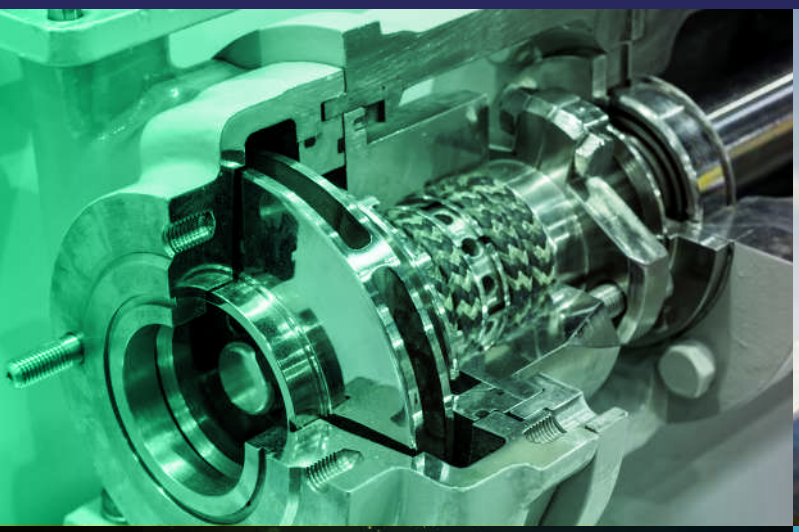
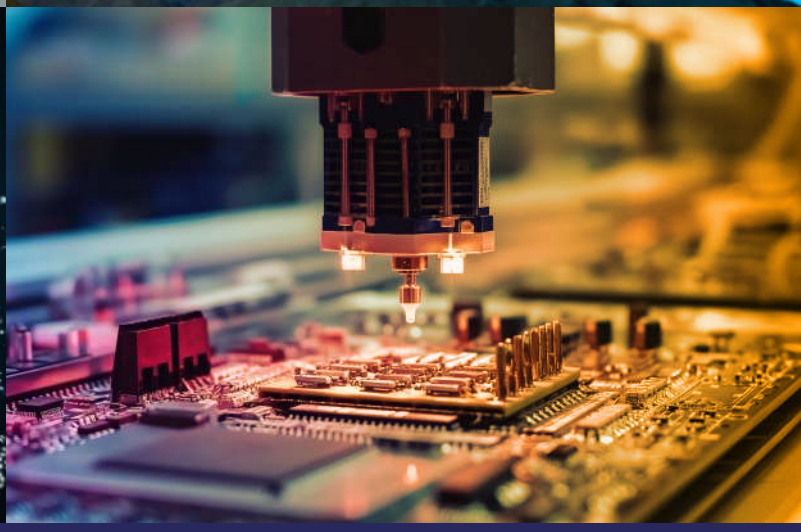
BOSTIK

ATTACHED TO YOUR WORLD

Engineering Adhesives

PRODUCT CATALOGUE 2025



Adhesive solutions by ARKEMA

Welcome

This catalogue is designed to meet the needs of professionals in engineering design, assembly, maintenance and repair.

Inside, you'll find information on our innovative and sustainability-enabling solutions, including adhesives that help to reduce carbon footprints, support circular economies and perform reliably under extreme conditions.

We also explore the key megatrends shaping our industry – such as technological advancements, workforce changes, legislation and environmental challenges – and how Bostik's products meet these evolving demands. To help you get the best results, this catalogue provides practical guidance on everything from surface preparation to curing techniques.

Additional support is available through our training academy and other resources. With a comprehensive range of products, including the precision-focused **Born2Bond**™ range and recently added **Polytec PT** range, this catalogue is your guide to solving today's engineering adhesive challenges. For further assistance, our team is always ready to help.

BOSTIK BORN2BOND THERMELT® Polytec PT

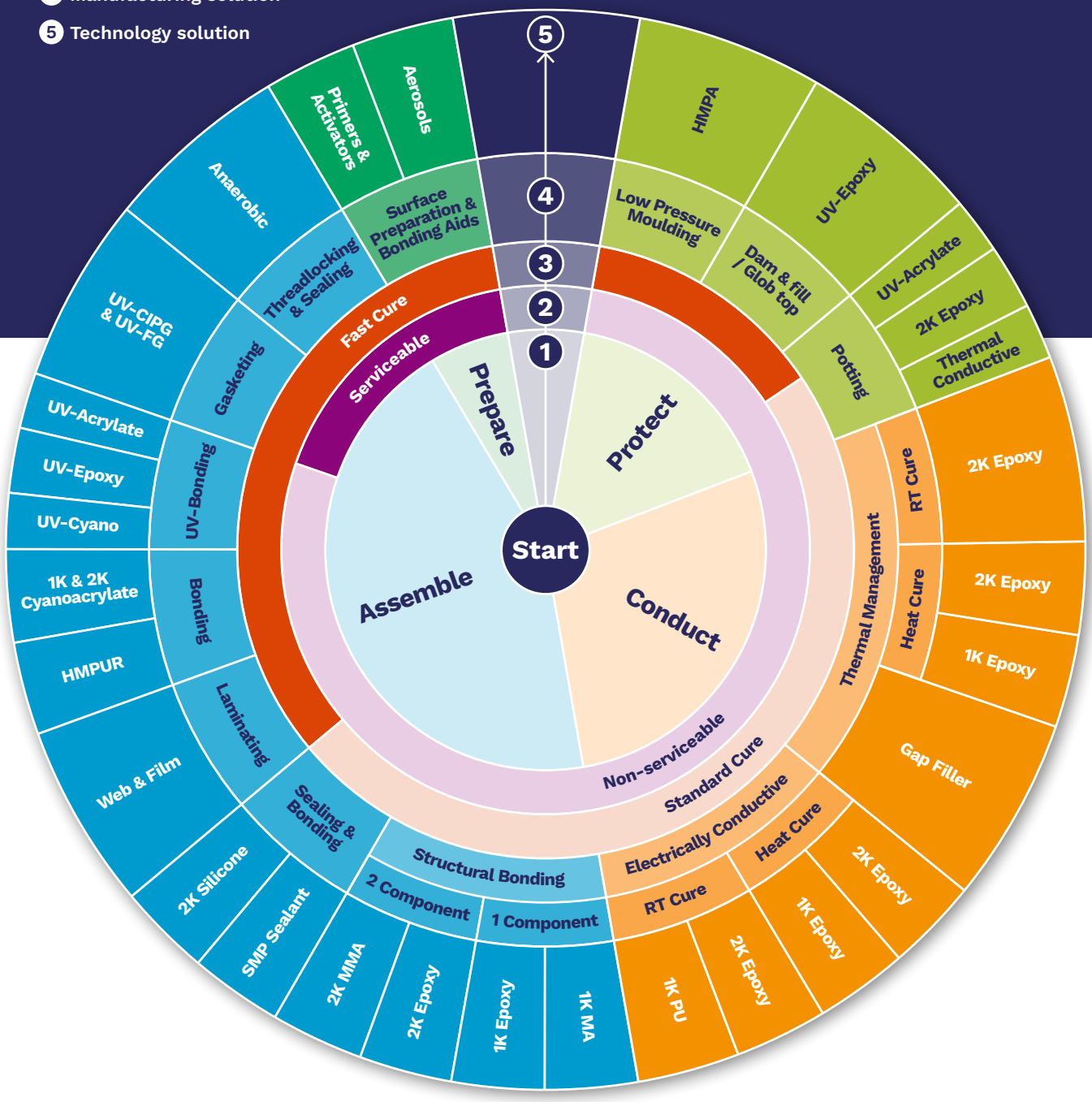
TURN THE PAGE TO USE THE BOSTIK ENGINEERING ADHESIVES PRODUCT WHEEL

Bostik Engineering Adhesives product wheel

FIND THE RIGHT SOLUTION FOR YOUR ADHESIVE NEEDS

Five steps to your manufacturing solution:

1. Challenge
2. Serviceability
3. Cure speed
4. Manufacturing solution
5. Technology solution



PREPARE

Page 30

Proper surface preparation is critical for achieving reliable and high-strength bonds. Bostik offers solutions for cleaning and pre-treating substrates, including degreasers, cleaners and advanced methods like primers, ensuring optimal adhesive performance and reproducibility on metals and plastics.

ASSEMBLE

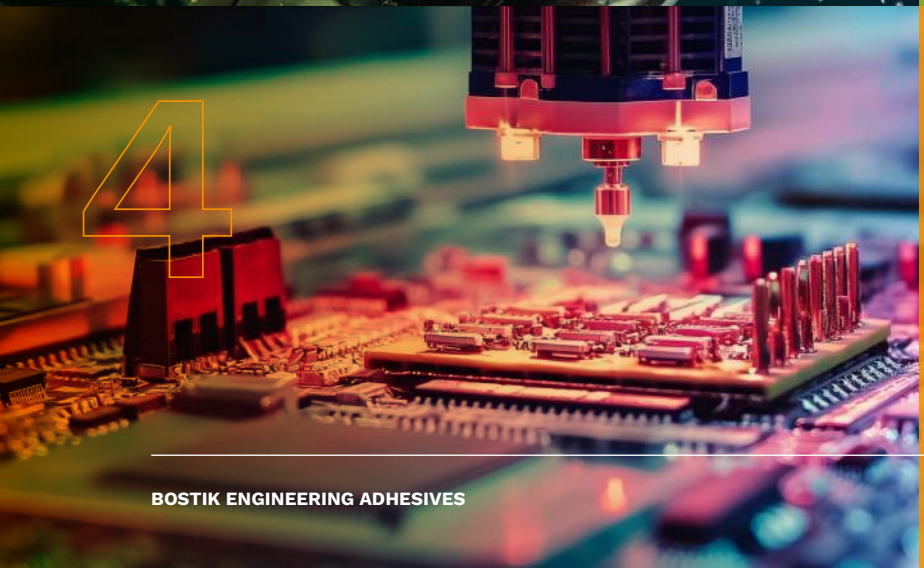
Page 38

Bostik's structural adhesives deliver strong, durable bonds that withstand mechanical stress and variable environmental conditions. By reducing reliance on mechanical fasteners, they improve operational efficiency and product integrity, making them a trusted choice in industries such as automotive, aerospace and electronics.

PROTECT

Page 104

Bostik's protective adhesives create a robust bond while shielding components from environmental damage. By forming a barrier against moisture, UV, chemicals and dust, these adhesives ensure long-lasting durability in diverse industries, safeguarding sensitive materials and components from external elements.



CONDUCT

Page 114

Functionalised conductive adhesives from Bostik combine bonding strength with advanced thermal or electrical conductivity. Designed for applications like microelectronics and automotive engineering, they dissipate heat and conduct electricity, enabling efficient, reliable connections while maintaining product integrity and performance.

Bostik Engineering Adhesives

Bostik's advanced adhesive solutions address critical challenges faced by product designers and manufacturers. With the acquisition of **Polytec PT** in 2023, Bostik has expanded its portfolio to include specialised materials, such as thermally and electrically conductive adhesives, offering a comprehensive 360° solution portfolio. Bostik adhesives enhance operational efficiency, product durability and sustainability across industries such as automotive, aerospace and electronics, empowering innovation in modern manufacturing.

Check with your local sales representative if the product is available in your region.

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BOSTIK

A global leader in smart adhesives

Bostik is a global leader in adhesive solutions with over 130 years of expertise. Specialising in smart bonding and sealing technologies, Bostik enhances safety, flexibility and efficiency across industries such as construction, industrial manufacturing and consumer markets.

Operating in more than 40 countries, Bostik employs over 7,000 people and operates four advanced research and development centres, ensuring close collaboration with customers and the ability to swiftly adapt to evolving market needs. Bostik is also a sustainability enabler, supporting the development of more efficient processes and offering a huge range of adhesive solutions, including low-carbon footprint products and bio-based chemistries.

GLOBAL FOOTPRINT

€2.7bn
2024 annual sales

7,000+
employees

40
countries

4
R&D centres

As the Adhesive Solutions segment of the Arkema Group, Bostik benefits from the extensive resources of a global leader in specialised materials.

By combining innovation, technical excellence and a commitment to customer success, Bostik and Arkema continue to shape the future of adhesive technology and enable advancements across a wide range of applications.

A global leader in specialty materials

Arkema is a global leader in specialty materials, driving innovation across adhesives, advanced materials and coatings. Operating in 55 countries, Arkema manages 151 production sites and 17 research and development centres.

Committed to sustainable development, Arkema leverages cutting-edge technologies to deliver solutions that meet the evolving needs of industries including construction, automotive and consumer goods. As the parent company of Bostik, Arkema strengthens its leadership by providing pioneering materials for a more sustainable, efficient future.

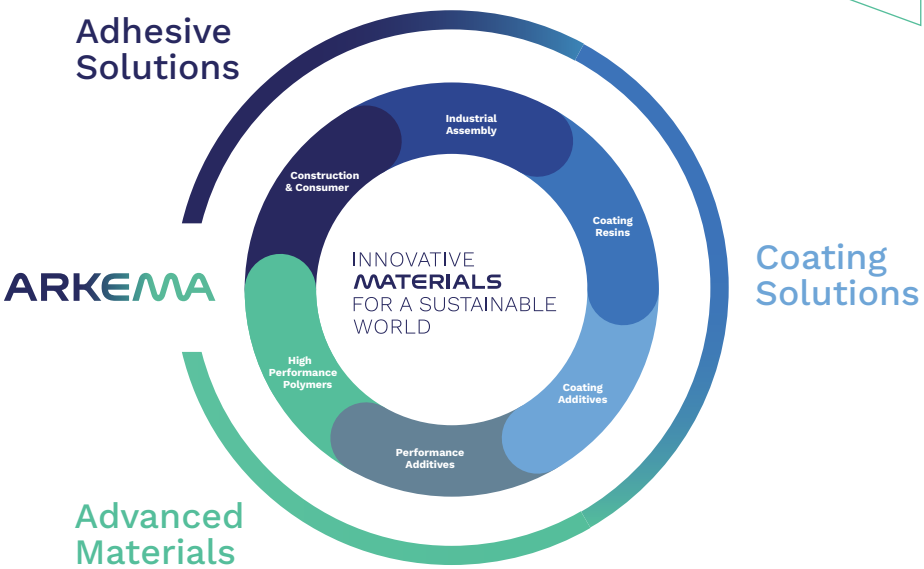
GLOBAL FOOTPRINT

€9.5bn
2024 annual sales

21,150+
employees

55
countries

17
R&D centres



ARKEMA

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Arkema and Bostik:
A portfolio of excellence

The Arkema Group and Bostik bring together unmatched expertise to deliver innovative, sustainable and high-performance adhesive solutions.

With Arkema's cutting-edge chemical technologies, specialty materials and Bostik's global reach, technical know-how and backward integration, we ensure reliable supply chains, innovative materials and tailored adhesive solutions to meet the needs of a diverse range of industries.

ARKEMA

Arkema drives global innovation in specialty materials with a commitment to innovation and sustainability.

BOSTIK

Bostik delivers ground-breaking, optimal adhesive technologies to enhance safety, flexibility and efficiency worldwide.

THERMELT®

High-performance, bio-based hot melt polyamide resins and adhesives for multiple manufacturing applications.

BORN2BOND™

Advanced, precision-focused engineering adhesives that focus on 'by-the-dot' bonding applications.

Polytec PT

Thermally and electrically functionalised, specialty adhesives and materials for demanding technical applications.

BORN2BOND™

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 **Born2Bond**™ brand, born out of our purpose and the collaborative bond we have with our customers.

THERMELT®

For over 40 years, 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, they are ideal for many applications including automotive, electronics and medical devices.

Polytec PT

Our Polytec PT range consists of specialty adhesives and thermal interface materials for applications in electronics, electrical engineering and the automotive sector.

Solutions include electrically and thermally conductive adhesives, UV-curing adhesives, high-temperature application products and silicone-free thermal interface materials.

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The world is changing

The pace of change in today's world is unprecedented. Societies and industries are navigating a confluence of challenges: the drive for sustainability, digital transformation and evolving consumer demands.

Industries must innovate to reduce environmental impacts, embrace circular economies and adapt to the demands of new technologies, such as AI and the Internet of Things (IoT).

Global initiatives such as the Paris Agreement are driving businesses to set ambitious emissions targets and adopt sustainable practices. Companies are being challenged to balance growth with environmental responsibility while meeting the demands of a more conscious and connected world.

Bostik and Arkema are leading this transition, leveraging science and innovation to develop materials that meet today's needs and anticipate future challenges.

Through high-performance adhesives and advanced manufacturing solutions, we empower industries to adapt, innovate and thrive – and enable sustainability – in a rapidly evolving world.

Scan to learn how Bostik is driving sustainability

SUSTAINABILITY ENABLERS

Through responsible manufacturing, innovative solutions and trustworthy collaboration with our stakeholders, **we aim to drive real and measurable change in the adhesives industry.**

BOSTIK

Driving a more sustainable future together

Bostik's mission is closely aligned with the UN's Sustainable Development Goals (SDGs), focusing on responsible manufacturing, innovation and collaboration. The Arkema group, of which Bostik is part of, is committed to **reducing greenhouse gas emissions by 48.5% for Scopes 1 and 2** and **67% for Scope 3 compared to 2019 by 2030**, with the ultimate goal of **reaching net-zero by 2050**.[1]

SCOPE 1	SCOPE 2	SCOPE 3
Direct emissions from owned or controlled sources. This includes fuel combustion at facilities and company vehicles.	**Indirect emissions** from the generation of purchased electricity, steam, heating and cooling consumed by the company.	**All other indirect emissions** that occur across the value chain. This includes emissions from suppliers, product distribution, employee travel and the end-of-life treatment of products.

By addressing emissions at all three levels, Bostik and Arkema are working towards comprehensive carbon reduction that spans our operations and the wider supply chain.

ARKEMA: A COMMITMENT TO REDUCE GREENHOUSE GAS EMISSIONS BY 2030

SCOPES 1 and 2

48.5% REDUCTION

SCOPE 3

67% REDUCTION

[1] Scan to learn more about **Arkema's 2050 net zero goal**

Advancing more sustainable innovation

Our sustainability strategy is built on three key pillars: responsible manufacturing, innovative solutions and **trustworthy collaboration**. We advance sustainable innovation by promoting the creation of adhesives that contribute to the principles of a circular economy, for example by enabling recycling or incorporating renewable raw materials.

Products like our bio-based adhesives and low-VOC formulations showcase our commitment to improving health, safety and minimising environmental impact.

Collaboration drives everything we do. By partnering with stakeholders, we develop forward-thinking solutions that meet the needs of industries while maintaining respect for the planet.

