

BORN² BOND™



High Performance
Hot Melt Polyurethane Reactive
(HMPUR) Solutions



BORN² BOND™

Bostik Born²Bond™

Born²Bond™ offers innovative solutions for a wide range of applications and industries. These solutions will enable customers to improve efficiencies, increase design opportunities and enhance sustainability, making it easier for them to manufacture better, safer and more innovative products.

As engineering adhesive applications develop, they raise new challenges. These include questions of how to apply adhesives to ever-smaller and more complex items, how to accelerate curing processes and how to reduce waste, all while complying with environmental and health and safety regulations.

In response, we have developed a portfolio of ground-breaking engineering adhesives that focus on 'by-the-dot' bonding applications. These products sit under the Bostik **Born²Bond™** brand – this name reflects our purpose and the collaborative bond we have with our customers.

Our Vision

For over 130 years, Bostik, an Arkema company, has been a leading global adhesive manufacturer specialising in innovative bonding and sealing solutions.

Bostik collaborates and innovates to create smart adhesives that are safer, more flexible, efficient and responsive to the dynamic challenges of our environment.

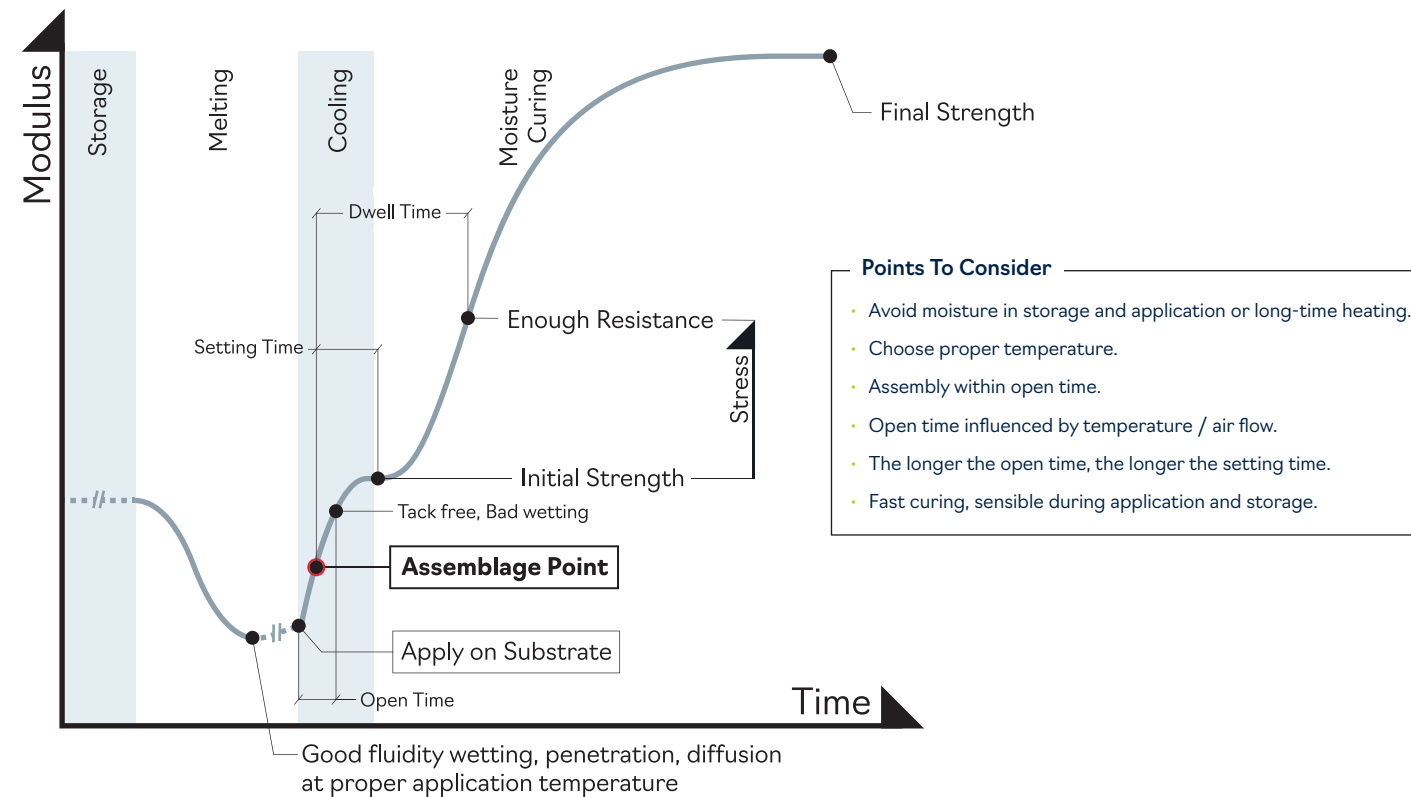
Born²Bond™ High Performance Hot Melt Polyurethane Reactive (HMPUR) Solutions

Advancements in production processes and trends such as miniaturization have made hot melt polyurethane reactive (HMPUR) solutions more important than ever. This is especially true of the electronic device sector, where precision, durability and speed of application are essential.

