



**BIO-BASED HOT MELT POLYAMIDES
FOR LOW PRESSURE MOULDING**



THERMELT[®]

PERFORMANCE COMES NATURALLY

Performance comes naturally

For over 40 years, Bostik THERMELT® has been the choice of designers, engineers and global supply managers seeking the very best protection, durability, and performance.

A range of bio-based hot melt polyamide resins and adhesives, it is ideal for many applications including:



Automotive



Electronics



Medical devices

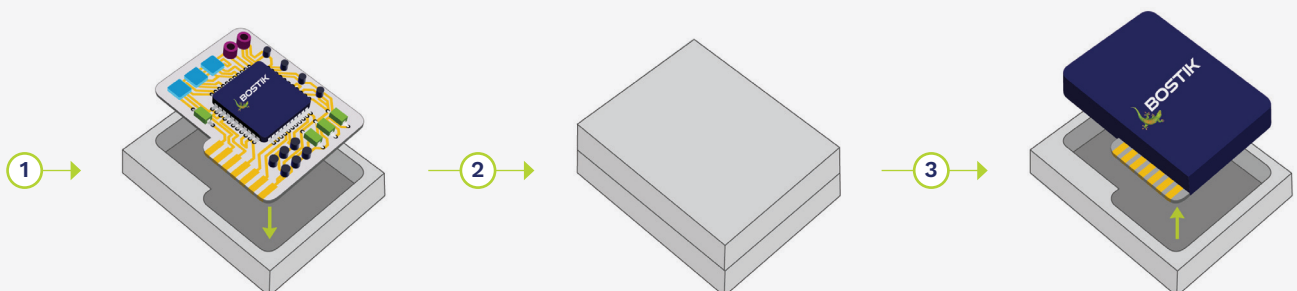
Now, with a shifting focus towards their own sustainability journeys, manufacturers are increasingly seeking resins and adhesives that help them achieve circular and lower-environmental impact product designs.

Bostik THERMELT® is ready to meet the challenge.

LOW PRESSURE MOULDING

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

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).



Innovation comes naturally

A pioneer in the development of Low Pressure Moulding (LPM) technology, we know that one formulation does not meet every need. It is why we have a range of innovative and ready-made **THERMELT**® formulations of different viscosities, temperature resistance levels, colours and finishes.

A 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 overall durability.

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

Partnership comes naturally

Our experienced and highly skilled team of chemical engineers, designers and product experts, partner with equipment manufacturers and low-pressure injection experts to take on their challenges and discover new ways to innovate.

Beyond the ability to tailor a **THERMELT**® formulation for our customers' specific needs, we provide support with product training as well as access to leading manufacturers of automated dispensing equipment.

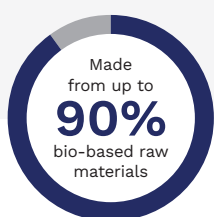


Sustainability comes naturally

RENEWABLE MATERIALS

We believe that adhesives have an essential role to play to help build a world that is more sustainable.

Our **THERMELT**[®] formulations are made from up to 90% bio-based raw materials including rapeseed and castor bean derivatives, helping our customers to reduce their carbon footprint while making it easier to disassemble at the product's end of life.



RESPONSIBLE SOURCING

Arkema strives to build long-term, balanced and sustainable relationships that are based on trust with its suppliers and subcontractors. Our responsible procurement process is guided by the ethical principles expressed in our Code of Conduct.

Arkema participates in the initiative Together for Sustainability (TfS). As part of this programme, suppliers are assessed by EcoVadis in terms of sustainable development performance. Our 2025 target is to reach 80% of the Group's purchases covered with TfS assessments of the relevant suppliers.

PRAGATI PROGRAMME

THERMELT's formulation contains derivatives of castor beans – with the majority being farmed in India by a huge network of small-scale growers.

Through our parent company, Arkema, along with co-founders, we are proud to have launched the world's first sustainable castor bean programme in Gujarat, India.