With clear goals and decisive actions, Bostik empowers industries to achieve a more sustainable and equitable future.

PILLAR 1

Responsible Manufacturing

Scan to learn more about **Responsible Manufacturing**

PILLAR 2

Innovative Solutions

Scan to learn more about **Innovative Solutions**

PILLAR 3

Trustworthy Collaboration

Scan to learn more about **Trustworthy Collaboration**

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MEGATRENDS

Engineering Adhesives megatrends

The engineering adhesives sector is undergoing rapid transformation, shaped by technological advancements, sustainability imperatives, supply chain resilience and workforce dynamics.

As industries like Maintenance, Repair and Overhaul (MRO) and electronic device manufacturing evolve, adhesives play a pivotal role in driving innovation, efficiency and durability. This topic explores the critical megatrends reshaping the adhesives landscape and their implications across sectors.

MEGATRENDS

1. Digital transformation
2. Sustainability and circular economy
3. Supply chain resilience
4. Workforce shortages and automation
5. Accreditation and innovation

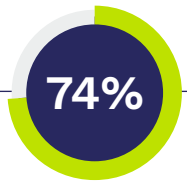
MEGATRENDS 1

Digital transformation

Technological advancements are revolutionising industrial processes, with Industry 4.0, IoT and automation creating smarter, more efficient manufacturing environments. Engineering adhesives are evolving to meet the demands of digital transformation by enabling faster, more precise and more complex assemblies.

MRO SECTOR

Predictive and preventative maintenance is becoming a cornerstone of MRO operations, driven by IoT sensors and digital twin technology. Adhesives used in this sector must withstand repeated stress cycles and extreme conditions while integrating seamlessly with automated inspection systems.



74% **of companies in MRO** cite digital transformation as a top priority, with **IoT adoption projected to grow by 21% annually.**[1]

BOSTIK IN ACTION

Bostik's **Born2Bond**™ anaerobic adhesives provide **durable and reliable bonds** that can **withstand extreme temperatures, vibration and stress**. Their consistent performance helps **improve safety and efficiency** in maintaining bonded components over time.

BOSTIK

ELECTRONIC DEVICE MANUFACTURING

Miniaturisation and component density in electronic devices drive demand for precision bonding solutions. UV-curable adhesives and conductive adhesives enable faster, automated production while reducing assembly errors.

The global IoT device market is expected to reach **$1.1 trillion** by **2026.**[2]

BOSTIK IN ACTION

Bostik's **Born2Bond**™ UV adhesives **enable precise microelectronics bonding** without heat damage, while its extensive range of electrical and thermal conductive adhesives ensure **optimal functionality**, enhancing intricate circuit assembly and **accelerating throughput**.

BOSTIK

[1] https://www.sphericalinsights.com/reports/digital-mro-market
[2] https://finance.yahoo.com/news/internet-things-iot-market-expand-224000733.html

MEGATRENDS 2

Sustainability and circular economy

Sustainability is at the heart of industrial strategy, with adhesives playing a key role in reducing environmental impact, supporting circular economies and enhancing product life cycles.

MRO SECTOR

Aerospace and automotive industries are prioritising adhesives that enable disassembly and recycling at the end of a product's life. This extends component longevity and reduces landfill waste.

SUSTAINABILITY ENABLERS

Aerospace MRO accounts for 12% of global transport emissions. Adhesives designed for reuse or easy removal are **essential for achieving carbon reduction targets.**[3]

BOSTIK IN ACTION

Bostik's **Thermelt®** adhesives and resins may enable reworkable bonds in automotive parts, contributing to **more sustainable repair practices.** And our **Born2Bond™ Anaerobic Adhesives**, including precise threadlocking and gasketing adhesives, allow easier, more reliable maintenance.

BOSTIK

ELECTRONIC DEVICE MANUFACTURING

E-waste is a growing challenge, with over 50 million metric tons generated annually. Adhesives that enable recyclable assemblies, reduce hazardous substances and integrate bio-based materials are crucial to mitigating this issue.

Over 50 million

metric tons of e-waste are generated annually.[4]

BOSTIK IN ACTION

Bostik's bio-based adhesive formulations reduce volatile organic compounds (VOCs), **supporting more eco-friendly electronics production.** And, being debondable by heat, our **Born2Bond™ High Performance HMPUR** range also facilitates end-of-life recycling.

BOSTIK

[3] https://www.royaleinternational.com/2023/11/sustainability-in-mro-green-practices-and-innovations
[4] https://www.statista.com/topics/3409/electronic-waste-worldwide/

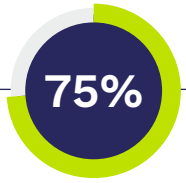
MEGATRENDS 3

Supply chain resilience

Global supply chain disruptions have underscored the need for resilient, flexible adhesive solutions that can adapt to material shortages and production delays.

MRO SECTOR

Manufacturers require adhesives that can bond a variety of substrates, reducing dependency on specific materials and ensuring operational continuity.



75% of MRO respondents **expect supply chain disruptions** to persist for another 1-3 years.[5]

BOSTIK IN ACTION

Bostik's multi-substrate adhesives allow repair operations to proceed even when standard materials are unavailable, **ensuring continued service life**. Our global setups and backward integration in diverse raw materials also reduce disruptions to availability.

BOSTIK

ELECTRONIC DEVICE MANUFACTURING

Recent semiconductor shortages and logistical delays have underscored the need for greater transparency in capacity, material flow and customs to ensure uninterrupted production.

The semiconductor industry is projected to reach a market size exceeding **$750 billion** in 2025, driven by advancements in automotive electronics, AI and high-performance computing.[6]

BOSTIK IN ACTION

Bostik and Arkema, as **major suppliers in the industry**, anticipate trends and market shifts well in advance, allowing them to adjust capacities and implement contingency plans to ensure reliability as a **trusted partner in this market**.

BOSTIK

[5] https://mrobusinesstoday.com/how-mros-are-tackling-the-global-supply-chain-crisis-a-new-era-of-repair-instead-of-replace/
[6] https://www.fortunebusinessinsights.com/semiconductor-market-102365

MEGATRENDS 4

Workforce shortages and automation

Labour shortages and the increasing complexity of advanced manufacturing, require simplified processes, reduced manual interventions and enhanced automation.

MRO SECTOR

A shortage of skilled technicians necessitates adhesives that require minimal application training and deliver consistent performance.

2.9% GROWTH

The MRO market is projected to **grow by 2.9% annually** through 2033 but faces a **significant talent gap**.[7]

BOSTIK IN ACTION

Bostik's easy-to-apply single component (1K) adhesives eliminate complex mixing procedures, supporting faster repairs in field operations. We are **always investing in more sustainable solutions** that make products easy to apply and remain compliant to evolving legislation.

BOSTIK

ELECTRONIC DEVICE MANUFACTURING

Automation is critical to offset workforce shortages, with adhesives designed for robotic application enabling more consistent production.

63% of electronics manufacturers report disruptions due to labour shortages.[8]

BOSTIK IN ACTION

Bostik's volumetric dispensing compatible adhesives allow precise robotic application, **reducing human error and increasing throughput**.

BOSTIK

[7] https://arsa.org/wp-content/uploads/2023/03/ARSA-OW-2023FleetandMarketReport-ExecutiveSummary.pdf
[8] https://www.electronicsworld.co.uk/electronics-manufacturers-reeling-from-components-and-skills-shortages-report-reveals/36049/

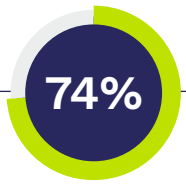
MEGATRENDS 5

Accreditation and innovation

The need for adhesives that comply with stringent safety, environmental, and performance standards drives both accreditation and innovation in the industry.

MRO SECTOR

Innovation and accreditation drive the development of advanced adhesive technologies, enhancing their effectiveness in demanding MRO applications while ensuring compliance with industry-specific regulations.



74% of European companies cite **regulatory challenges as a top concern.**[9]

BOSTIK IN ACTION

Selected Bostik **Born2Bond™ anaerobic adhesives** comply with NSF standards, reflecting Bostik's commitment to meeting stringent **health and safety regulations** across various industries.

BOSTIK

ELECTRONIC DEVICE MANUFACTURING

Adhesives used in medical devices and electronics may need to meet biocompatibility and low-outgassing requirements.

The global medical device market is projected to reach **$612.7 billion in 2025**, with a significant portion **requiring biocompatible adhesives.**[10]

BOSTIK IN ACTION

Many products in the **Born2Bond™** range comply with ISO 10993 standards, ensuring suitability for medical device applications.

BOSTIK

[9] https://blog-idceurope.com/top-3-regulatory-concerns-of-european-organizations-for-the-next-two-years/
[10] https://nabi.bio/biocompatibility-testing-a-guide-for-medical-device-manufacturers

CHALLENGES

Engineering Adhesives challenges

The engineering adhesives market faces multifaceted challenges as industries adapt to evolving demands in sustainability, regulatory compliance, performance and operational efficiency.

Addressing these challenges is crucial for advanced manufacturing and enabling product innovation. Adhesives are increasingly expected to deliver on multiple fronts – enhancing durability, enabling recyclability and improving productivity – all while navigating complex regulatory landscapes.

This topic explores key challenges in engineering adhesives, providing insights into how the industry is adapting to these pressing demands.

CHALLENGES

1. Sustainability
2. Regulatory and compliance
3. Customer and market demands
4. Performance and innovation
5. Operational efficiency

1 | Sustainability

The drive toward sustainability is reshaping the adhesive industry, with manufacturers under pressure to develop eco-friendly solutions that reduce environmental impact without compromising performance. Adhesives play a critical role in enabling circular economies and reducing carbon footprints across industries.

KEY FOCUS AREAS

LIFE CYCLE ANALYSIS

Adhesives must be evaluated for their impact at every stage of the product lifecycle, from sourcing to disposal.

DURABILITY AND REPAIRABILITY

Longevity is essential to reduce waste. Adhesives that allow for easy repair or reassembly extend product life.

END-OF-LIFE MANAGEMENT

Adhesives must support recycling and disassembly to facilitate material recovery at the end of a product's life.

BIO-SOURCED MATERIALS

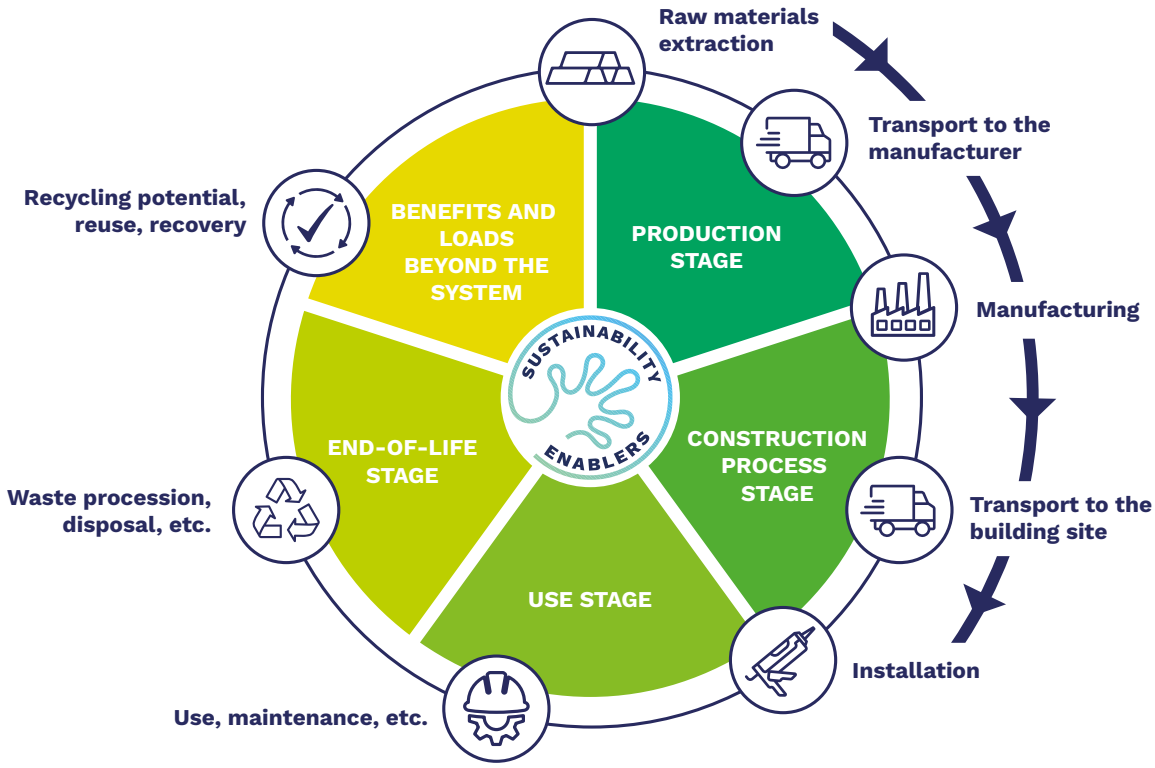
Adhesives derived from renewable sources help reduce dependency on petroleum-based materials.

ECO-DESIGN

Adhesives designed to minimise energy use during curing contribute to more sustainable manufacturing.

BOSTIK IN ACTION

Several Bostik products are bio-based adhesive solutions, helping our customers through their journey to CO_2 emissions reduction. A large part of our range has been developed to substitute solvent-based adhesive solutions with a lower carbon footprint and lower energy consumption, supporting manufacturers in achieving their sustainability and circular economy goals.



2 | Regulatory and compliance

Globally, regulations governing chemicals are becoming more stringent, driven regionally by regulations such as REACH (EU) and TSCA (US). Adhesives must meet evolving safety, health and environmental regulations while maintaining high performance.

KEY FOCUS AREAS

MULTIPLE REGULATORY UPDATES ANNUALLY

The industry faces various regulatory updates, requiring constant adaptation.

CERTIFICATIONS

Adhesives should meet certifications such as NSF (meets the public health and safety standards set by the National Sanitation Foundation) and UL (Underwriters Laboratories) fire safety ratings to ensure compliance across sectors.

BIOCOMPATIBILITY

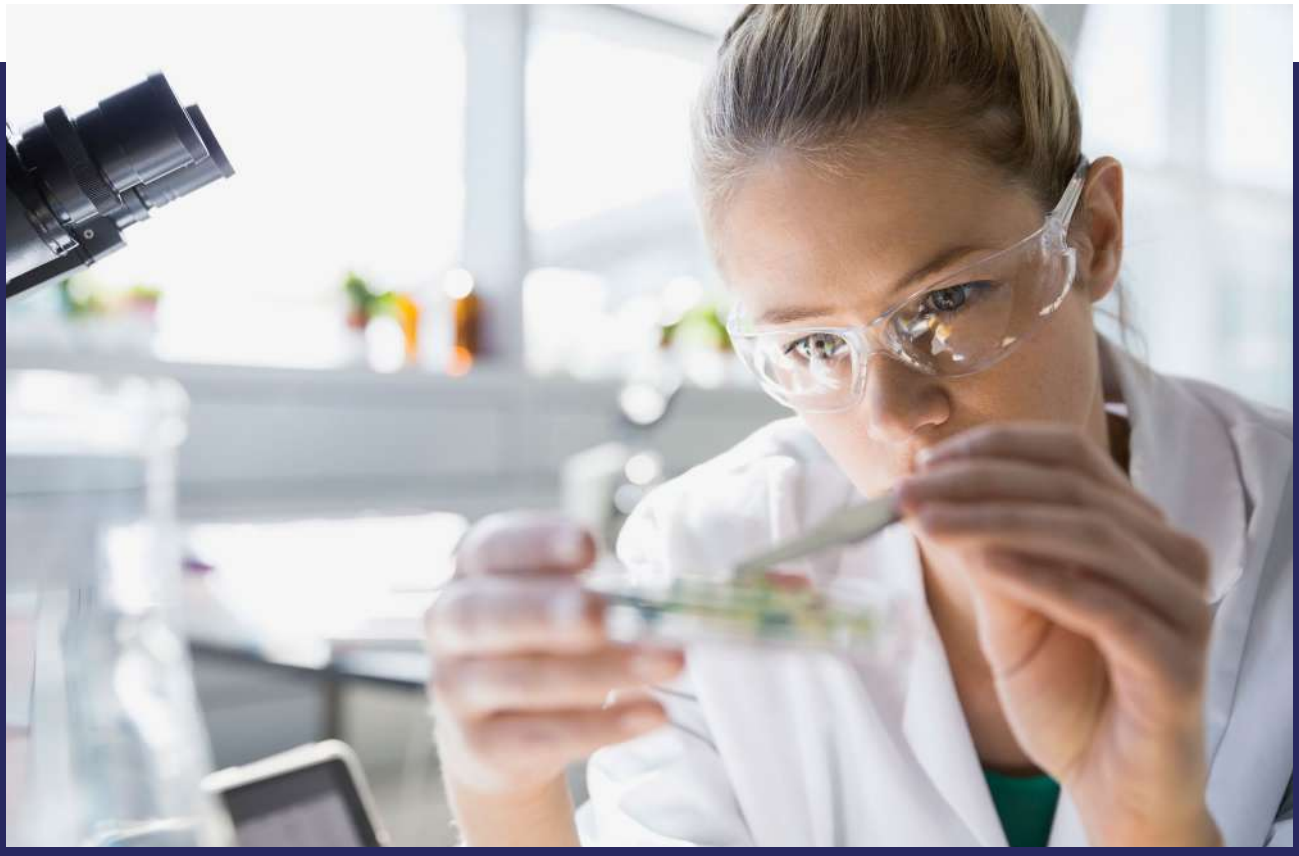
Adhesives involved in the assembly of certain medical devices should meet biocompatibility standards to prevent harm to users.

ETHICAL MANUFACTURING

Responsible sourcing and production processes are crucial to align with international guidelines.

BOSTIK IN ACTION

Many of **Bostik's medical-grade adhesives comply with ISO 10993**, ensuring safety in medical applications while meeting regulatory demands for biocompatibility.



3 | Customer and market demands

Customer expectations are evolving, driven by trends in product customisation, hybrid materials and faster production cycles. Adhesives must support design flexibility and offer solutions that simplify application and improve final product quality.

KEY FOCUS AREAS

DIVERSITY OF SUBSTRATES

Adhesives must bond to a wide range of materials, from plastics to metals and composites.

USER-FRIENDLY PRODUCTS

Intuitive adhesive solutions that simplify application reduce errors and improve workflow efficiency.

TRAINING AND SUPPORT

Providing comprehensive user education helps ensure adhesives are applied correctly, maximising performance.