Bostik High Performance HMPUR solutions are now found in many applications, across a wide range of industries - helping manufacturers to meet modern day industry demands.

How does HMPUR work?

Evolution During Processing



What should be considered when choosing the right HMPUR solutions?

Determine The Preferred Application Methods

Born2Bond™ HMPUR solutions span a range of viscosities, providing flexibility in the choice of processing method:

- Low viscosity products can be swirl sprayed
- High viscosity products allow for bead application
- All are suitable for roll coating
- Some products can be applied by all three methods

Recognise The Process Requirements

While the recommended application temperature for Bostik's HMPUR solutions is generally the same (typically between 110°C - 130°C), other process parameters can also guide the selection of the right product. These include:

- Manufacturing lines with high throughput might require high initial strength products.
- Other processes might require an extended handling window to position parts before the adhesive is set.

Hot melt polyurethane adhesives can be designed to meet the unique requirements of each application. Additionally, Bostik's HMPUR solutions cover a range of processing considerations.



Align with Performance Requirements

Substrate adhesion is a primary concern. Some of Bostik's HMPUR products are better suited than others at adhering to low energy substrates. For example:

- Cured polyurethane adhesives typically offer good chemical, solvent and water resistance. Bostik's HMPUR product line offers varied levels of resistance to these conditions.
- Polyurethane adhesives can yield rigid bonds or bonds with more elastic properties; Bostik offers products on both ends of the spectrum.

Born2Bond™ HMPUR Applications for Electronics



Bostik HMPUR Range - Usage of Grade HMPUR

Bostik HMPUR Range - Characteristic

Package

PP Syringe, 30 ml

Aluminium Cartridge, 300 ml

Robotic

Dispensing Unit

- Air Dispenser
- Jetting
- Screw

Moisture curing

Adheres to a variety of substrates

Suitable for a variety of application methods

Good balance between strength and elasticity

Accommodates bonding of dissimilar substrates

Low application temperature (typically 110°C to 130°C)

Good temperature, humidity and chemical resistance

One-component solution for a simplified buying process

Ability to provide "initial strength" upon cooling prior to cure

100%-solids and therefore have no volatile organic compounds (VOCs)

HMPUR HDD 6002

Color	Off White	
	Unit	Value
Viscosity @ 130°C	mPa.s	5500
Operation Temp	°C	120 - 140
Open Time	min	2
<ul style="list-style-type: none">• High Initial bonding strength• Excellent environmental resistance• High bonding on Plastics		

- Specially designed for precise auto-dispensing or jetting
- High production efficiency with reduction of total cost
- Excellent humidity, sebum, temperature and impact resistance
- High reliability with ISO 10993 compliance

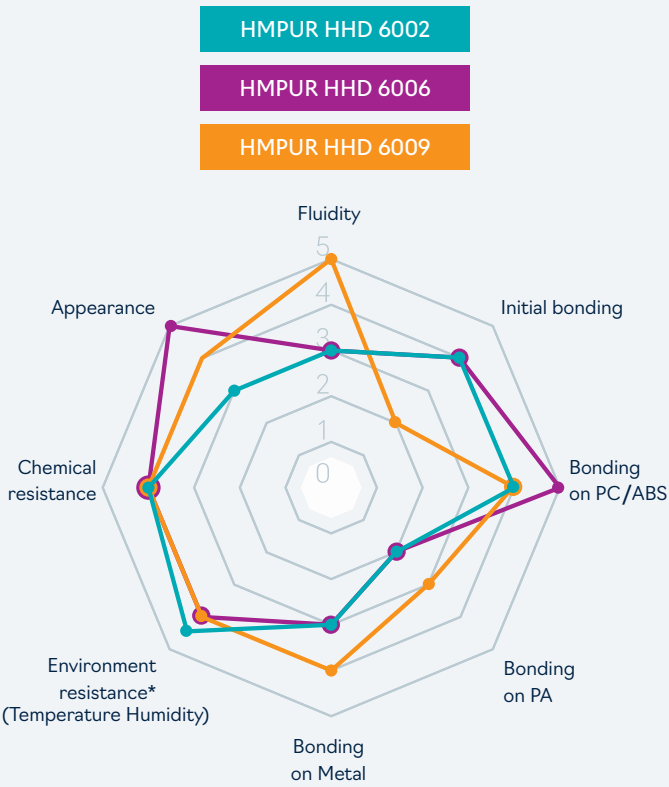
HMPUR HDD 6006

Color	Yellow - Fluorescing	
	Unit	Value
Viscosity @ 130°C	mPa.s	6000
Operation Temp	°C	120 - 140
Open Time	min	3
<ul style="list-style-type: none">• Higher bonding on Plastics• UV tracing for dispensing quality control• Proper open time		