Scan the QR code to learn more about the **Pragati Programme**

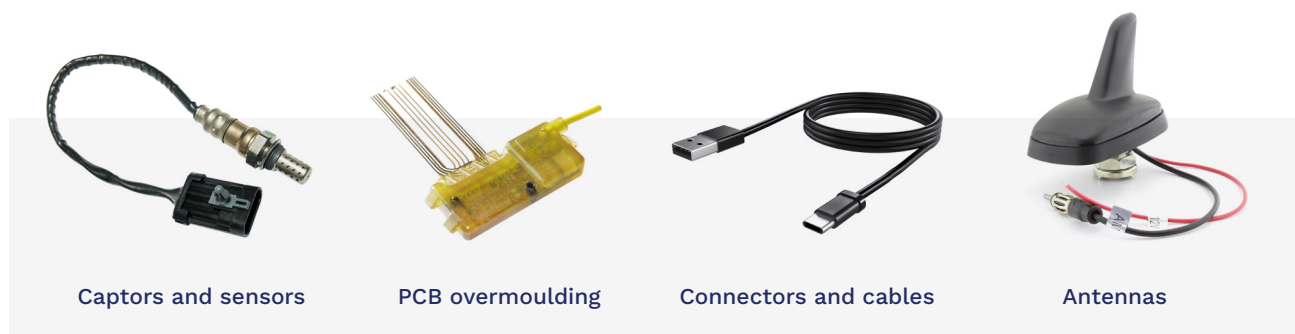


ARKEMA




Suitable for a wide range of applications

Multipurpose with high resistance to temperature and oil, **THERMELT®** hot melt solutions 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.



BENEFITS OF LOW PRESSURE MOULDING

PROCESS	PRODUCT	SUSTAINABILITY
		
<p>SPEED</p> <p>Reduced cycle time with immediate set: injection cycle time of less than 2 minutes.</p>	<p>VERSATILE ENCAPSULATION</p> <p>Suitable for various materials, including the most sensitive electronic components.</p>	<p>RENEWABLE MATERIAL</p> <p>Bio-based ca. 45 to 90%, mainly rapeseed oil.</p>
<p>EASIER MANUFACTURING</p> <p>Simplified process with single component solution, no risk of mixing error.</p>	<p>HIGH RESISTANCE</p> <p>Improved water tightness, UL94 V0 approved, resistant to high temperatures, shocks, harsh environments and solvents.</p>	<p>REDUCED WASTE</p> <p>100% thermoplastic, reusable excess material and long shelf life.</p>
<p>COST IN USE</p> <p>Reduced energy consumption due to low injection temperature and pressure, need for less equipment.</p>	<p>QUALITY DESIGN</p> <p>Optimised and aesthetically pleasing designs, reduced weight, no housing needed.</p>	<p>NON-REACTIVE CHEMISTRY</p> <p>One component, no curing and label-free.</p>

