



ATTACHED TO YOUR WORLD

# Molded for Success

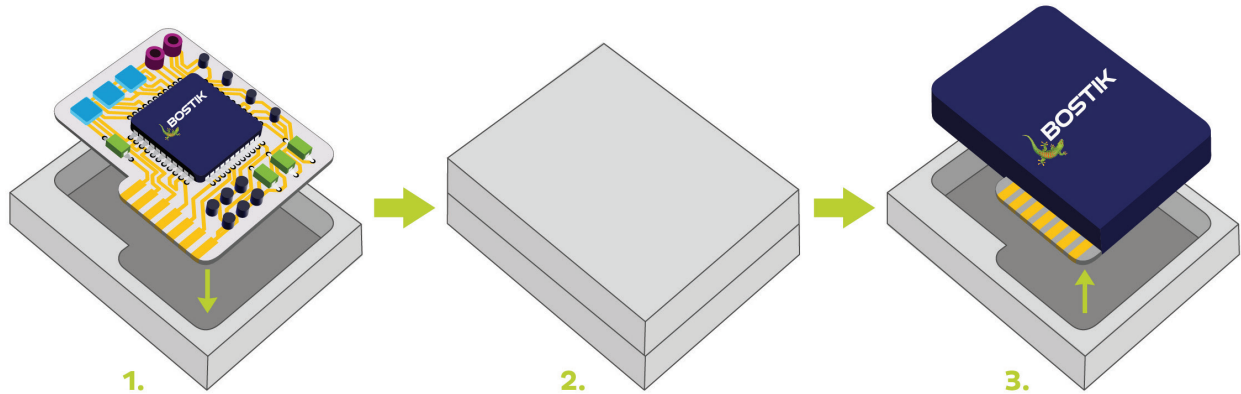
**SMART HOT MELT POLYAMIDES FOR  
LOW PRESSURE MOLDING**



## LOW PRESSURE MOLDING

Used to encapsulate electronic components, Low Pressure Molding (LPM) technology serves an important role in protecting and sealing items against moisture, dust, dirt and debris.

Simplified to a single, fast process, LPM is a cross between classic plastic injection and resin potting and is ideal for connectors, onboard electronics, LEDs and PCBs (printed circuit boards).



Encapsulate electronic parts in a single, fast process.

## EXPERIENCED GLOBAL SOLUTION PARTNER

**A pioneer in the development of LPM technology, Bostik's extensive expertise enables us to understand customers' unique performance and process requirements.**

### WORLD LEADER IN SMART ADHESIVES...

An Arkema company, Bostik formulates industrial adhesives at a global scale. Designed to improve operational efficiencies and aid in sustainability efforts, these adhesives also enhance product functionality and durability overall.

With a global R&D network comprised of three international Smart Technology Centers and 11 regional centers, we ensure fully integrated production and centralized competencies. Additionally, our knowledgeable technical support team enables us to work closely with customers, meeting their existing needs while anticipating future needs to come.

### ...AND IN SMART LOW PRESSURE MOLDING

As a proven solution provider, Bostik has developed partnerships with equipment manufacturers and low pressure injection experts. These partnerships, in addition to our technical know-how of the LPM process, have enabled our company to offer the best solution for each and every encapsulation project.

Specifically, our LPM solutions include Thermelt, a comprehensive range of hot melt polyamide adhesives designed to meet customers' unique needs. Multipurpose with high resistance to temperature and oil, these adhesives offer easy processability at low pressure and low temperatures, which enables them to encapsulate even fragile, sensitive electronics for the most demanding environments.

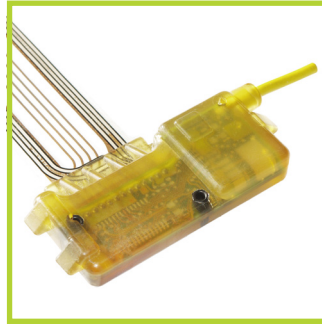
Other formulations offer more cohesion and higher thermal stability for certain applications.