CUSTOMISATION

Adhesives must be tailored to meet unique product design and performance specifications.

SAFETY

Adhesives must comply with local regulations which are often amended.

BOSTIK IN ACTION

Bostik's **Born2Bond™ Academy** offers end-user workshops and resources, ensuring manufacturers achieve optimal results in bonding applications. Learn more about the **Born2Bond™ Academy** on pages 130-131.

4 | Performance and innovation

As products become more complex, adhesives must deliver enhanced performance, supporting multi-functional requirements such as conductivity, thermal management and vibration resistance.

KEY FOCUS AREAS

DUAL FUNCTIONALITY

Adhesives that combine bonding with thermal or electrical conductivity offer greater value.

CHEMICAL AND TEMPERATURE RESISTANCE

High-performance adhesives must withstand harsh environments without degradation.

PRECISION DISPENSING

Adhesives formulated for automated (and) jet dispensing improve accuracy and reduce material waste.

LOW SHRINKAGE

Adhesives that minimise shrinkage during curing enhance structural integrity, particularly in electronics and automotive applications.

BOSTIK IN ACTION

Born2Bond™ Light Lock adhesives offer dual curing capabilities, providing instant adhesion and secondary (UV) curing.

5 | Operational efficiency

To remain competitive, manufacturers must streamline production, reduce waste and enhance quality control. Adhesives play a key role in enabling faster processes and simplifying complex assembly lines.

KEY FOCUS AREAS

FASTER PRODUCTION CYCLES

Rapid-curing adhesives reduce downtime, increasing throughput.

FIRST-TIME ACCURACY

Adhesives that require minimal rework improve overall efficiency.

SUPPLY CHAIN RESILIENCE

Versatile adhesives that bond across multiple substrates reduce supply chain dependency.

PACKAGING AND WASTE REDUCTION

Innovative adhesive packaging minimises excess material and simplifies disposal.

BOSTIK IN ACTION

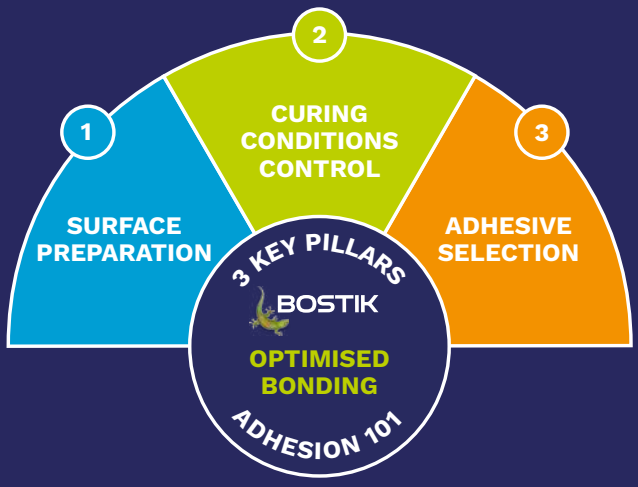
Bostik's **Thermelt® hot melt polyamide adhesives** and resins are designed for fast application and high throughput, enhancing operational efficiency in the automotive and appliance industries.

ADHESION 101

Adhesion 101: The fundamentals of reliable bonding

Achieving durable, long-lasting bonded assemblies is more than just selecting the right adhesive.

A successful bond relies on three fundamental pillars: **surface preparation**, **curing conditions** and **adhesive selection**. Each of these elements plays a vital role in ensuring strong adhesion, preventing bond failure and optimising product performance across industries like automotive, aerospace, electronics and medical devices.



1 SURFACE PREPARATION

A well-prepared surface maximises adhesive contact and bond strength by removing contaminants and improving mechanical anchorage.

2 CURING CONDITIONS CONTROL

Controlled curing guarantees full polymerisation, ensuring the adhesive achieves its intended mechanical properties.

3 ADHESIVE SELECTION

Finally, choosing the right adhesive for the substrates, environmental conditions and load requirements is essential for durability and operational success.

Addressing these three core areas results in high-performance bonding solutions that withstand mechanical stress, environmental exposure and long-term wear.

1 | Surface preparation

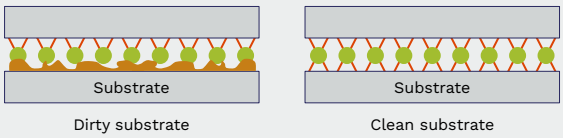
Surface preparation is the foundation of reliable bonding. A clean, well-prepared substrate ensures maximum adhesive performance by eliminating barriers that could prevent bonding. Contaminants such as oils, dust, sweat or oxides create a layer that inhibits adhesion, leading to bond failure over time. Proper preparation methods significantly enhance bond strength and durability.

Bostik quick tip

Always apply adhesives on a clean, dry surface

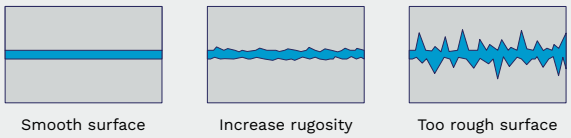
KEY METHODS OF SURFACE PREPARATION

DEGREASING AND CLEANING: Removes oils, dust and surface contaminants. Solvent cleaning is one of the most crucial steps, ensuring the substrate is free from residue before bonding.



Dirty substrate | Clean substrate

ABRASION (ROUGHENING): Increases surface roughness (rugosity) to enhance mechanical anchorage. Techniques include sanding, grit blasting and grinding. Rougher surfaces provide greater surface area, improving adhesive grip.



Smooth surface | Increase rugosity | Too rough surface

= Mechanical anchorage improvement

= Creation of micro-bubbles = Weak points

Bostik quick tip

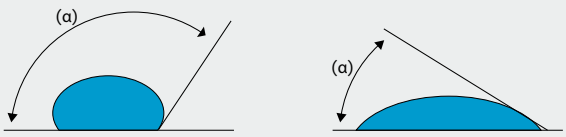
We recommend a substrate rugosity (Ra) between 0.8 and 3.2 (e.g. 120 to 400 grit sandpaper)

Bostik quick tip

Always check the compatibility of the cleaning solvent with your substrate

SOLVENT CLEANING (POST-ABRASION): After abrasion, solvents remove any loose particles or debris left behind, ensuring the surface is clean and ready for bonding.

SURFACE TREATMENTS: Plasma, corona and flame treatments improve bonding by increasing surface energy, enhancing wetting properties for better adhesive distribution.



Bad wetting vs. Good wetting.

Bostik quick tip

We recommend a minimum surface tension of 38 mN/m

DID YOU KNOW?

Untreated aluminium bonded with epoxy can achieve shear strengths of 3 MPa, but with proper acid etching and preparation, shear strength can reach more than 20 MPa – **a six-fold increase!**

2 | Curing conditions

Curing transforms adhesives from a liquid to a solid state through polymerisation, which is crucial for developing bond strength. Controlled curing ensures the adhesive reaches its full mechanical potential, preventing incomplete polymerisation, which can weaken the bond.

KEY FACTORS IN CURING CONDITIONS

1. TEMPERATURE

Higher temperatures accelerate curing, but too much heat can lead to shrinkage or thermal degradation. Monitoring and maintaining appropriate curing temperatures ensures consistent results.

2. HUMIDITY

Some adhesives, such as cyanoacrylates, are moisture-sensitive and require precise humidity levels for optimal curing. Low humidity can slow down the process, while excessive moisture can weaken the bond.

Bostik quick tip

Always refer to the **product TDS** to check the optimal polymerisation conditions. Available at **born2bond.bostik.com**

3. UV IRRADIANCE (FOR UV-CURABLE ADHESIVES)

UV adhesives rely on exposure to specific wavelengths and intensities. Inconsistent UV exposure can lead to partial curing. Proper calibration of UV lamps ensures thorough curing.

4. MIXING RATIOS (FOR 2K ADHESIVES)

Two-component adhesives must be mixed at the correct ratios. Inaccurate mixing results in incomplete polymerisation and weaker bonds. Automated dispensing systems help maintain precision.

5. PRESSURE

Applying uniform pressure during curing ensures even adhesive distribution and optimal contact between surfaces.

SETTING THE STANDARD FOR ADHESIVE INNOVATION

By mastering surface preparation, curing processes and adhesive selection, engineers can create durable bonds that enhance product performance and longevity. Bostik's expertise in adhesive technology ensures solutions that address the unique challenges faced across industries, delivering reliable bonding results in even the most demanding environments.

If you want to develop the training and resources needed to build expertise using Bostik products through hands-on experience and in-depth technical learning, please consider our **Born2Bond™ Academy** training workshops. See pages 130-131.

3 | Adhesive selection

Selecting the right adhesive requires careful consideration of substrates, environmental conditions and mechanical loads. The adhesive must be compatible with the materials being bonded and able to withstand operational stresses such as vibration, thermal cycling and exposure to chemicals or UV light.

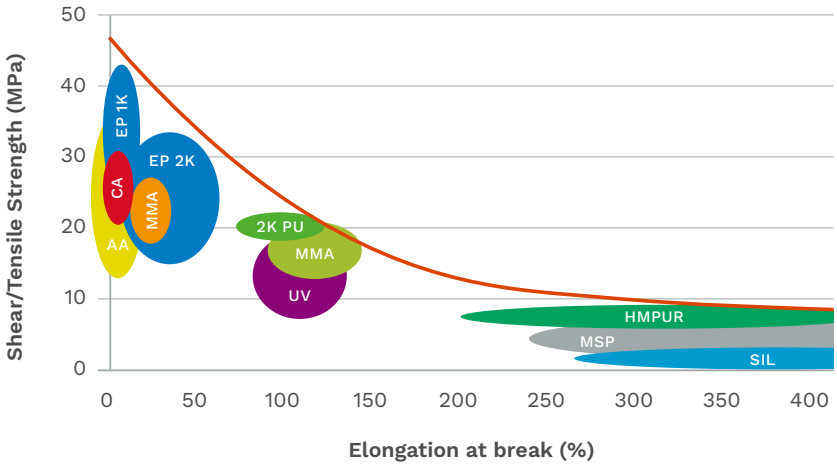
KEY FACTORS IN ADHESIVE SELECTION

1. DEFINITION OF THE ASSEMBLY

Consider the materials and design of the assembly. Substrate compatibility is essential – ensure the adhesive is formulated to bond plastics, metals or composites used in the project. Joint design, including bond line thickness and overlap, impacts the overall strength and longevity of the bond.

2. MECHANICAL CONSTRAINTS

Evaluate the mechanical properties required for the application. Factors like tensile strength, elongation and flexibility determine how well the adhesive handles stress, movement or vibrations. Adhesives must provide durability without cracking or degrading under mechanical loads.



AA = Anaerobic Adhesive
CA = Cyanoacrylate
EP 2K = Two Component Epoxy
EP 1K = Single Component Epoxy
MMA = Methyl Methacrylate (Standard)
2K PU = Two Component Polyurethane
MMA = Methyl Methacrylate (Flexible)
UV = Ultra Violet
HMPUR = Hot Melt Polyurethane Reactive
MSP = Modified-Silyl Polymer
SIL = Silicone

3. ENVIRONMENTAL CONSTRAINTS

Assess the environmental conditions the bonded assembly will face. Adhesives must withstand extreme temperatures, humidity, chemical exposure or UV light without losing performance. Selecting adhesives with proven resistance to these factors ensures long-term reliability.

4. PROCESS LIMITATIONS

Understand the constraints of the manufacturing process. Consider the available dispensing equipment, curing times and production speed. Adhesives that require specific curing methods, such as UV or heat, must align with the capabilities of the production line. International standards, including certifications like ISO 10993 for medical devices or food safety standards, also play a role in adhesive selection.

PREPARE

PRODUCT RANGES INCLUDED WITHIN BOSTIK PREPARE

BOSTIK BORN2BOND™

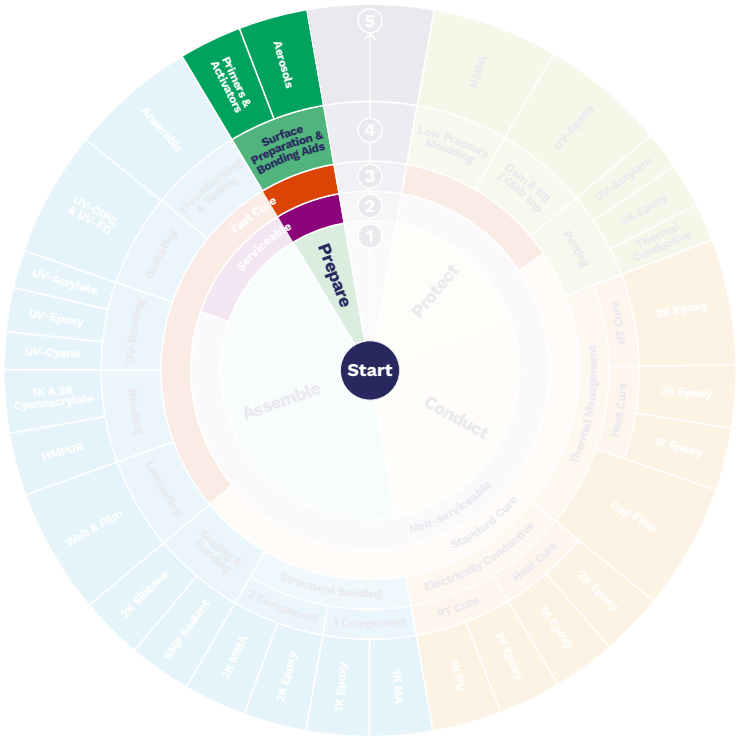
Prepare

ENSURING STRONG FOUNDATIONS FOR DURABLE BONDS

Proper surface preparation is essential for achieving high-quality bonding and durability. Removing contaminants, such as grease, dust and particles, is essential for effective chemical bonding, as their presence can severely impact the quality of the bonding line. In some cases, substrate preparation is also necessary to ensure an efficient assembly process. Factors like low surface energy and the pH of the surface must also be addressed to guarantee good wettability and proper adhesion.

The importance of cleaning and priming are sometimes underestimated, but they are vital for the overall quality and reliability of the assembly. Bostik has developed a wide range of solutions for degreasing, cleaning and preparing substrates, as well as accelerating curing, to enhance the performance of its adhesives.

The **PREPARE** section highlights innovative products and techniques that optimise substrate readiness, ensuring adhesives perform at their best. Explore solutions that simplify preparation while maximising bond strength and consistency.



Service Products

BORN2BOND™ PRE-BONDING CLEANER

Suitable for cleaning of all kinds of substrates prior to bonding. Solvent-based and supplied in aerosol form, it will easily remove grease, oil, lubricants and other contaminants without leaving any residue.

FEATURES

- Fast evaporation
- No residues
- Suitable for multiple substrates including sensitive plastics
- 360° valve spray system can be used at any angle

TYPICAL APPLICATIONS

- Metal and plastic parts, composite materials, flanges, bolts, shafts

360° Valve

Fast Evaporation

Cleaning & Degreasing

Multi-substrate Application

Scan to access product TDS

BORN2BOND™ 6-IN-1 LUBRICANT

Multi-purpose lubricant designed to keep moving parts operating correctly. It repels moisture, prevents corrosion and uses a capillary effect to penetrate rust – making it perfect for general maintenance in workshops.

FEATURES

- Lubricates moving parts
- Prevents seized parts
- Prevents corrosion
- Repels moisture
- Silences squeaky hinges
- Penetrates rust with capillary effect
- 360° valve spray system can be used at any angle

TYPICAL APPLICATIONS

- Servicing and general maintenance in workshops
- Lubrication of couplings and cables
- Removal of moisture from electronics

360° Valve

Capillary Effect to Penetrate Rust

Corrosion Prevention

Moisture Repelling

Multi-Purpose Lubricant

Prevents Seized Parts

Silencing Squeaky Hinges

Scan to access product TDS

BORN2BOND™ SEEZ-RELEASE

Uses a thermal freeze shock effect to loosen rusted, corroded and seized parts within machinery – diffusing directly into rust by capillary force.

FEATURES

- Loosens rusted, corroded and seized parts by thermal freeze shock effect
- Diffuses directly into the rust by capillary force
- 360° valve spray system can be used at any angle

TYPICAL APPLICATIONS

- For the release of rusted and corroded parts
- Facilitates maintenance of seized components in tools, machines and vehicles

360° Valve

Capillary Effect to Penetrate in Parts

Release of Corroded Parts by Freeze Shock

Scan to access product TDS

Always use glasses and gloves when applying adhesives.

BORN2BOND™ ADHESIVE & GASKET REMOVER

Easy to apply and creates a foam-like layer, softening old gaskets and cured adhesives for removal within 15 minutes.

FEATURES

- Removes cured gaskets and adhesives within 15 minutes
- Minimal damage to flanges and surfaces
- Suitable for multiple substrates
- 360° valve spray system can be used at any angle

TYPICAL APPLICATIONS

- Cleaning of surfaces, flanges, gearboxes, metal housings, pumps

360° Valve

Cleaning Residual Parts

Multi-substrate Application

Scan to access product TDS

Products only available in Europe.

Best-practice bonding

SUBSTRATE AND SURFACE PREPARATION

The nature of the substrate and its surface impacts the bondline performance.

- The surface should be cleaned with the appropriate cleaner to eliminate surface contaminants and increase wettability before applying the adhesives in order to achieve the best performance.
- For slightly oily surfaces, an oil tolerant product such as **Born2Bond™ TA-43** and **Born2Bond™ RA-03** can be used.
- For cleaning, we recommend **Born2Bond™ Pre-Bonding Cleaner**.
- To remove cured product, we recommend **Born2Bond™ Adhesive & Gasket Remover**.
- Mechanical pretreatment (sanding, grinding, laser etching, etc.) will improve the performance, especially for retaining and gasketing applications.
- The curing speed is dependent on material, temperature and gap size.
- To improve the curing speed or shorten the fixture time, we recommend using **Born2Bond™ Anaerobic Activator.**

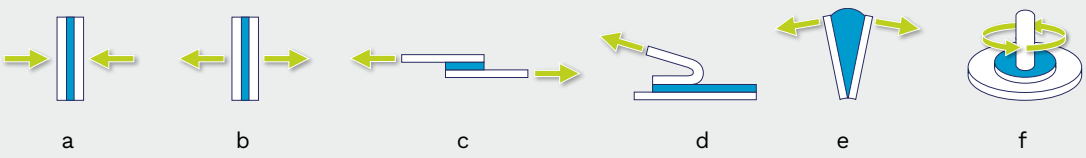
DESIGNING WITH ADHESIVES

There are five major types of stress that affect the bondline (see diagram below).