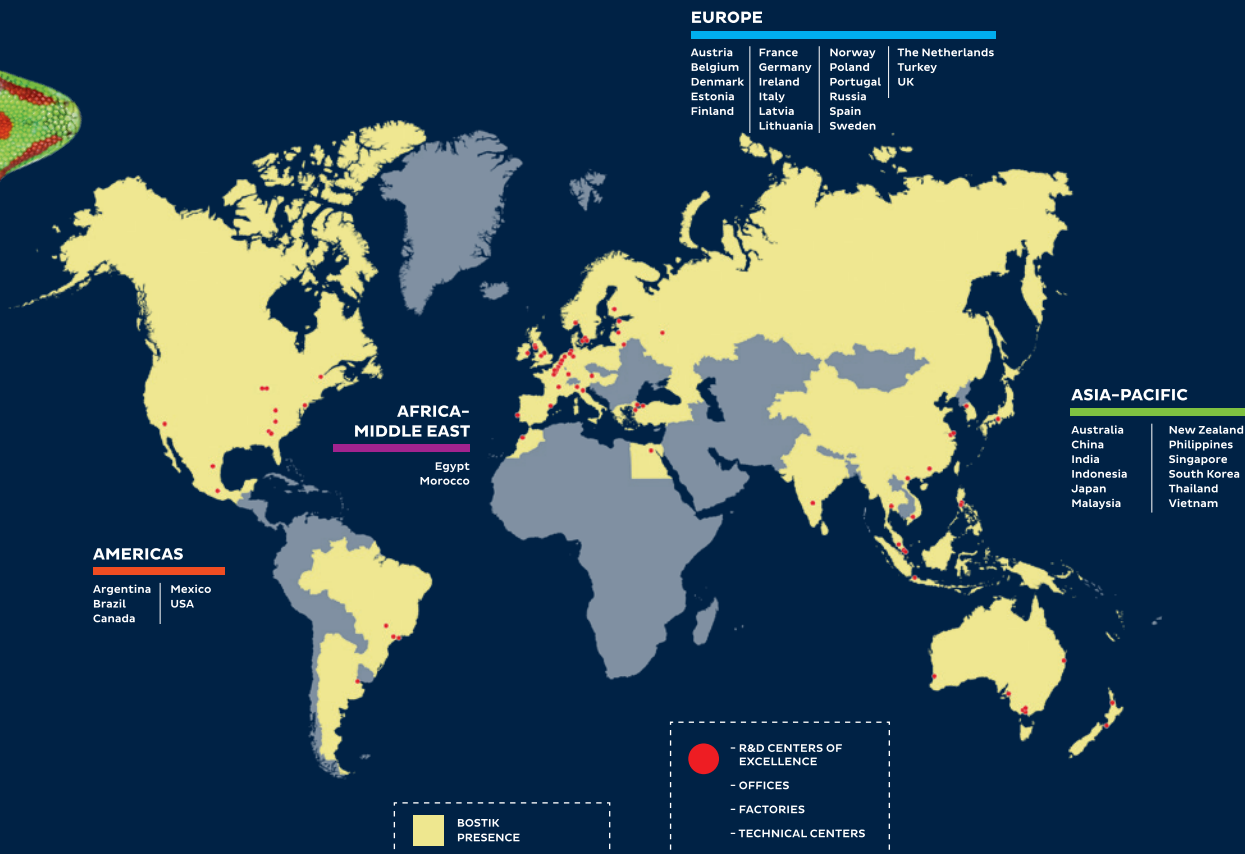
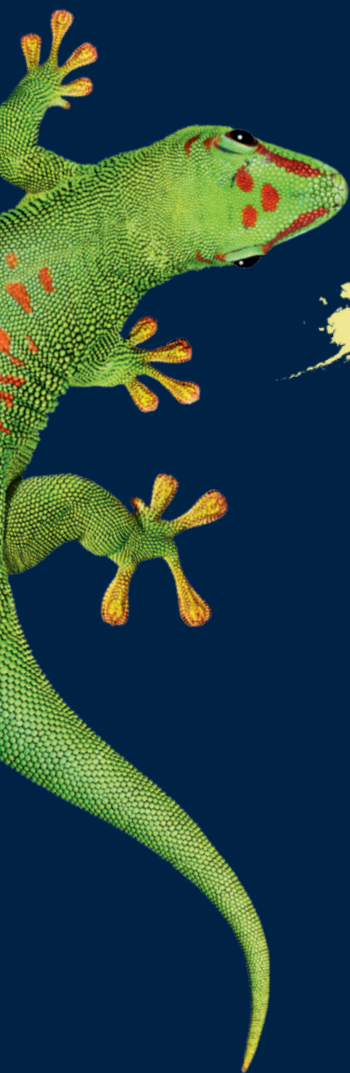
HMPUR HDD 6009

Color	Off White	
	Unit	Value
Viscosity @ 110°C	mPa.s	3500
Operation Temp	°C	100 - 120
Open Time	min	2 - 5
<ul style="list-style-type: none">• High bonding especially on metal and glass• Excellent fluidity• Good flexibility		

Selection Guide



The solution availability may vary between regions, please check with your Bostik representative.



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