## TYPICAL APPLICATIONS



**Captors and Sensors**



**PCB Overmolding**



**Connectors and Cables**



**Antennas**

## KEY APPLICATION MARKETS

LPM applications are used in various key markets, such as automotive, electronics, smart phones, medical and other industrial areas.



## BENEFITS OF SMART LOW PRESSURE MOLDING



### Process

#### **SMALL PROCESS FOOTPRINT**

Lower energy consumption due to low injection pressure and need for less equipment.

#### **HIGH PRODUCTION SPEEDS**

Reduced cycled times with one-component product; immediate set with no mixing errors.

#### **EASIER MANUFACTURING**

Simplified process with only three steps.



### Product

#### **HARMLESS ENCAPSULATION**

Suitable for the most sensitive electronic components.

#### **HIGH RESISTANCE**

Water-tight, UL94 V0 approved, resistant to high temperatures, shocks, harsh environments and solvents.

#### **QUALITY DESIGN**

Lightweight, sky-lining and aesthetically-pleasing design; no housing needed.



### Sustainability

#### **ZERO WASTE**

Recyclable excess material and long shelf life

#### **NATURAL MATERIAL**

Solvent-free, bio-based up to 90%.

#### **RECYCLABILITY**

Improved end-of-life management.

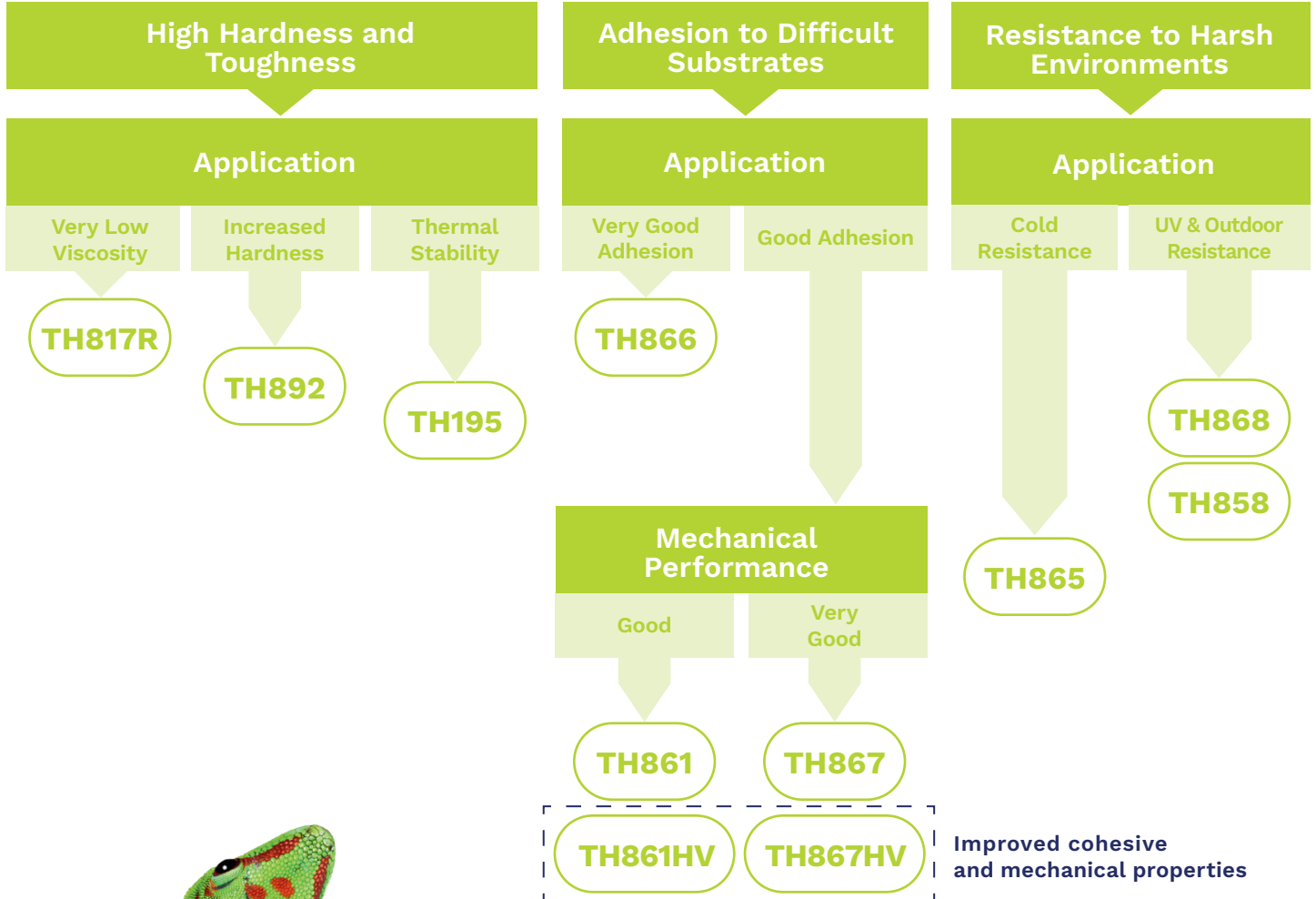
# HOT MELT POLYAMIDES

The Thermelt polyamide hot melts range includes multipurpose products with easy processability and high resistance in harsh environments, and most are available in black and natural colors. Bostik helps you find a sustainable and safe solution for your most complex LPM projects.

Product	Operating Range (°C)	Shore Hardness (ISO 868) (Instant/15s)	Softening Point (°C) (ASTM D3461)	Typical Characteristics
<b>Thermelt 861</b>	-40°C to 125°C	40/21 D	160°C ±5°C	General purpose moldable polyamide with good adhesion for industrial applications.
<b>Thermelt 867</b>	-40°C to 150°C	38/27 D	183°C ±5°C	General purpose high performance moldable polyamide with good adhesion and environmental and thermal shock resistance. Used for applications such as automotive exteriors.