- Adhesives are strong in shear strength but weaker in peel and cleavage strength (see diagram above).
- Consideration of the gap is important; a thinner gap provides a stronger bondline and helps speed up curing time.
- Joints must be designed based on the load the bondline will be exposed to. For higher loads, try to maximise the bonding area for increased strength.

Types of Stresses

a: Compression
b: Tension
c: Shear
d: Peel
e: Cleavage
f: Torsional



INFLUENCES ON CURING SPEED

- **Temperature:** The higher the temperature, the faster the adhesive will cure. Low temperatures will slow down the curing.
- **Material:** Anaerobic adhesives will cure best on “active” substrates like mild steel, aluminium and copper alloys. “Passive” substrates like stainless steel and chrome will slow down the curing.
- **Gap size:** Smaller gaps will have a faster curing than bigger gaps.
- **Activator:** The use of an activator such as **Born2Bond™ Anaerobic Activator** will speed up the curing and is recommended on passive materials or cold environments.

BOSTIK ACADEMY

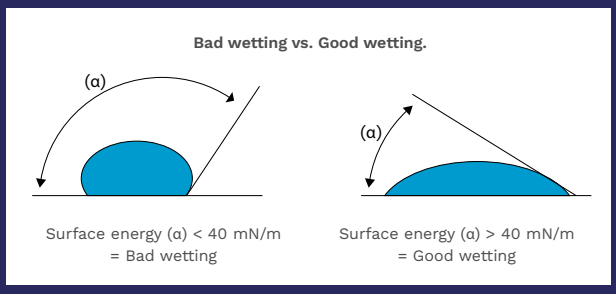
500 mL cobra head aerosols.

All **Born2Bond**™ aerosols are supplied in 500 mL spray cans with a cobra nozzle head for ease of application and improved access to difficult-to-reach areas.

1. 360° valve for use in every direction.
2. Easily switch from large area spraying to precise application, thanks to the thin plastic cannula.
3. Security tab prevents leakage and accidental misuse.
4. Single-handed ergonomic design.

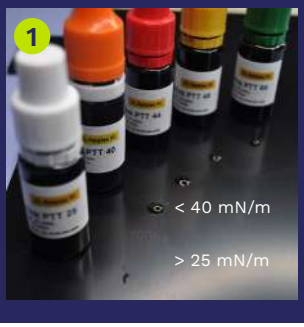
What is wetting?

Wetting is the ability of a liquid to spread on a solid surface. It depends mainly on the surface energy of the solid. If the surface energy is inferior to 40 mN/m, the adhesive won't spread evenly and the solid will be considered unsuitable to bond. In this case, physical surface treatment (for example, plasma or corona treatment) or a **Born2Bond**™ **Primer** will increase the surface energy and improve the adhesion. The surface energy can be easily measured by using calibrated inks.



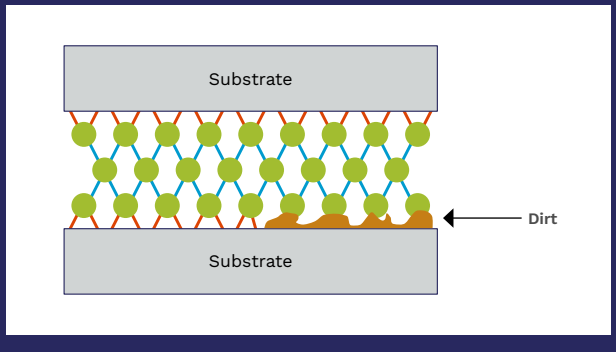
Examples of surface energy measuring inks

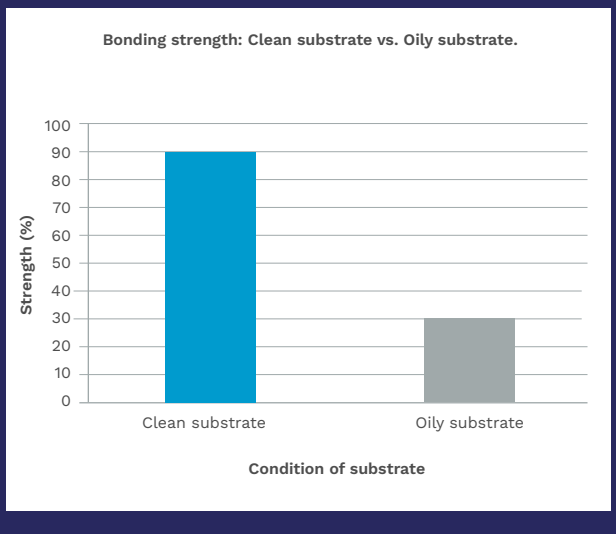
1. In this example, the surface energy is between 25 and 40 mN/m, therefore the surface is difficult to bond. A surface treatment would be preferable.
2. Left half without treatment (< 25 mN/m). Right half with nanoflame treatment (> 66 mN/m).



Why is cleaning important?

Oil and grease can make a barrier between the adhesive and the substrates, decreasing the mechanical bonding properties.





Service Products

BORN2BOND™ ANAEROBIC ACTIVATOR

Solvent-based product that accelerates and supports anaerobic adhesive curing on passive metals like stainless steel, chromated metals and zinc. It can also accelerate cure speed in larger gaps and increase bonding strength.

FEATURES

- Fast-evaporating with no residue
- Can be used at low temperatures (< 5 °C)
- On-part lifetime of 30 days

TYPICAL APPLICATIONS

- Stainless steel bolts and shafts
- Threadlocking, pipe sealing, gasketing and retaining

Fast Bonding

Increases Curing Speed

Easy to use

Fast Evaporation

Multi-substrate Application

Scan to access product TDS

Anaerobic Activator available in Europe only.

BORN2BOND™ PRIMER

Used to make polyolefin and other low surface energy substrates suitable for bonding with cyanoacrylate adhesives*. It is only recommended for difficult-to-bond substrates, which include polyethylene, polypropylene, polytetrafluoroethylene (PTFE) and thermoplastic rubber materials. **Born2Bond™ Primer** is not recommended in assemblies where high peel strength is required.

FEATURES

- Improves adhesion to difficult-to-bond substrates
- Specially formulated for the adhesion of low surface energy substrates
- Suitable for use with other cyanoacrylates
- Dries in seconds
- Increases adhesion strength
- Certification: ISO10993-5

TYPICAL APPLICATIONS

- Preparation of surfaces
- Bonding of difficult-to-bond plastics and polyolefins

Multi-substrate Application

Fast Evaporation

Scan to access product TDS

*Optimum results with Ultra LV, MV and Aquafast.

BORN2BOND™ BOOSTER

Surface preparation product that accelerates cyano-acrylate curing and is specially designed for curing on wood and plastic surfaces. Its long open time and short drying time makes it an ideal choice for professionals. Unlike other accelerators, **Born2Bond™ Booster** is particularly suitable for promoting quick adhesion when joining parts that are immediately subjected to high stress, like edge coating or shoe soles.

FEATURES

- Increases curing speed of cyanoacrylate adhesives on acidic woods and porous substrates
- Dries in seconds
- Open time: 24 hours
- Transparent
- Easy to use

TYPICAL APPLICATIONS

- Preparation of surfaces
- Acceleration of bonding for wood, leather and vertical surfaces

Increase curing speed

Easy to use

Fast Evaporation

Scan to access product TDS

Always use glasses and gloves when applying adhesives.

BOSTIK CLEANER

Bostik Cleaner is a powerful preparation agent that is highly suitable for cleaning and degreasing substrates prior to bonding.

FEATURES

- Elevated evaporation rates
- 'No stress-cracking' on plastic
- Easily diluted for use
- High efficiency for degreasing

TYPICAL APPLICATIONS

- Cleaning and degreasing of a variety of substrates

Cleaning & Degreasing

Fast Evaporation

Multi-substrate Application

Scan to access product TDS

Bostik Cleaner available in Europe only.

ASSEMBLE

PRODUCT RANGES INCLUDED WITHIN BOSTIK ASSEMBLE

BOSTIK BORN2BOND™

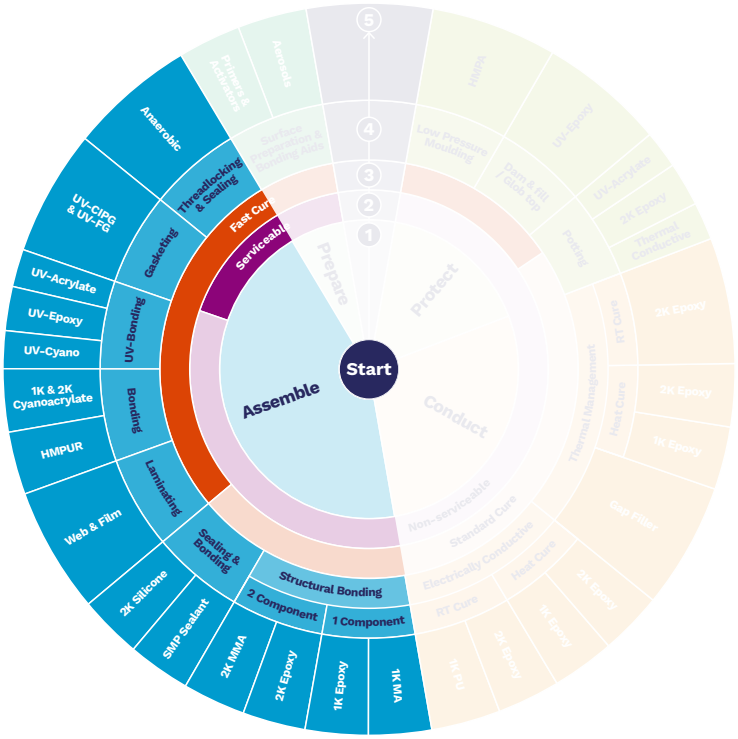
Assemble

MEETING THE CHALLENGES OF MODERN MANUFACTURING

Designers and manufacturers face growing challenges in production. They need to achieve Right First Time (RFT) durable bonds with increasingly complex and diverse materials. This includes integrating mechanical and chemical fasteners as well as ensuring components can withstand greater mechanical stress and harsh environments. Bostik's innovative assembly adhesives tackle these pain points while addressing ever-evolving industry legislation and sustainability demands.

The **ASSEMBLE** section features solutions tailored for industries such as automotive, aerospace and electronics, offering a wide range of innovative adhesive technologies that enhance product durability and streamline manufacturing processes.

Our range not only provides adhesives designed to deliver improved performance, including speed and ease of use, but products that truly stand out from competitors when it comes to safety and sustainability.



ASSEMBLE
ANAEROBIC

BOSTIK BORN2BOND™ ANAEROBIC

BORN2BOND™

Anaerobic

Born2Bond™ Anaerobic Adhesives offer high-performance solutions for fastening and sealing applications such as threadlocking, pipe sealing, gasketing and retaining. Designed with workplace safety and environmental sustainability in mind, selected grades are NSF-certified, providing a reliable alternative to traditional mechanical fixings.

Threadlocking

BORN2BOND™

ONE-STOP SOLUTIONS FOR ALL THREADLOCKING REQUIREMENTS

Single-component, one-stop solutions for all threadlocking requirements, including preventative maintenance.

Eliminating the cost and inconvenience of holding extensive inventory, these liquid adhesives fill and seal all voids to achieve a cohesive connection of metal parts that remains fixed even when subjected to extreme vibrations, temperatures or chemical substances.

Multiple Strengths | Oil Tolerant | Up To 180 °C | Fluorescent | Corrosion Prevention

FEATURES

- 100% connection – no loosening
- Evenly distribute force
- Vibration resistant
- Corrosion prevention
- Variety of viscosities and strengths
- Suitable for active and passive metals

TYPICAL APPLICATIONS

- Screws and bolts
- Mechanical parts assembly
- Machine engineering
- Gear manufacturing
- Engines and powertrains

FOCUSED ON PERFORMANCE

Born2Bond™ Threadlocking Anaerobic Adhesives maintain a secure hold under vibration and temperature changes. They effectively seal threads and resist corrosion, extending the lifespan of assemblies. Additionally, they simplify inventory needs and **offer a cost-effective solution**, making them a superior choice for various applications. A single TA (threadlocking adhesive) **can replace a large inventory of mechanical fasteners**.

BORN2BOND™ THREADLOCKING RANGE

The list of features in the following tables will help you identify which products best match your needs.

STANDARD GRADES	TA-22	TA-43	TA-70	TA-90
BASE	Anaerobic acrylic adhesive			
VISCOSITY	900 to 1,500 mPa·s	2,500 to 3,000 mPa·s	400 to 600 mPa·s	20 to 55 mPa·s
FIXTURE TIME	20 min	<15 min	10 min	7 min
BREAKAWAY STRENGTH ON STEEL (ISO 10964) UNSEATED	9 Nm	15 Nm	18 Nm	6 Nm
COLOUR	Purple (UV fluorescence)	Blue (UV fluorescence)	Green (UV fluorescence)	
TEMPERATURE RANGE	-55 to 150 °C		-55 to 180 °C	-55 to 210 °C
CERTIFICATIONS	NSF S6			–
PACKAGING	Bottles: 50 mL and 250 mL			

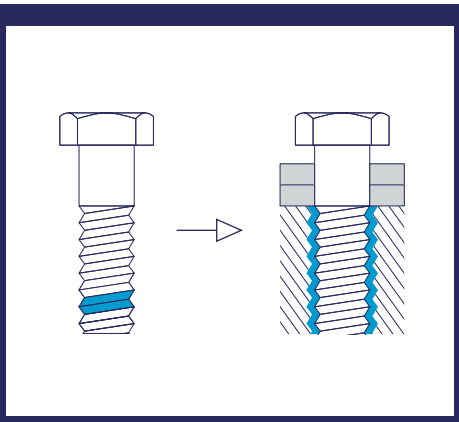
WL GRADES	TA-WL* LOW STRENGTH	TA-WL* MEDIUM STRENGTH	TA-WL* HIGH STRENGTH
BASE	Anaerobic acrylic adhesive		
VISCOSITY	900 to 1,500 mPa·s	2,000 to 3,000 mPa·s	350 to 550 mPa·s
FIXTURE TIME	<30 min	20 min	10 min
BREAKAWAY STRENGTH ON STEEL (ISO 10964) UNSEATED	3 Nm	10 Nm	20 Nm
COLOUR	Purple (UV fluorescence)	Blue (UV fluorescence)	Green (UV fluorescence)
TEMPERATURE RANGE	-55 to 150 °C		-55 to 210 °C
CERTIFICATIONS	–	NSF S6	–
PACKAGING	Bottles: 50 mL and 250 mL		

BOSTIK ACADEMY

Lock up to **1,000 bolts** with **just one bottle.**

With one of our 50 mL bottles, using one small drop you can lock:

M5 BOLTS	M10 BOLTS	M15 BOLTS	M20 BOLTS
1,000	500	250	125



TDS and **SDS** available at **born2bond.bostik.com**

*Available in selected regions only. Not classified as a hazardous mixture according to CLP Regulation (EC) 1272/2008 in EU. **Always use glasses and gloves when applying adhesives.**

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

Pipe Sealing

BORN2BOND™

SOLUTIONS FOR ALL TYPES OF THREADED METAL PIPES AND FITTINGS

Reliable and adaptable solutions, suitable for all types of threaded metal pipes and fittings and both new installations and preventative maintenance.

Filling and sealing all voids, these single component adhesives provide 100% surface-to-surface contact, achieving a cohesive, durable connection that will not fail even when subjected to vibration, extreme temperatures or chemical substances. A convenient, cost-effective alternative to conventional sealing alternatives like hemp or PTFE tapes, these adhesives eliminate the need for additional inventory.

Multiple Strengths | Up To 180 °C | Multiple Viscosities | Fluorescent | Sealing

FEATURES

- 100% connection – no loosening
- Vibration resistant
- Corrosion prevention
- Single component
- Variety of viscosities and strengths
- Suitable for active and passive metals
- Prevents leakages

TYPICAL APPLICATIONS

- Metal pipes and fittings
- Engines and powertrains
- Pumps and compressors
- Liquid and gas storage
- Hydraulic systems

FOCUSED ON PERFORMANCE

Born2Bond™ Pipe Sealing Anaerobic Adhesives save MRO operatives time compared to using PTFE tape or hemp due to ease of application, instant sealing and durable results. These adhesives are applied directly to threads, **cure immediately** and provide a reliable seal resistant to vibrations, high temperatures and chemicals. This efficiency **reduces the need for rework or maintenance**, making them an **improved time-saving option** for pipe sealing applications.

BORN2BOND™ PIPE SEALING RANGE

The list of features in the following tables will help you identify which products best match your needs.

STANDARD GRADES	PA-77	PA-42
BASE	Anaerobic acrylic adhesive	
VISCOSITY	80,000 to 90,000 mPa·s	400 to 800 mPa·s
FIXTURE TIME	60 min	10 to 20 min
BREAKAWAY STRENGTH ON STEEL (ISO 10964) LOOSE	10 Nm	16 Nm
COLOUR	Yellow (UV fluorescence)	Brown (UV fluorescence)
TEMPERATURE RANGE	-55 to 180 °C	-55 to 150 °C
CERTIFICATIONS	NSF S2, DVGW, WRAS	–
PACKAGING	Accordion bottle: 50 mL, Tube: 250 mL	Bottles: 50 mL and 250 mL

WL GRADES	PA-WL* LOW STRENGTH
BASE	Anaerobic acrylic adhesive
VISCOSITY	100,000 to 200,000 mPa·s
FIXTURE TIME	30 min
BREAKAWAY STRENGTH ON STEEL (ISO 10964) LOOSE	3 Nm
COLOUR	Yellow (UV fluorescence)
TEMPERATURE RANGE	-55 to 180 °C
CERTIFICATIONS	NSF S2, DVGW, WRAS
PACKAGING	Accordion bottle: 50 mL, Tube: 250 mL

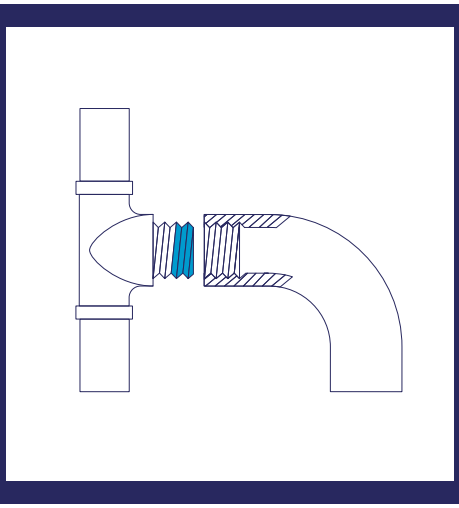
BOSTIK ACADEMY

Seal up to **500 pipes** with **just one bottle.**

Our packaging has been developed to allow the controlled flow of adhesive depending on the size of a pipe's thread.