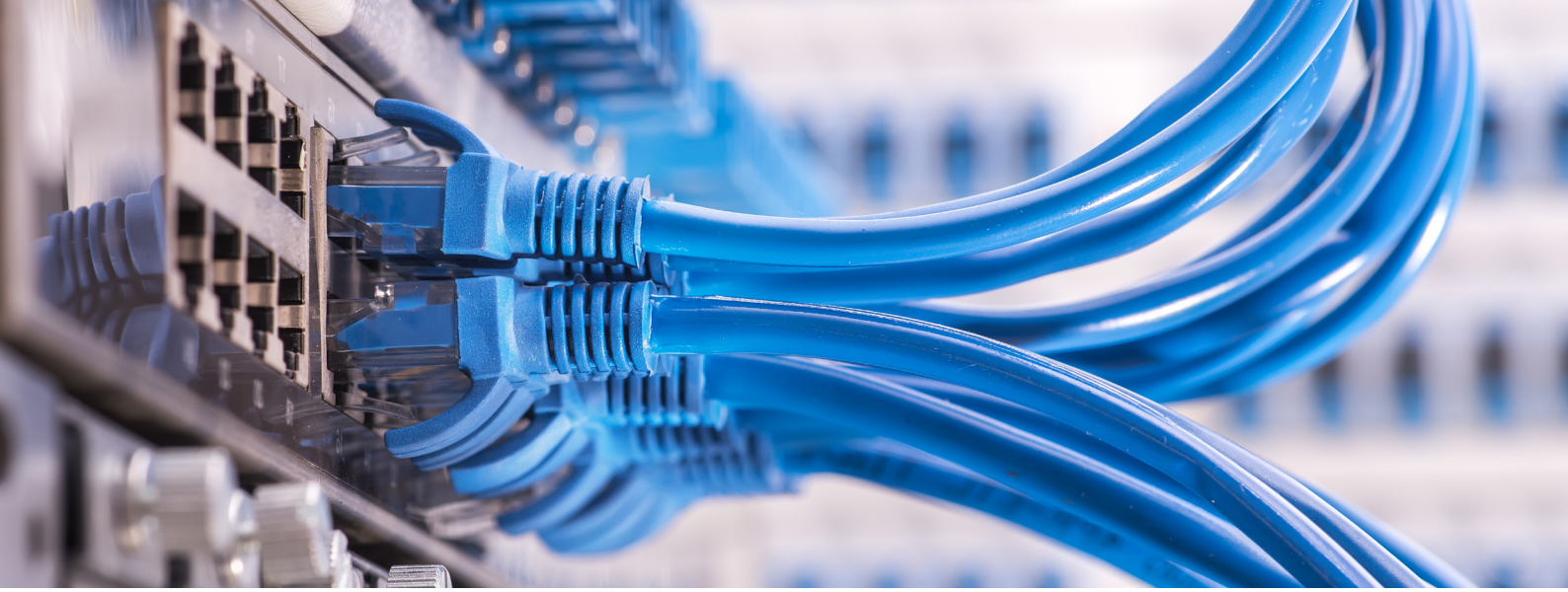
THERMELT® LPM products

The THERMELT® polyamide hot melt range includes multipurpose products with easy processability and high resistance in harsh environments, and most are available in black and natural colours. Safer and more sustainable than other encapsulation technologies, they are the ideal solution for your most complex LPM projects.

PRODUCT	OPERATING TEMPERATURE RANGE	SHORE HARDNESS (ISO 868) (Instant/15s)	SOFTENING POINT (ASTM D3461)	TYPICAL CHARACTERISTICS	BIO-BASED CONTENT
THERMELT 858	-40°C to 150°C	40/32 D	180°C ±5°C	Mouldable polyamide with very good thermal stability as well as UV and moisture resistance. (Available in black only).	45-65%
THERMELT 866	-25°C to 115°C	22/12 D	155°C ±5°C	Mouldable polyamide with excellent adhesion to PES, PC and other demanding substrates.	
THERMELT 861	-40°C to 125°C	40/21 D	160°C ±5°C	General purpose mouldable polyamide with good adhesion for industrial applications.	65-75%
THERMELT 861 HV	-30°C to 125°C	32/20 D	160°C ±5°C	General purpose high-end mouldable polyamide with good adhesion and improved internal cohesion for industrial applications. (Available in black only).	
THERMELT 865	-55°C to 120°C	30/16 D	157°C ±5°C	Mouldable polyamide with very good low temperature resistance and good adhesion for automotive applications.	
THERMELT 867	-40°C to 150°C	38/27 D	183°C ±5°C	General purpose high performance mouldable polyamide with good adhesion and environmental and thermal shock resistance. Used for applications such as automotive exteriors.	
THERMELT 867 HV	-50°C to 150°C	45/29 D	182°C ±5°C	General purpose, high-end mouldable polyamide with good adhesion, very good mechanical properties and improved internal cohesion for demanding industrial applications. (Available in black only).	
THERMELT 868	-40°C to 125°C	30/20 D	160°C ±5°C	Mouldable polyamide with very good UV and moisture resistance. Used for demanding outdoor applications. (Clearest colour of the range).	75-90%
THERMELT 195	-20°C to 150°C	45/40 D	200°C ±5°C	Mouldable polyamide with excellent thermal stability and increased hardness for electronics overmoulding.	
THERMELT 817R	-15°C to 125°C	43/28 D	165°C ± 5°C	Specialty mouldable polyamide with very low application viscosity for demanding designs.	
THERMELT 870	-10°C to 110°C	38/23 D	144°C ±5°C	General purpose mouldable polyamide with increased adhesion for electronic applications.	
THERMELT 892	-20°C to 140°C	45/36 D	175°C ±5°C	Mouldable polyamide with increased strength and hardness for industrial and consumer electronics applications. (Available in black only).	

