesive solutions for your sport and lifestyle applications?

[Contact a Bostik expert today!](#)



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