Using one of our 50 mL bottles or accordions, by applying just one ring of pipe sealant to the male part of a pipe, you can seal:

500 pipes (1/4 nozzle turn)
400 pipes (1/2 nozzle turn)
300 pipes (3/4 nozzle turn)
200 pipes (1 full nozzle turn)



TDS and **SDS** available at **born2bond.bostik.com**

*Available in selected regions only. Not classified as a hazardous mixture according to CLP Regulation (EC) 1272/2008 in EU. **Always use glasses and gloves when applying adhesives.**

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

BACK TO PRODUCT SELECTOR

Gasketing

BORN2BOND™

FLEXIBLE AND DURABLE ALTERNATIVES TO PRE-FORMED GASKETS

Single-component, cost-effective alternative to conventional pre-formed gaskets on metal flanges. Flexible, durable and resistant to wear and tear, they can be used during installation or for preventative maintenance.

Achieving 100% surface-to-surface contact, the adhesives create a cohesive, durable connection that can withstand vibration, extreme temperatures and exposure to oils, solvents and water. They also offer better stress distribution and, unlike traditional gaskets, do not require any 'bedding-in'.

Multiple Strengths | Up To 230 °C | Multiple Viscosities | Fluorescent | Sealing

FEATURES

- Outstanding fatigue strength
- Vibration resistant
- Corrosion prevention
- Prevents sagging and micro-movement
- Variety of viscosities and strengths
- Instant and flexible seal options
- Suitable for active and passive metals
- Suitable for metals with different thermal expansion coefficients

TYPICAL APPLICATIONS

- Flange connections
- Oil sump sealing
- Engines and powertrains
- Pumps and compressors
- Storage of liquids and gas
- Gearboxes and transmissions

FOCUSED ON PERFORMANCE

Born2Bond™ Gasketing Anaerobic Adhesives can help reduce typical MRO inventory by up to 90%. This product can replace multiple conventional pre-formed gaskets with a single-component solution that can be used for various applications. This versatility means that there is **no need to stock a wide range of gasket sizes and types**, significantly cutting down on storage requirements and increasing the likelihood of successful repair and maintenance without the need to order unique parts.

BORN2BOND™ GASKETING RANGE

The list of features in the following tables will help you identify which products best match your needs.

STANDARD GRADES	GA-74	GA-18	GA-10
BASE	Anaerobic acrylic adhesive		
VISCOSITY	30,000 to 50,000 mPa·s	200,000 to 800,000 mPa·s	40,000 to 140,000 mPa·s
FIXTURE TIME	15 to 30 min	<12 h	
TENSILE SHEAR STRENGTH ON STEEL (ISO 4587)	9 N/mm²	8 N/mm²	3 N/mm²
COLOUR	Orange (UV fluorescence)	Red (UV fluorescence)	Pink (UV fluorescence)
TEMPERATURE RANGE	-55 to 150 °C	-55 to 180 °C	-55 to 230 °C
CERTIFICATIONS	–	NSF S2	–
PACKAGING	Accordion bottle: 50 mL, Tube: 250 mL	Accordion bottle: 50 mL, Cartridge: 300 mL	Accordion bottle: 50 mL, Tube: 250 mL

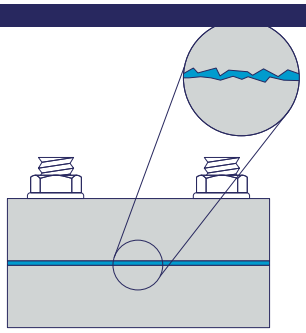
WL GRADES	GA-WL* INSTANT GASKET	GA-WL* FLEXIBLE GASKET
BASE	Anaerobic acrylic adhesive	
VISCOSITY	30,000 to 100,000 mPa·s	60,000 to 100,000 mPa·s
FIXTURE TIME	45 min	40 min
TENSILE SHEAR STRENGTH ON STEEL (ISO 4587)	6 N/mm²	8 N/mm²
COLOUR	Orange (UV fluorescence)	Red (UV fluorescence)
TEMPERATURE RANGE	-55 to 230 °C	
CERTIFICATIONS	–	
PACKAGING	Accordion bottle: 50 mL, Tube: 250 mL	Syringe: 50 mL, Tube: 250 mL

BOSTIK ACADEMY

Seal up to **7 linear metres** of gasket with **just one bottle.**

With one of our 50 mL accordions, you can seal the following gasket lengths:

- Nozzle fully open: **up to 2 linear metres.**
- Nozzle partially open: **up to 7 linear metres.**



Unlike traditional pre-formed gaskets, anaerobic adhesives will completely fill all spaces (despite substrate rugosity), achieving 100% cohesion, greater structural rigidity and will withstand higher power transmissions and pressures.

TDS and **SDS** available at **born2bond.bostik.com**

*Available in selected regions only. Not classified as a hazardous mixture according to CLP Regulation (EC) 1272/2008 in EU. **Always use glasses and gloves when applying adhesives.**

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

BACK TO PRODUCT SELECTOR

Retaining

BORN2BOND™

SINGLE-COMPONENT BONDING SOLUTIONS FOR CYLINDRICAL ASSEMBLIES

Cost effective, adaptable alternative or addition to mechanical retaining processes. Capable of bonding all types of cylindrical assemblies, these single-component solutions also seal all metal joints to eliminate the risk of fretting corrosion.

They achieve 100% surface-to-surface contact, producing a cohesive, durable connection capable of withstanding vibration, extreme temperatures and chemical substances.

Multiple Strengths | Oil Tolerant | Up To 180 °C | Multiple Viscosities | Fluorescent

FEATURES

- High power transmission
- Resistance to dynamic loads
- Vibration resistant
- Corrosion prevention
- Variety of viscosities and strengths
- Suitable for active and passive metals

TYPICAL APPLICATIONS

- Bearing assembly
- Gear manufacturing
- Machine engineering
- Drive shafts
- Conveyor belts
- Centrifuges
- Turbines

SUSTAINABILITY ENABLER

The **Born2Bond™ WL** (White Label) Anaerobic range has been designed to uphold high standards. This range is classified as **not hazardous** according to EU regulation (EC) 1272/2008 (CLP) and **simplifies EHS assessments** without compromising performance. These solutions can be **safer for users** than alternatives which are classified as hazardous according to EU regulation (EC) 1272/2008 (CLP).

BORN2BOND™ RETAINING RANGE

The list of features in the following tables will help you identify which products best match your needs.

STANDARD GRADES	RA-38	RA-03	RA-20	RA-41	RA-48	RA-60
BASE	Anaerobic acrylic adhesive					
VISCOSITY	2,000 to 3,000 mPa·s	100 to 150 mPa·s	5,000 to 12,000 mPa·s	400 to 800 mPa·s	400 to 600 mPa·s	Paste
FIXTURE TIME	10 min	15 min	60 min	20 to 30 min	10 to 15 min	
COMPRESSIVE SHEAR STRENGTH ON STEEL (ISO 10123)	16 N/mm²		7 N/mm²	8 N/mm²	5 N/mm²	4 N/mm²
COLOUR	Green (UV fluorescence)			Yellow (UV fluorescence)	Green (UV fluorescence)	Grey (UV fluorescence)
TEMPERATURE RANGE	-55 to 180 °C		-55 to 230 °C	-55 to 150 °C	-55 to 180 °C	-55 to 150 °C
CERTIFICATIONS	NSF S5		–			NSF S5
CERTIFICATIONS	Bottles: 50 mL and 250 mL					Accordion bottle: 50 mL

WL GRADES	RA-WL*
BASE	Anaerobic acrylic adhesive
VISCOSITY	350 to 550 mPa·s
FIXTURE TIME	< 30 min
COMPRESSIVE SHEAR STRENGTH ON STEEL (ISO 10123)	5 N/mm²
COLOUR	Green (UV fluorescence)
TEMPERATURE RANGE	-55 to 180 °C
CERTIFICATIONS	–
PACKAGING	Bottles: 50 mL and 250 mL

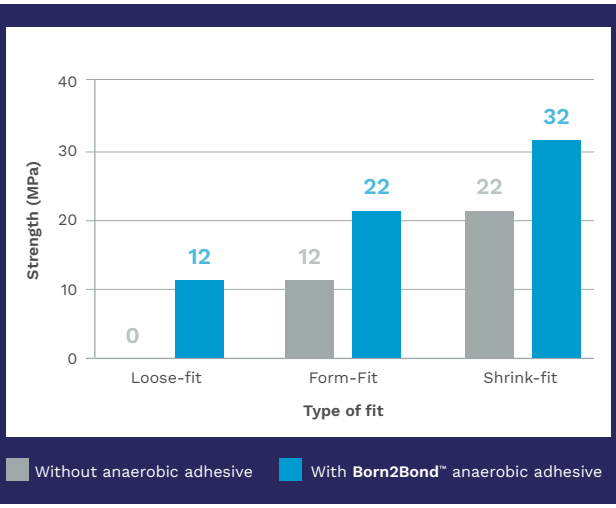
BOSTIK ACADEMY

Retain stronger, with Born2Bond™ anaerobic adhesives.

LOOSE-FIT: No mechanical assembly to join the male and female parts.

FORM-FIT: A retaining technique where a pin or screw is used to join two parts together.

SHRINK-FIT: A retaining technique using thermal expansion to join two parts together. The outer part is heated to expansion and upon returning to room temperature, the part contracts on the inner part, creating a tight fit.



TDS and SDS available at **born2bond.bostik.com**

*Available in selected regions only. Not classified as a hazardous mixture according to CLP Regulation (EC) 1272/2008 in EU. **Always use glasses and gloves when applying adhesives.**

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

ASSEMBLE

UV-CIPG & UV-FG

BOSTIK BORN2BOND™
UV-CIPG & UV-FG

BORN2BOND™

UV-CIPG & UV-FG

Born2Bond™ UV-CIPG (Cure-In-Place Gasket) and UV-FG (Foam Gasket) offer precise and reliable sealing solutions for today's manufacturing. These UV-curable adhesives ensure rapid curing, strong durability and resistance to high temperatures, humidity and chemicals. Perfect for automotive electronics, sensors and advanced assemblies, they enhance efficiency while maintaining product performance and flexibility.

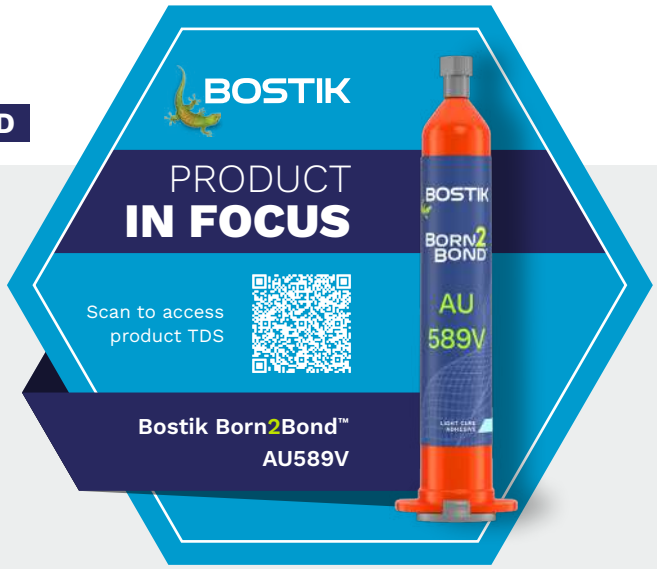
UV-CIPG & UV-FG

BORN2BOND™

ADDRESSING THE CHALLENGES ASSOCIATED WITH TRADITIONAL GASKETS

AU589V is a single-component, light-cure gasket material based on acryl acrylate. It has excellent flexibility and toughness to apply as a water/dustproof gasket.

This product is supplied in viscous paste form and can be dispensed by semi- or fully automated systems such as air, mechanical and jet valve. Its ability to cure within seconds after light exposure allows faster processing, higher productivity, lower material cost resulting overall in lower production costs.



Flexible & Elastic | Precision | UV Curing | Waterproof | Multiple Viscosities | Serviceable

FEATURES

- Single component
- Extremely flexible and tough
- No cracking under compression or deformation
- Cures immediately with UV light

TYPICAL APPLICATIONS

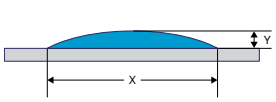
- Automotive related components (ECUs, sensors, cameras, ADAS etc.)
- Cameras and wearable electronics
- Replacement of O-rings
- Complex gaskets on flat surfaces or shallow grooves

BOSTIK ACADEMY

Ensuring a **waterproof** gasket seal.

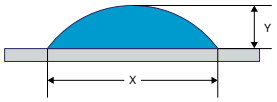
Gasket sealing capability is directly linked to the bead height-to-width ratio.

If Y/X < 0.5



If the gasket height is too low, it cannot be compressed and therefore will not result in a waterproof seal.

If 0.5 < Y/X < 0.9



If the gasket height is maintained, it can be compressed, resulting in good component waterproofing.

BOSTIK ENGINEERING ADHESIVES
FOCUSED ON PERFORMANCE

FOCUSED ON PERFORMANCE

Born2Bond™ UV Gasketing solutions offer enhanced product serviceability with **on-demand sealing**, eliminating the need to pre-produce rubber-moulded gaskets. This approach **increases sealing capabilities**, reduces labour intensity and supports the trend to reduce the number of SKUs, in turn **reducing the amount of inventory stock space required**.

BORN2BOND™ UV-CIPG & UV-FG RANGE

The list of features in the following tables will help you identify which products best match your needs.

UV-CIPG (Cure-In-Place Gasket)		**AU589V**	**AU060RRB**
BEFORE CURE			
VISCOSITY @25 °C	@0.5 rpm (mPa·s)	788,000	400,000
	@5 rpm (mPa·s)	153,600	65,000
THIXOTROPIC INDEX (Vis 0.5 rpm/5 rpm)		5.1	6.1
COLOUR		Colour change after curing under UV light (Purple > Dark green)	
AFTER CURE (metal halide lamp (UV-A: 4,000 mJ/cm²))			
HARDNESS @23 °C	Shore A	12	34
	Shore 00	63	–
FILM PROPERTIES @23 °C	Strength (MPa)	0.8	5.3
	Elongation (%)	480	600
COMPRESSION SET* (70 °C, 22 h)	25% compression (%)	–	4
	50% compression (%)	6	
COMPRESSION SET* (125 °C, 24 h)	50% compression (%)	8	11
DURABILITY	85 °C 95%RH	1,000 h	
	120 °C	2,000 h	–
APPLICATION TEMPERATURE		-40 to 120 °C	
PACKAGING		Syringe: 50 g Cartridges: 180 g and 360 g	Syringe: 40 g Cartridges: 160 g and 320 g

UV-FG (Foam Gasket)		**AU003**
APPEARANCE		Light brown to brown
CHEMICAL TYPE		Urethane acrylate
DENSITY @23 °C		1.1 g/cm³
VISCOSITY @50 °C		14,000 mPa·s
HARDNESS @23 °C (SHORE 00)		25
ELONGATION AT BREAK @23 °C		700%
TENSILE STRENGTH @23 °C		140 kPa
COMPRESSION SET	50% comp., 23 °C, 24 h	5%
	50% comp., 80 °C, 24 h	36%
FOAM RATIO @23 °C		60%
PACKAGING		Pail: 4 kg

TDS and **SDS** available at **born2bond.bostik.com**

*ASTM D395 or JIS K6262.
Always use glasses and gloves when applying adhesives.

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

ASSEMBLE UV-ACRYLATE

BOSTIK BORN2BOND™ & POLYTEC PT UV-ACRYLATE

BORN2BOND™ Polytec PT

UV-Acrylate

Thanks to the recent acquisition of Polytec PT – and Bostik's backward integration in acrylic monomers – we have developed an extensive portfolio of advanced, high-performing technologies designed to tackle the constantly evolving challenges of even more flexible and durable materials.
The UV-Acrylate range is a core technology for Bostik, enabling precise bonding and durability under the most demanding conditions. **Born2Bond™** and **Polytec PT** UV-Acrylates meet these challenges with advanced solutions offering low shrinkage, transparency and resistance to impact, chemicals and temperature. Ideal for electronics, luxury goods and automotive applications, these adhesives deliver robust performance, reliability and ease of use without compromising critical aesthetics.

UV-Acrylate
General use

Polytec PT

BORN2BOND™

IMPROVE AESTHETICS, DURABILITY AND THROUGHPUT

Highly durable, transparent when cured and easy to manage. Can be used with metals, glass and plastics, including ABS and PMMA.

The range can be dispensed using a wide variety of equipment and methods. Patented Nanostrength® technology developed by Bostik's parent company, Arkema.

Long Lasting | Gap Filling | No Cracks | Transparent | UV Resistant | Fast Curing

FEATURES

- Highly durable - impact, chemical and temperature resistant
- Wide UV wavelength range (365 to 405 nm)
- High elongation
- Compatible with various dispensing equipment

TYPICAL APPLICATIONS

- Luxury goods
- Electronics
- Automotive
- General assembly

FOCUSED ON PERFORMANCE

Bostik's UV-Acrylate products **show long durability**. They embrace the benefits of **solvent-free UV technology**, which not only saves space but also reduces infrastructure needs. We've chosen cutting-edge LED technology for our light source, **ensuring efficiency and reliability**. Leveraging our vertical integration with the Arkema group, we have formulated our product incorporating the **latest advancements in photoinitiators and monomers.**

BORN2BOND™ & POLYTEC PT UV-ACRYLATE GENERAL USE RANGE

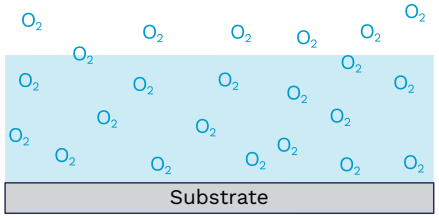
The list of features in the following tables will help you identify which products best match your needs.

	LC 2100 GEL	LC 177 GEL
VISCOSITY	Available in various viscosities	
ELONGATION	250 to 290%	170 to 180%
TENSILE STRENGTH	25 to 30 MPa	9 to 11 MPa
LAP SHEAR STRENGTH - PMMA	5 MPa	7 MPa
LAP SHEAR STRENGTH - PC	14 MPa	5 MPa
HARDNESS (SHORE)	45 to 50 D	20 to 35 D
WATER ABSORPTION	2.5%	1%
FIXTURE TIME LED 405 nm (500 mW/cm²)*	1 sec	6 sec
MATERIALS	PC, ABS, FR4, Aluminium, Stainless Steel, Glass	PMMA, ABS, Aluminium, Stainless Steel, Glass
PACKAGING	Cartridges: 30 cc and 600 cc	

BOSTIK ACADEMY

Why UV-acrylic adhesives can remain **tacky once cured**.