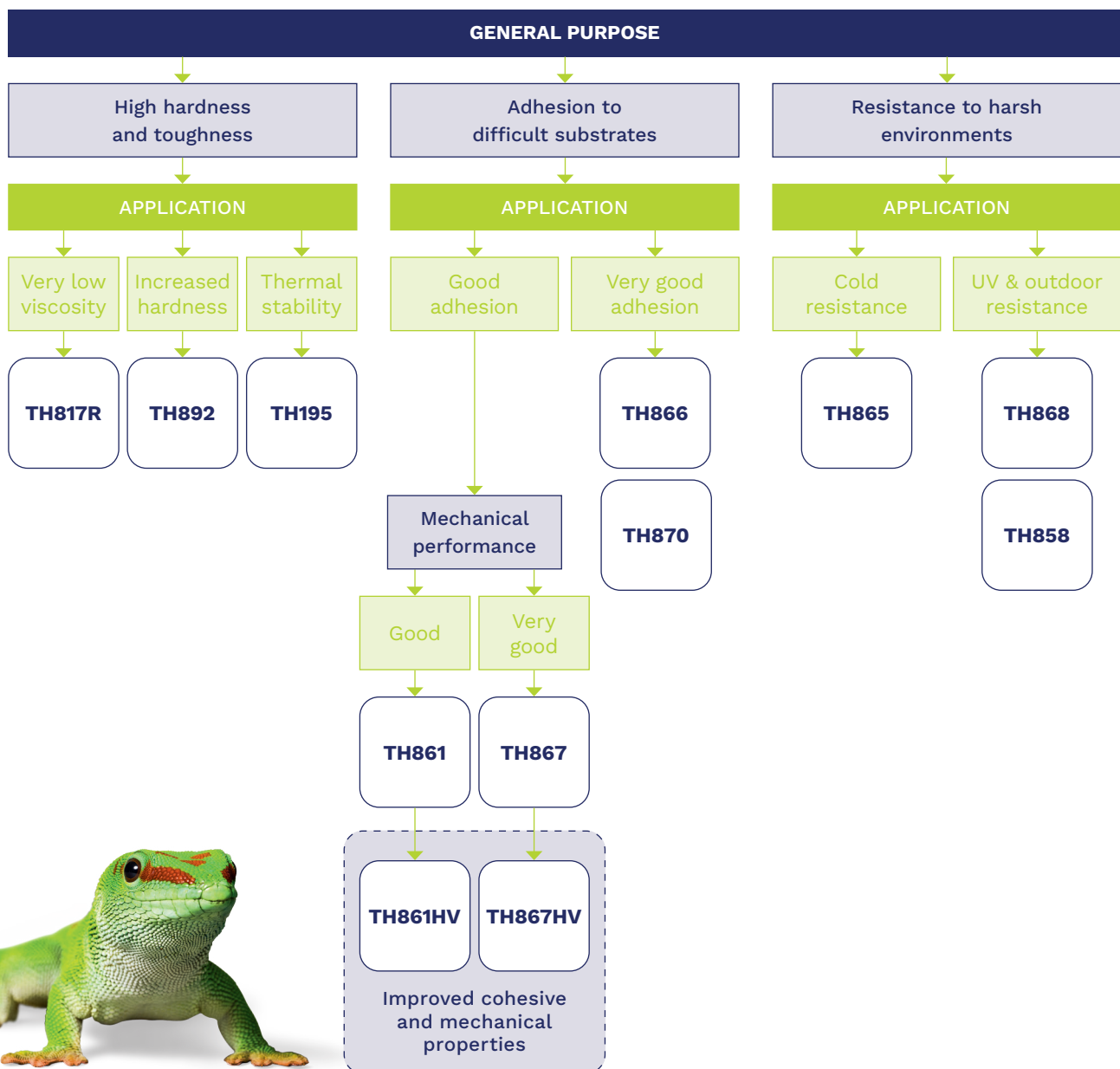
Please get in touch with your Bostik representative to know which product is available in your territory.

PLEASE NOTE: Values based on internal estimations, for informational purposes only.



PRODUCT SELECTOR

Please use the **Product Selector** below to identify the right solutions for your LPM requirements.





THERMELT®

IMPORTANT – PLEASE READ BEFORE USING THIS BROCHURE

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