<b>Thermelt 866</b>	-25°C to 115°C	22/12 D	155°C ±5°C	Moldable polyamide with excellent adhesion to PES, PC and other demanding substrates.
<b>Thermelt 817R</b>	-15°C to 125°C	43/28 D	165°C ± 5°C	Specialty moldable polyamide with very low application viscosity for demanding designs.
<b>Thermelt 868</b>	-40°C to 125°C	30/20 D	160°C ±5°C	Moldable polyamide with very good UV and moisture resistance. Used for demanding outdoor applications. Clearest color of the range.
<b>Thermelt 858</b>	-40°C to 150°C	40/32 D	180°C ±5°C	Moldable polyamide with very good thermal stability as well as UV and moisture resistance. Available in black only.
<b>Thermelt 865</b>	-55°C to 120°C	30/16 D	157°C ±5°C	Moldable polyamide with very good low temperature resistance and good adhesion for automotive applications.
<b>Thermelt 892</b>	-20°C to 140°C	45/36 D	175°C ±5°C	Moldable polyamide with increased strength and hardness for industrial and consumer electronics applications. Available in black only.
<b>Thermelt 195</b>	-20°C to 150°C	45/40 D	200°C ±5°C	Moldable polyamide with excellent thermal stability and increased hardness for electronics overmolding.
<b>Thermelt 861 HV</b>	-30°C to 125°C	32/20 D	160°C ±5°C	General purpose high-end moldable polyamide with good adhesion and improved internal cohesion for industrial applications. Available in black only.
<b>Thermelt 867 HV</b>	-50°C to 150°C	45/29 D	182°C ±5°C	General purpose, high-end moldable polyamide with good adhesion, very good mechanical properties and improved internal cohesion for demanding industrial applications. Available in black only.

# LPM POLYAMIDE HOT MELTS PRODUCTS

## General Purpose



\* Please get in touch with your Bostik representative to know which product is available in your territory.



# BOSTIK

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