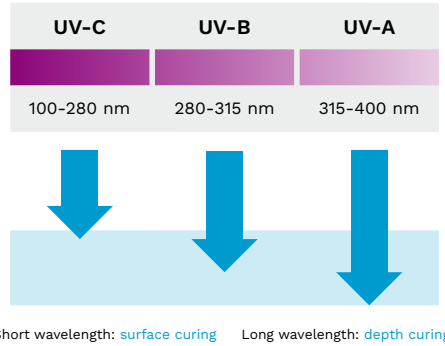
UV acrylic adhesives cure by radical polymerisation. The contact with oxygen (O_2) inhibits the reaction, which is why when cured by UV, the adhesive part that remains in contact with air does not fully cure and remains tacky.



How to get a **tack-free cure** product.

To get a tack-free surface, we can combine both UV-A (low energy but in-depth polymerisation) and UV-C (more powerful, but no penetration in adhesives and only surface curing).

Influence of wavelength



Short wavelength: surface curing Long wavelength: depth curing

TDS and **SDS** available at **born2bond.bostik.com**

*Measured with UV Meter LEDCure L-405. Some specific materials might be more challenging to bond than others, please consult our technical support for guidance. **Always use glasses and gloves when applying adhesives.**

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

UV-Acrylate
Plastic bonding

Polytec PT

ADVANCED UV-ACRYLATE FOR PLASTIC BONDING

Polytec PT UV 2181-1 is a cutting-edge, single-component UV-acrylate/methacrylate hybrid adhesive designed for precise plastic bonding.

With solvent-free, UV/VIS-curing properties, it offers excellent elongation, impact resistance and on-demand curing. Perfect for medical devices, displays and electronics, this adhesive ensures superior performance and versatility for high-precision bonding applications.

UV Resistant | Gap Filling | Fast Curing | Higher Durability

FEATURES

- Very fast cure on demand (UV/VIS)
- Multiple viscosities
- Very good adhesion to thermoplastic substrates
- Impact resistant

TYPICAL APPLICATIONS

- Display Bonding
- Electronics
- Plastic film lamination (high peel strength)
- Medical devices

FOCUSED ON PERFORMANCE

Bostik's product range is **designed to bond both similar and dissimilar substrates**, including low surface energy materials, with appropriate surface treatments like plasma or primers. When it comes to bonding plastics or dissimilar substrates, we often need to fine-tune our approach or create innovative formulations. This is especially true for the increasingly popular composites and fibreglass materials, which typically require specialised formulations. With our expertise in polymer science, **Bostik and Arkema are perfectly equipped to deliver tailored solutions** that meet the evolving needs of our customers.

BORN2BOND™ & POLYTEC PT UV-ACRYLATE PLASTIC BONDING RANGE

The list of features in the following table will help you identify which products best match your needs.

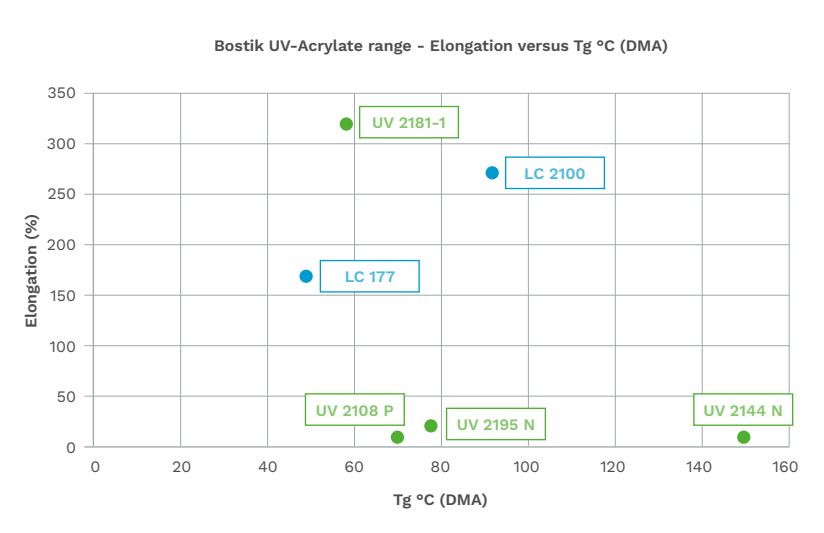
	UV 2181-1	UV 2108 P	UV 2195 N	UV 2144 N
CHEMICAL BASE	Methacrylate/acrylate		Hybrid system	Methacrylate/acrylate
CURING	UV/Visible			
APPEARANCE	Transparent	Transparent, fluorescent	Slightly yellow, transparent	Transparent
VISCOSITY @23 °C	300 to 1,200 mPa·s	140 to 250 mPa·s	6,100 mPa·s	8,000 to 10,000 mPa·s
THIXOTROPY	Yes	No		
FLEXIBILITY	Yes	No		
SHORE HARDNESS*	D 53	D 84	D 78	D 85
SUBSTRATE COMPATIBILITY	Universal‡		Difficult-to-bond plastics (e.g. PA, PBT, PPS, LCP)	Plastics
CERTIFICATIONS	ISO 10993-5		–	
PACKAGING	Cartridge: 30 g	Cartridge: 30 g Bottle: 1 kg	Cartridge: 30 g	

BOSTIK ACADEMY

Elongation versus Tg °C – Plastic bonding.

The glass transition temperature (Tg) and elongation give information about the expected behaviour of the adhesive at high temperatures. It is also important to test the substrate compatibility by doing trials.

At least one substrate must be transparent to UV.



TDS and **SDS** available at **born2bond.bostik.com**

*Shore hardness with dual curing. ‡Some specific materials might be more challenging to bond than others, please consult our technical support for guidance.
Always use glasses and gloves when applying adhesives.

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

UV-Acrylate
Glass and metal bonding

Polytec PT

SUPERIOR UV-ACRYLATE FOR GLASS AND METAL BONDING

Polytec PT UV 1306 delivers outstanding adhesion for glass, metal and plastic components.

This single-component UV-acrylate/methacrylate hybrid adhesive offers up to 250% elongation, high impact and moisture resistance and on-demand curing. Ideal for digital cameras, lenses and optical devices, it ensures durable and reliable performance in demanding applications.

UV Resistant
Gap Filling
Fast Curing
Higher Durability

FEATURES

- Highly transparent
- Multiple viscosities
- Impact resistant
- Temperature shock resistant

TYPICAL APPLICATIONS

- Digital cameras
- Lenses
- Structural glass bonding
- Luxury packaging
- White goods
- Active alignment

FOCUSED ON PERFORMANCE

Bostik's products address designers' needs for **transparency, structural bonding, shock absorption or dimensional stability**. By employing high power LEDs as a light source, low temperature load and low stress on the substrate is achieved. They are **compatible with both automatic and non-automatic dispensing systems.**

BORN2BOND™ & POLYTEC PT UV-ACRYLATE GLASS AND METAL BONDING RANGE

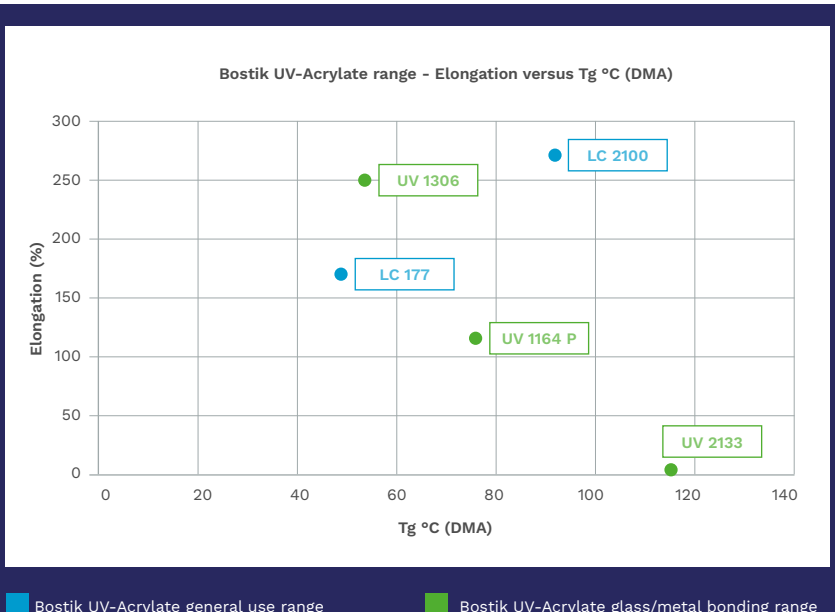
The list of features in the following table will help you identify which products best match your needs.

	UV 1306	UV 2133	UV 1164 P
CHEMICAL BASE	Hybrid system		Methacrylate/acrylate
CURING	UVA	UV/Visible	
APPEARANCE	Highly transparent, clear	Grey	Transparent
VISCOSITY @23 °C	150 to 200 mPa·s	40,000 to 50,000 mPa·s	1,800 to 2,200 mPa·s
THIXOTROPY	No	Yes	No
FLEXIBILITY	Yes	No	Yes
SHORE HARDNESS	D 62	D 80	D 78
SUBSTRATE COMPATIBILITY	Glass & Metal		
PACKAGING	Cartridge: 30 g	Cartridges: 10 cc (15 g) and 30 cc (55 g)	Cartridge: 30 g

BOSTIK ACADEMY

Elongation versus Tg °C – glass/metal bonding.

For glass-to-metal bonding it is important to consider the different Coefficients of Thermal Expansion (CTE) of the materials. You need to use a flexible adhesive that can compensate for the different CTEs or use an adhesive with a CTE in-between. For example, UV 2133 is suitable for glass-to-metal bonding thanks to its CTE and high Tg °C, despite its high stiffness.



TDS and **SDS** available at **born2bond.bostik.com**

Always use glasses and gloves when applying adhesives.

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

UV-Acrylate
Dual cure

Polytec PT

INNOVATIVE DUAL-CURE UV-ACRYLATE ADHESIVE

Polytec PT DC 2307 combines UV and thermal curing for superior adhesion across diverse substrates.

With a strength/elongation balance, advanced toughening technology and excellent water resistance, it's ideal for protecting sensitive electrical components, pin sealing and sensor potting, ensuring exceptional durability in challenging environments.

Light & Secondary (Dual) Cure

Gap Filling

Fast Curing

Higher Durability

Fluorescent

FEATURES

- Very fast cure on demand (UV/VIS)
- Secondary curing mechanism
- Innovative toughening technology
- Very good water resistance

TYPICAL APPLICATIONS

- Protection of sensitive electrical parts
- Pin-sealing
- Sensor potting (e.g. small switches)

FOCUSED ON PERFORMANCE

Polytec PT dual curing adhesives combine UV-curing with secondary curing mechanisms such as heat or moisture, making them **ideal for complex bonding** applications. Primary curing enables **immediate handling strength** upon UV exposure, **reducing assembly time**, while secondary mechanism allows curing in shadow areas of the adhesive.

BORN2BOND™ & POLYTEC PT UV-ACRYLATE DUAL CURE RANGE

The list of features in the following table will help you identify which products best match your needs.

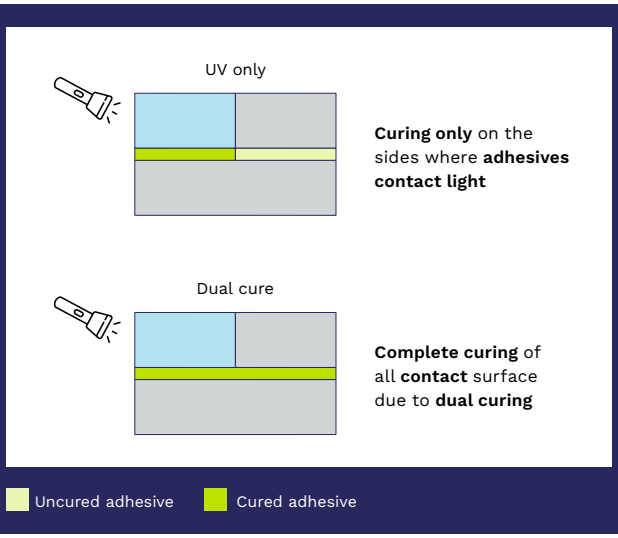
	DC 2307	DC 7042-VC	DC 7508 LV
CHEMICAL BASE	Methacrylate/acrylate	Hybrid system	
CURING	UV/Visible/Thermal	UV/Visible/Humidity	UV + Moisture
APPEARANCE	Transparent, fluorescent	Blue-green, fluorescent	Opaque, fluorescent
VISCOSITY @23 °C	2,000 to 3,000 mPa·s	2,000 to 6,000 mPa·s	1,400 mPa·s
THIXOTROPY	No	Yes	
FLEXIBILITY	Yes	No	
SHORE HARDNESS	D 44	D 75*	D 77*
SUBSTRATE COMPATIBILITY	Universal‡		
PACKAGING	Cartridge: 30 g		Cartridges: 30 g and 500 cc (600 g)

BOSTIK ACADEMY

What is dual curing?

Dual curing adhesives can cure with two different stimuli: UV and/or heat, UV and/or pressure and UV and/or humidity.

It allows a UV adhesive to cure perfectly, even in dark areas where UV light cannot activate the photoinitiator. It also ensures perfectly cured material (i.e. essential for medical devices) and enhances overall performance (strength, durability and adhesion).



TDS and SDS available at **born2bond.bostik.com**

*Shore hardness with dual curing. ‡Some specific materials might be more challenging to bond than others, please consult our technical support for guidance.
Always use glasses and gloves when applying adhesives.

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

BACK
TO PRODUCT
SELECTOR

ASSEMBLE

UV-CYANOACRYLATE

BOSTIK BORN2BOND™
UV-CYANOACRYLATE

Light Lock range 66

BORN2BOND™

UV-Cyanoacrylate

Bonding complex assemblies, achieving rapid curing and ensuring durability under demanding conditions are critical challenges when designing and manufacturing advanced and innovative products.
Born2Bond™ UV-Cyanoacrylates offer a patented dual-cure solution that combines instant bonding with UV light curing. These adhesives deliver precise application, increased flexibility, fast bonding and dependable performance across various substrates, making them essential for enhancing production efficiency and product quality. Our methoxyethyl cyanoacrylate and unique photoinitiator sets us apart in the industry.

Light Lock

BORN2BOND™

DUAL CURE (LIGHT AND SURFACE CURING) CYANOACRYLATES

Patented†, low-odour, low-blooming, dual-curing (contact and light curing) cyanoacrylate adhesives.

They are designed for bonding applications that require fast fixturing, coating or surface cure. The UV and visible-light cure sensitivity allow rapid bonding through transparent parts and quick curing of light-exposed bulk or surface-coated areas. Further, the products' instant bonding capability ensures cure between opaque substrates (contact cure).

Light & Surface (Dual) Cure

Low Bloom

Gap Filling

Low-odour Technology

Fast Bonding

Multi-substrate Adhesion

FEATURES

- Dual cure formulation: instant and photo-cure
- Fixture time of 60 seconds without light exposure and 3 seconds with light curing*
- Can be cured with visible and UV-LED light
- Dry to touch, tack free surface cure
- Cure-on-demand of excess material released from bondlines
- Low odour, low blooming
- Available in a range of viscosities

TYPICAL APPLICATIONS

- Conformal coating
- Encapsulation
- Electronics and audio assembly
- Luxury goods
- Medical devices

PATENTED †

SUSTAINABILITY ENABLER

SUSTAINABILITY ENABLERS

Bostik's innovative products range feature dual curing capabilities. They are classified as not hazardous according to EU regulation (EC) 1272/2008 (CLP). The low odour design offers **superior comfort during use** and full curing is achieved **without the need for an activator.**

BORN2BOND™ LIGHT LOCK RANGE

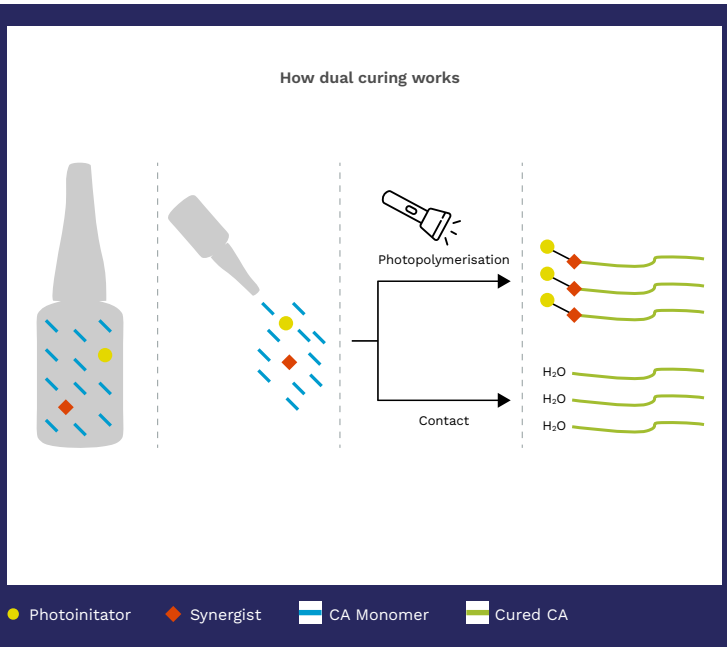
The list of features in the following table will help you identify which products best match your needs.

	LIGHT LOCK LV	LIGHT LOCK MV	LIGHT LOCK HV	LIGHT LOCK GEL	LIGHT LOCK 30X
BASE	Light-curing Methoxyethyl Cyanoacrylate				
VISCOSITY	5 to 20 mPa·s	150 to 220 mPa·s	500 to 800 mPa·s	30,000 to 45,000 mPa·s	150 to 350 mPa·s
PHOTOCURING TIME (410 nm; 30 mW/cm²)	< 3 sec				
PHOTOCURING WAVELENGTH	360 to 440 nm				
FIXTURE TIME on ABS/ABS (contact cure)	15 to 30 sec	50 to 70 sec	60 to 80 sec	15 to 30 sec	30 to 60 sec
BOND STRENGTH (GBMS)	17 to 20 MPa	11 to 15 MPa	13 to 17 MPa	16 to 18 MPa	9 to 11 MPa
ELONGATION AT BREAK	1%	4%	1.50%	0.10%	120%
APPEARANCE	Colourless when cured				
TEMPERATURE RANGE	-40 to 80 °C				-40 to 60 °C
CERTIFICATIONS	ISO 10993-5		ISO 10993-5, ISO 10993-10		ISO 10993-5
PACKAGING	Bottles: 20 g and 500 g			Cartridge: 30 mL Bottle: 500 g	Bottles: 20 g and 500 g

BOSTIK ACADEMY

One adhesive, **two ways to cure it.**

1. **Photopolymerisation** – through activating the product with a low power UV/visible light for < 3 seconds.
2. **Contact pressure** – like a regular single-component cyanoacrylate between two substrates, by applying min. a pressure of 0.3 MPa for 60 seconds.



TDS and **SDS** available at **born2bond.bostik.com**

*Depending on substrates. †Patented in multiple countries.
Always use glasses and gloves when applying adhesives.

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

ASSEMBLE

1K & 2K CYANOACRYLATE

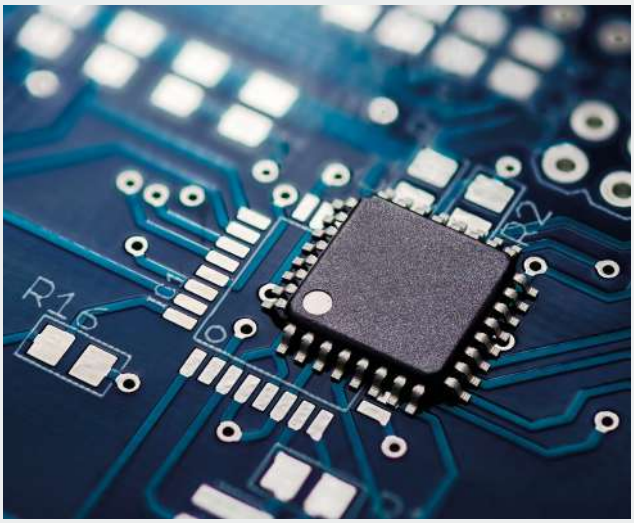
BOSTIK BORN2BOND™
1K & 2K CYANOACRYLATE

BORN2BOND™

1K & 2K Cyanoacrylate

Thanks to backward integration in cyanoacrylate monomers (made possible by Arkema's material and chemistry expertise), including methoxyethyl cyanoacrylate and heptylcyanoacrylate and supported by our patented crackless process, we have developed a comprehensive and unique range that sets new industry standards.

Born2Bond™ 1K & 2K Cyanoacrylate adhesives deliver extremely fast, durable and high-performance bonding for diverse substrates, including plastics, metals and rubbers. With low odour, reduced blooming and gap-filling properties, these adhesives are ideal for precision applications in automotive, electronics and general assembly, offering reliability and versatility to meet the latest manufacturing demands.



Ultra

BORN2BOND™

LOW-ODOUR, LOW-BLOOMING INSTANT ADHESIVES

Low-odour, low-blooming, instant adhesives with a range of viscosities, specially designed for bonding most substrates including plastics, rubbers and metals.

The formulation consistency has been designed for high bond strength, even in places that are subject to flexing. Careful selection of the formulation ingredients ensures that the product does not leave white stains (blooming).

Fast Bonding & Curing

Low Bloom

Low-odour Technology

Multi-substrate Adhesion

FEATURES

- Short fixture time
- High bonding strength
- Less brittle than conventional instant adhesives
- Transparent and easy to use

TYPICAL APPLICATIONS

- General assembly
- Leather and rubber bonding
- Shoe assembly
- Automotive aftermarket applications
- Speaker assembly
- Medical devices

FOCUSED ON PERFORMANCE

Born2Bond™ Ultra cyanoacrylates are ideal for applications that demand minimal blooming and low odour. These adhesives **significantly reduce the whitening effect** and **emit a low odour**, **enhancing user comfort**. Furthermore they are classified as **not hazardous** according to EU regulation (EC) 1272/2008 (CLP).

BORN2BOND™ ULTRA AND AQUAFAST

The list of features in the following tables will help you identify which products best match your needs.

ULTRA RANGE	ULTRA LV	ULTRA MV	ULTRA HV	ULTRA GEL
BASE	Methoxyethyl Cyanoacrylate			
VISCOSITY	20 to 50 mPa·s	120 to 170 mPa·s	700 to 1,000 mPa·s	105,000 to 120,000 mPa·s
FIXTURE TIME*	5 to 10 sec	10 sec	15 sec	5 sec
BOND STRENGTH (GBMS)	20 MPa	21 MPa	20 MPa	18 MPa
APPEARANCE	Transparent			
TEMPERATURE RANGE	-40 to 80 °C			
CERTIFICATIONS	ISO 10993-5	NSF S4, ISO 10993-5	ISO 10993-5	
PACKAGING	Bottles: 20 g and 500 g			Cartridges: 30 cc and 300 cc

	AQUAFAST**
BASE	Ethyl Cyanoacrylate
VISCOSITY	90 to 150 mPa·s
FIXTURE TIME*	10 to 80 sec
BOND STRENGTH (GBMS)	18 MPa
APPEARANCE	Transparent
TEMPERATURE RANGE	-40 to 120 °C
PACKAGING	Bottles: 20 g and 500 g

BOSTIK ACADEMY

What is cyanoacrylate blooming?

Blooming is a common phenomenon when using cyanoacrylates. It happens when excess cyanoacrylate monomers vaporise and react with moisture in the air, causing a white residue often seen on plastics or rubbers.

The **Born2Bond™ Ultra** range, including **Ultra K85**, result in less less blooming than traditional ethyl cyanoacrylates (ECA).

Image 1.

1 = ECA
2 = MECA
(methoxyethyl cyanoacrylate)
3 = Ultra K85

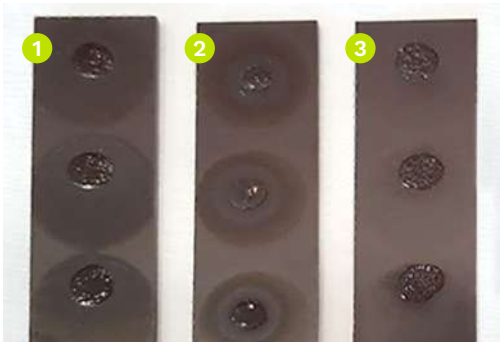


Image 2.

1 = ECA - Vapour polymerisation
2 = MECA - Less vapour polymerisation
3 = Ultra K85 - Minimal vapour polymerisation

TDS and **SDS** available at **born2bond.bostik.com**

*Depending on substrates.
**Aquafast has been designed for high humidity and immersion resistance.
Always use glasses and gloves when applying adhesives.

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

Ultra K85

BORN2BOND™

60% BIO-BASED INSTANT ADHESIVE WITH REVOLUTIONARY DURABILITY

Fast-bonding adhesive that boasts exceptional resistance to humidity and high temperatures.

The first-ever instant adhesive to withstand more than 1,000 hours at 85 °C and 85% relative humidity*, it is ideal for bonding substrates exposed to highly-variable environmental conditions, without compromising outstanding sustainability credentials.

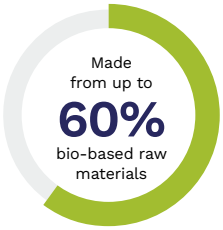
- Higher Durability
- Low Bloom
- Low-odour Technology
- Resistant to 85 °C/ 85%RH
- Sustainability /Bio-based Content

FEATURES

- Resistant to 85 °C/85%RH for more than 1,000 hours
- Resistant to 70 °C for 10 days under water
- Passes the cataplasma test on GBMS
- 30% elongation
- 60% bio-based content (ASTM D6866) from renewable sources (Arkema Oleris® Advanced Bio-Materials)
- Hydroquinone content below 10 ppm

TYPICAL APPLICATIONS

- Outdoor products (exposed to rain, heat and cold)
- MRO (Maintenance, Repair and Overhaul)
- General assembly
- Toy manufacturing and prototyping
- Medical devices
- Automotive
- Consumer electronics
- Footwear



SUSTAINABILITY ENABLER

Born2Bond™ Ultra K85 is made from **60% bio-based materials** (ASTM D6866), helping to support users' sustainability targets **without compromising on performance**. Arkema, Bostik's parent company, is part of the 'Pragati' sustainable castor bean farming programme which is the sustainable base for Ultra K85. Castor beans do not compete for space with food, do not require or result in deforestation and are profitable for local farmers – thus benefiting the areas that they are grown.

BORN2BOND™ ULTRA K85

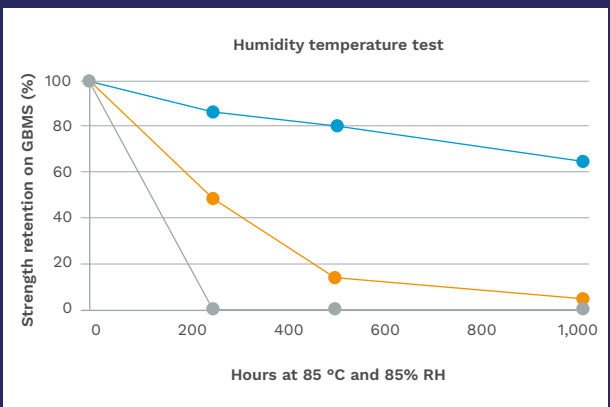
The list of features in the following table will help you identify which products best match your needs.

	ULTRA K85 MV
BASE	Heptyl Cyanoacrylate
VISCOSITY	140 to 200 mPa·s
FIXTURE TIME**	15 sec
BOND STRENGTH	8 to 15 MPa
APPEARANCE	Colourless
TEMPERATURE RANGE	-40 to 100 °C
CERTIFICATIONS	ISO 10993-5
PACKAGING	Bottles: 20 g and 500 g

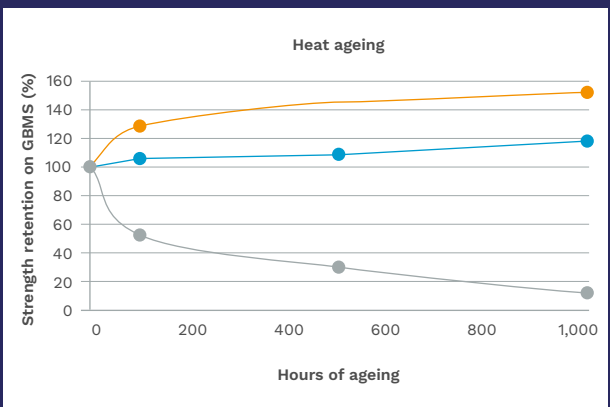
BOSTIK ACADEMY

Ultra K85 - Outstanding heat and humidity resistance.

Ultra K85 MV shows outstanding resistance to heat and humidity



Max. recommended temperature is 100 °C



TDS and **SDS** available at **born2bond.bostik.com**

*Up to 5,000 hours on ABS. **Depending on substrates.
Always use glasses and gloves when applying adhesives.

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

Instant Bonding

BORN2 BOND™

HIGH-STRENGTH, TWO-PART, INSTANT ADHESIVE

High-strength hybrid adhesive that provides a fast fixture time at room temperature while maintaining good processability and bond gaps up to 5mm.

This product offers excellent bonding characteristics to a large variety of non-porous substrates, such as aluminium, steel, plastics and elastomers as well as porous substrates, such as woods, chipboard and leather. Formulated for applications that require mechanical and in-use environmental resistance.

Gap Filling | High Strength | Impact Resistant | Multi-substrate Adhesion | Precision | Long Open Time (up to) 25 min.

FEATURES

- Short fixture time
- Long open time
- High adhesion strength
- Fills gaps up to 5 mm
- Translucent after curing
- Gel consistency for precise application
- Multipositioning dispensing

TYPICAL APPLICATIONS

- General assembly
- MRO applications
- Structural bonding
- Magnet bonding
- Automotive

FOCUSED ON PERFORMANCE

Standard single-component cyanoacrylates require the bonded surfaces to be in direct contact, as they do not cure effectively in the presence of gaps. In contrast, **two-component cyanoacrylates are engineered to fill gaps up to 5 mm**, providing **high-strength bonds** even when the surfaces are not perfectly aligned. **Born2Bond™ 2K cyanoacrylates** are a **versatile and reliable choice** for more demanding bonding scenarios where performance and durability are critical.

BORN2BOND™ INSTANT BONDING RANGE

The list of features in the following table will help you identify which products best match your needs.

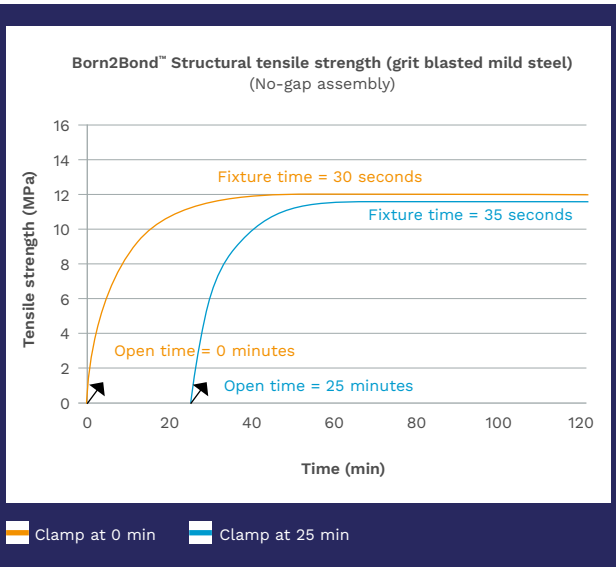
	STRUCTURAL	REPAIR	FLEX	MP515
BASE	Hybrid Cyanoacrylate & Acrylate	Ethyl Cyanoacrylate	Methoxyethyl Cyanoacrylate	Ethyl Cyanoacrylate /Multifunctional Acrylates
VISCOSITY (mPa·s)	**PART A:** 100,000 to 150,000 **PART B:** 40,000 to 80,000	**PART A:** 130,000 to 180,000 **PART B:** 70,000 to 130,000	**PART A:** 120,000 to 170,000 **PART B:** 70,000 to 130,000	**PART A:** 120,000 to 180,000 **PART B:** 40,000 to 70,000
OPEN TIME	25 min	4 to 10 min	6 to 10 min	5 min
FIXTURE TIME*	30 to 90 sec	15 to 60 sec	60 sec	30 to 140 sec
BOND STRENGTH (GBMS)	14 MPa		10 MPa	18 to 23 MPa
APPEARANCE	Transparent	Whitish	Transparent	
TEMPERATURE RANGE	-40 to 120 °C	-40 to 80 °C	-40 to 100 °C	-40 to 120 °C
GAP FILLING CAPABILITY	5 mm	1.5 cm	1 cm	5 mm
CERTIFICATIONS	ISO 10993-5	NSF S4		–
PACKAGING	Syringes: 10 g and 50 g			

BOSTIK ACADEMY

Why use a 2K cyanoacrylate?

A 2K (two-component) cyanoacrylate is designed to polymerise regardless of the gap:

- **FOR A NO-GAP ASSEMBLY**, it will cure as fast as a standard cyanoacrylate (fixture time <60 seconds), regardless of the assembly time - either immediately after dispensing (orange line) or even up to 25 minutes after dispensing (blue line), both resulting in similar final tensile strength.
- **FOR A GAP ASSEMBLY**, it will cure as fast as an MMA adhesive (fixture time < 35 minutes).



TDS and SDS available at **born2bond.bostik.com**

*Depending on gaps and substrates. **Except polyolefins.
Always use glasses and gloves when applying adhesives.

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

ASSEMBLE

HIGH PERFORMANCE HMPUR

BOSTIK BORN2BOND™ HIGH PERFORMANCE HMPUR

BORN2BOND™

High Performance HMPUR

With years of collaboration alongside leaders in consumer electronics and durable goods manufacturing, Bostik has gained deep expertise and invaluable experience to meet the demands of the most challenging industries. This has resulted in a comprehensive and well-established range of solutions tailored to the needs of designers and manufacturers of advanced products – products that address challenges such as bonding increasingly diverse substrates, ensuring greater durability under varying environmental conditions and maintaining efficient production processes.
Born2Bond™ High Performance HMPUR adhesives tackle these issues with versatile, single-component solutions that deliver excellent adhesion, flexibility and resistance to temperature and humidity fluctuations, enhancing product reliability and manufacturing efficiency. Bostik's latest innovations meet the industry's growing demand for more sustainable adhesives.

BACK TO PRODUCT SELECTOR

High Performance HMPUR

BORN2BOND™

HELPING MANUFACTURERS TO MEET MODERN DAY INDUSTRY DEMANDS

Versatile, single-component solutions capable of bonding a wide variety of substrates. Available in a range of viscosities with varying open times, they enable precise dispensing across different applications and assembly processes.

Delivering excellent bonding performance (both rigid and elastic), these High Performance HMPUR adhesives will withstand fluctuations in temperature and humidity. They also remain resistant to impact, thermal shock and chemical and organic compounds, including sweat and sebum – making them ideal for use in hand-held devices and wearable electronics.

Flexible & Elastic | Multi-substrate Adhesion | Precision | Multiple Viscosities | Reworkability

FEATURES

- High bonding strength
- Excellent fluidity suitable for a variety of application methods
- Good chemical resistance
- High flexibility and impact resistance
- Good balance between strength and elasticity
- Adjustable viscosity

TYPICAL APPLICATIONS

- Structural bonding for consumer electronics
- Hand-held devices
- Wearable electronics
- Displays and touch screens assembly
- Audio (TWS, airbuds and microspeaker assembly)

FOCUSED ON PERFORMANCE

BOSTIK ENGINEERING ADHESIVES – FOCUSED ON PERFORMANCE

Bostik's HMPUR range are **high-performance adhesives** that enable reworkability during the manufacturing process. This capability allows for **better quality control**, ensuring that products meet specifications and reduce the occurrence of out-of-spec items on the production line. By enabling adjustments and corrections during manufacturing, Bostik HMPUR helps **maintain consistent product quality** and efficiency. This makes it an invaluable asset for manufacturers aiming to **optimise their production processes** and **reduce waste.**

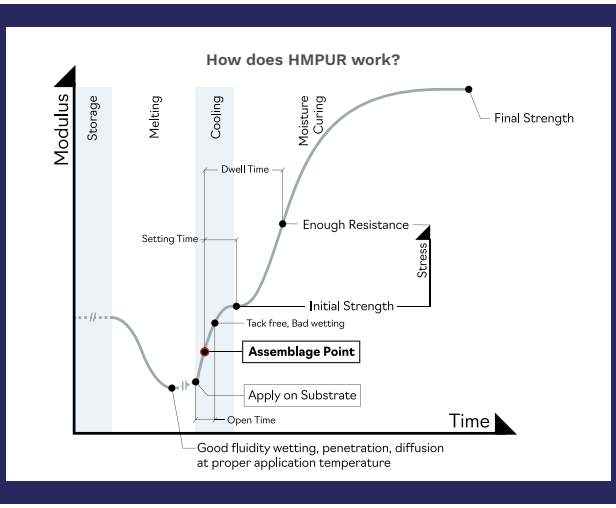
	HHD 6009	HHD 6002	HHD 6006	HHD 6103BK
COLOUR	Off white paste			Black
VISCOSITY (mPa·s)	3,500 @130 °C	5,500 @130 °C	6,000 @130 °C	5,000 @130 °C
OPERATING TEMPERATURE	100 to 130 °C	120 to 130 °C		110 to 130 °C
OPEN TIME*	1 to 3 min		2 to 4 min	5 min
DENSITY	1.1 g/cm³			
TENSILE STRENGTH	11 MPa	12 MPa	11 MPa	
ELONGATION AT BREAK	1,500%	1,100%	900%	1,200%
UV-TRACE	No**		Yes	No
CERTIFICATIONS	ISO 10993-5, ISO 10993-10			–
PACKAGING	Cartridges: 30 mL and 300 mL		Cartridges: 30 mL, 150 mL and 300 mL	Cartridges: 30 mL and 300 mL

	HHD 5504	HHD 5510	HHD 5518BK	HHD 5529	HHD 5539BK	HHD 5507
COLOUR	Off white paste		Black	Off white paste	Black	Off white paste
VISCOSITY (mPa·s)	2,200 @110 °C	4,300 @110 °C	6,800 @110 °C	3,700 @110 °C		2,300 @110 °C
OPERATING TEMPERATURE	100 to 120 °C					
OPEN TIME*	5 to 7 min	2 to 4 min				5 to 7 min
DENSITY	1.1 g/cm³					
TENSILE STRENGTH	> 10 MPa	> 10 MPa				
ELONGATION AT BREAK	> 800%					
UV-TRACE	Yes					
CERTIFICATIONS	–					
PACKAGING	Cartridge: 30 mL					

BOSTIK ACADEMY

Tips for optimum HMPUR performance.

- Avoid moisture in storage and during application.
- Choose an appropriate temperature.
- Assemble within specified open time.
- Avoid heating for extended periods.
- Open time is impacted by temperature/air flow, adhesive quantity applied, heat conductivity of the substrate and machine speed.
- Moisture curing is influenced by moisture content in the air and substrate surface, as well as temperature.



TDS and **SDS** available at **born2bond.bostik.com**

*Open time is an application factor that depends on the environment temperature, substrates and application process. **UV tracer version available.
Always use glasses and gloves when applying adhesives.

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

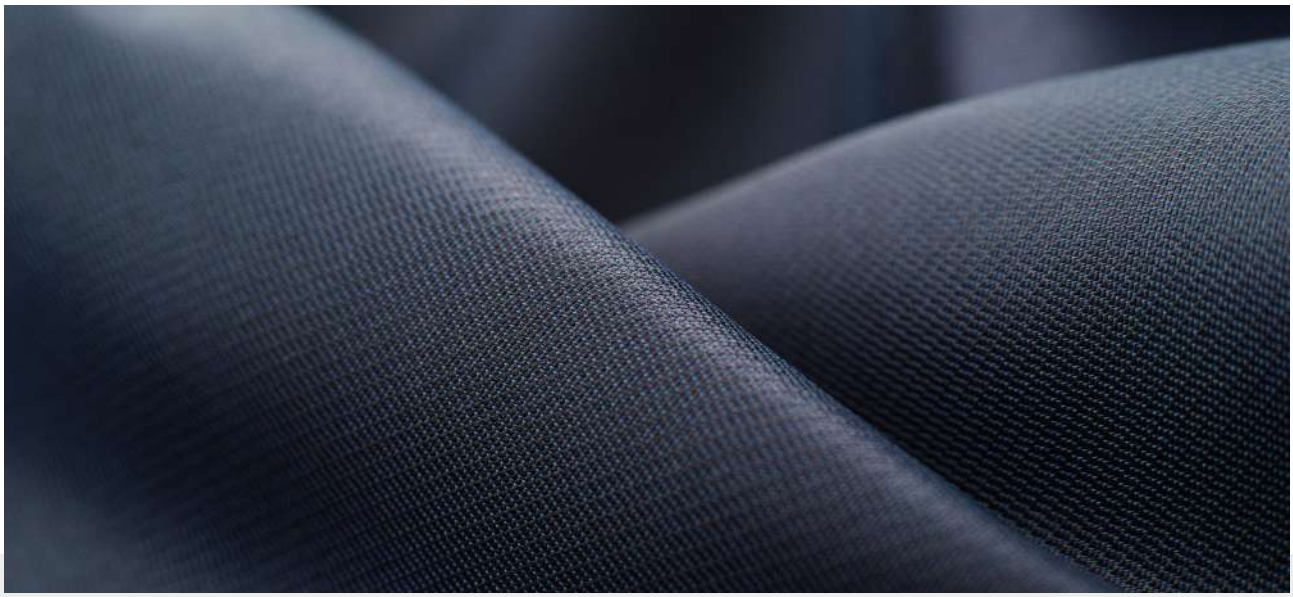
ASSEMBLE
WEB & FILM

BOSTIK
WEB & FILM

BOSTIK

Web & Film

Bostik's hot melt webs and films offer advanced bonding and laminating solutions for a wide range of applications, from textiles and technical fabrics to industrial and electronic soft goods. Designed for **efficiency**, **durability** and **ease of storage and use**, these solid adhesives activate with mild heat to form strong, reliable bonds while enabling seamless integration into automated processes. Available in various chemistries and formats, they enhance production efficiency with clean, **precise application** and **reduced processing steps**. With in-house expertise and integration with Arkema, Bostik delivers both ready-made and custom adhesive solutions, tailored to meet the specific needs of your industry.



Web & Film

VERSATILE, CONSISTENT AND EASY-TO-USE HOT MELT SOLUTIONS

PA92 E is a high-performance, bio-based copolyamide adhesive web designed for strong, uniform bonding across textiles, plastics and sensitive materials like leather. With an 80% bio-based content and low activation temperature, it offers a sustainable, efficient solution for various applications.

Engineered with a fine filament pattern, PA92 E provides a soft textile feel and excellent adhesive coverage. It bonds well to leathers, fabrics and polyurethane foams, with strong resistance to oils, plasticisers and dry cleaning. Available in roll form, it supports both intermittent and continuous processes while maintaining low VOC emissions.

Multi-substrate Adhesion | Lightweight | Low Activation Temperature | Safety (Low VOC) | Precision

FEATURES

WEBS

- Easy and clean to use
- Acoustic properties
- Good air flow
- Consistent bonding

FILMS

- Easy and clean to use
- Consistent bonding
- Excellent versatility

TYPICAL APPLICATIONS

- Soft goods, including leather and textiles
- Smart speakers
- Keyboards
- Tablet and phone cases

FOCUSED ON PERFORMANCE

Bostik's adhesive web and film technologies provide **consistent application control, optimised weight-to-performance ratios**, in addition to **neat and flexible manufacturing**. Whether offering fabric-like handling in non-woven webs with good air flow or full-surface coverage with films for demanding bonding applications, Bostik's specialty hot melts **ensure superior and durable adhesion**, requiring only mild heat for activation.

BOSTIK WEB & FILM RANGE

The list of features in the following tables will help you identify which products best match your needs.

WEB	PA92 E	PE109 E	PU108 E
CHEMISTRY	Bio-based CoPA (80%) from Arkema	CoPES from Bostik	Aliphatic TPU
MELTING POINT (Kofler method)	90 to 100 °C	105 to 110 °C	105 to 115 °C
VISCOSITY (MFI @160 °C; 2.16 kg)	35 mg/10 min	30 g/10 min	60 g/10 min
TYPICAL WEIGHT		8 to 120 gsm	
TYPICAL WIDTH		250 to 3,200 mm	

FILM	TC206	TC440	TC5009
CHEMISTRY	Bio-based CoPA (50%) from Arkema	CoPES from Bostik	Aromatic TPU
MELTING POINT (Kofler method)	105 to 115 °C	90 to 100 °C	95 to 105 °C
VISCOSITY (MFI @160 °C; 2.16 kg)	10 g/10 min	20 g/10 min	10 g/10 min
TYPICAL WEIGHT		20 to 100 gsm	
TYPICAL WIDTH		10 to 2,800 mm	

BOSTIK ACADEMY

Optimising bonding conditions for hot melt webs & films.

Consider three key parameters for optimal bonding performance: **TEMPERATURE, PRESSURE** and **TIME.**

1. **TEMPERATURE** – ≈ 20% above the web or film melting temperature (always refer to the product TDS).
2. **PRESSURE** – To prevent poor adhesion, voids or aesthetic flaws, we recommend a pressure of 1-2 bar.
3. **TIME** – The optimal bonding time is the time taken to reach the target glue-line bonding temperature, plus 30 seconds:
   - TEXTILES: 30+ seconds
   - FOAMS: 30-45+ seconds
   - RIGID SUBSTRATES: 45-60+ seconds

TDS and **SDS** available at **born2bond.bostik.com**

Always use glasses and gloves when applying adhesives.

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

ASSEMBLE

2K SILICONE

BOSTIK BORN2BOND™
2K SILICONE

SIL-9605 **86**

BORN2BOND™

2K Silicone

When it comes to assembly lines where very high temperatures are involved, non-carbonated chemistries deliver superior performance. Born2Bond™ 2K Silicone adhesives provide durable, high-performance bonding for demanding applications requiring flexibility and resistance to extreme temperatures. Ideal for automotive, electronics and industrial assembly, these two-component silicones ensure strong adhesion to diverse substrates, delivering long-lasting seals and enhanced durability across challenging environments.

BACK TO PRODUCT SELECTOR

2K Silicone

BORN2BOND™

HIGH-PERFORMANCE 2K SILICONE SEALANT

SIL-9605 is a two-component, 100% silicone, room temperature cure sealant that rapidly builds adhesive and elastomeric strength for appliance assembly.

It develops high initial green strength, so you do not have to slow your production of assemblies within minutes of bonding. **SIL-9605** is a solventless solution certified under UL746C, proving it meets industry standards for safety and performance in electrical applications.

Flexible & Elastic | Fast Processing | High Heat Resistance | Chemical Resistance | Multi-substrate Adhesion | Sealing

FEATURES

- High temperature resistance (180 °C)
- Excellent ageing resistance
- High flexibility
- Excellent UV and chemical resistance
- Non-corrosive while curing

TYPICAL APPLICATIONS

- Electric stove-top bonding (high temperature resistance)
- Overhead hood assemblies (high temperature resistance)
- Refrigerator assembly
- Washer/dryer assembly

FOCUSED ON PERFORMANCE

Silicones are inorganic polymers made up of siloxane bonds without carbon atoms in the backbone chain. This results in several advantageous properties, including **resistance to high temperatures**, **improved fire resistance** and **better UV resistance**. Additionally, silicones exhibit **superior chemical resistance** and **remarkable durability**. These characteristics, combined with its inherent elasticity, make silicone an **exceptionally versatile** material for various applications.

BORN2BOND™ 2K SILICONE

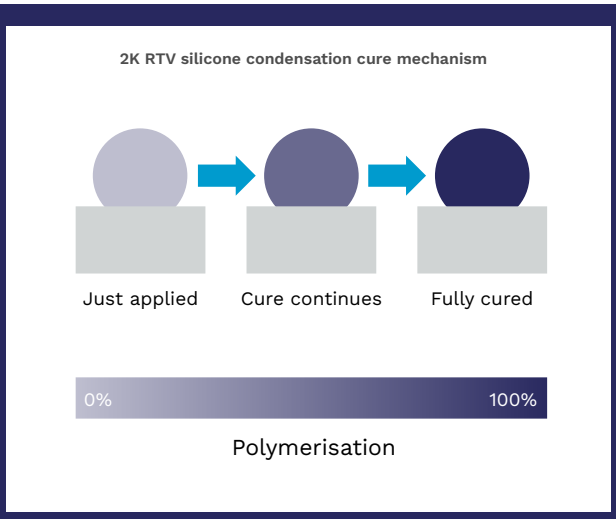
The list of features in the following table will help you identify which products best match your needs.

	SIL 9605	
	PART A	**PART B**
COLOUR (mixed)	Black	
DENSITY (mixed)	1.35 to 1.45 g/mL	
MIX RATIO	2:1	
SKIN OVER TIME (mixed)	< 4 min	
SNAP TIME (mixed)	< 8 min	
COLOUR	Black	White
VISCOSITY	75,000 to 150,000 mPa·s	40,000 to 55,000 mPa·s
DENSITY	1.25 to 1.35 g/mL	1.60 to 1.75 g/mL
PACKAGING	Side by side cartridge: 400 mL. Pails and drums also available on request.	

BOSTIK ACADEMY

1K RTV silicone vs. 2K RTV silicone.

- **1K RTV** (room temperature vulcanisation) silicone can be directly used on the part and cures via water diffusion from the environment.
- **2K RTV** silicones require mixing and introduce more complexity versus 1K alternatives, but they cure in a matter of minutes and are therefore ideal for industries seeking high UPH without the use of additional energy.



TDS and **SDS** available at **born2bond.bostik.com**

Always use glasses and gloves when applying adhesives.

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

ASSEMBLE
SMP SEALANT

BOSTIK
SMP SEALANT

SMP Sealant

Capitalising on decades of experience with leading durable goods manufacturers – and being one of the global leaders in Silyl Modified Polymers – Bostik's SMP range offers extremely robust bonding and sealing solutions that withstand movement, vibration and harsh conditions. Designed for construction, automotive and industrial applications, these flexible, weather-resistant sealants ensure superior adhesion to a variety of materials, providing long-term performance while supporting sustainable solutions.

SMP Sealant

HIGH-STRENGTH SMP SEALANT FOR INDUSTRIAL APPLICATIONS

Bostik ISR 70-03 is a high quality elastic bonding adhesive, suitable for use on industrial applications requiring high strength.

It has excellent resistance to UV, weather and temperature and exhibits excellent adhesion performance on a wide variety of substrates (minimal or no pre-treatment necessary) while it can be overpainted with most common industrial paints. **Bostik ISR 70-03** used with Dual SMP® technology guarantees an increased cure speed, extending application possibilities.

Flexible & Elastic

Multi-substrate Adhesion

Higher Durability

Sealing

FEATURES

- Good adhesion on many substrates without the use of a primer
- Low odour
- Compatible with most commercially available paints and lacquers
- Excellent UV and weather resistance

TYPICAL APPLICATIONS

- Audio (loudspeaker assembly, bonding of earphone charging cases)
- Lighting (lighting fixtures, public lighting)
- Screens (bonding/sealing of touch-screens and touch-panels)
- Mobility (automotive interiors, marine applications)

SUSTAINABILITY ENABLER

Bostik's ISR-range consists of Silyl Modified Polymer (SMP) based sealants that provide **ease of application**. Additionally they are classified as **not hazardous** according to EU regulation (EC) 1272/2008 (CLP).

BOSTIK™ SMP SEALANT

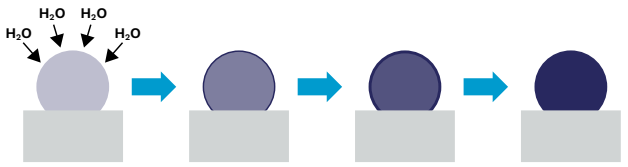
The list of features in the following table will help you identify which products best match your needs.

	ISR 70-03 (EU version)	ISR 70-07 (EU version)
BASIC MATERIAL	Silyl Modified	
CURING METHOD	Moisture	
DENSITY	1.5 g/mL	1.4 g/mL
SKIN FORMING TIME 23/50%R.H.	10 min	60 min
CURING SPEED AFTER 24 HR 23/50%R.H.	3 mm	2.5 mm
SHORE A HARDNESS	58	40
VOLUME CHANGE	< 3%	< 4%
TENSILE STRESS (100%) ISO 37 (dumbbells)	2.5 MPa	1.0 MPa
TENSILE STRESS AT BREAK ISO 37 (dumbbells)	3.5 MPa	1.3 MPa
ELONGATION AT BREAK ISO 37 (dumbbells)	200%	
E-MODULUS (10%) ISO 37 (dumbbells)	4.5	1.0
SHEAR STRESS ISO 4587	2.5 MPa	–
GLASS TRANSITION	-50 °C	–
TEMPERATURE RESISTANCE	-40 to 110 °C*	
APPLICATION TEMPERATURE	5 to 40 °C	
COLOURS (standard)	White, grey, black	Grey
CERTIFICATION	ISEGA	–
PACKAGING	Cartridge: 290 mL	

BOSTIK ACADEMY

How do SMP sealants cure?

Single-component SMP sealants react with water molecules present in the air to form a flexible sealant, curing from the outer skin to centre. The greater the air humidity, the faster the cure will be.



TDS and **SDS** available at **born2bond.bostik.com**

*10 Cycles of 7 hours at 110 °C followed by 17 hours at 23 °C/50%RH.
Always use glasses and gloves when applying adhesives.

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

ASSEMBLE

2K MMA

BOSTIK BORN2BOND™
2K MMA

BORN2BOND™

2K MMA

Born2Bond™ 2K MMA adhesives deliver high-performance bonding and sealing for demanding applications. Engineered for exceptional strength and flexibility, they are designed to withstand vibration, impact and extreme conditions across sectors such as electronics, general assembly, automotive and transportation and medical devices. Offering fast curing times and excellent adhesion to diverse materials, they provide durable, reliable performance tailored to modern manufacturing needs.

BACK TO PRODUCT SELECTOR

2K MMA

BORN2BOND™

STREAMLINING STRUCTURAL ASSEMBLY PROCESSES

Designed for multi-substrate structural bonding (including glass, ceramics, metals and plastics), Born2Bond™ XMA (Methylmethacrylate Adhesives) incorporates Nanostrength® technology developed by Bostik's parent company, Arkema.

Nanostrength® provides sag resistance during and after dispensing and above all greater impact resistance and elongation properties that are up to eight times those of typical MMA (Methyl Methacrylate Adhesives) products.

Born2Bond™ XMA products are highly stable, with excellent gap-filling properties and low squeeze-out, resulting in a finer finish and reduced risk of wastage.

Gap Filling

Multi-substrate Adhesion

High Strength

Fast Curing

Higher Durability

FEATURES

- High impact resistance
- Sag resistance
- High elongation
- Suitable for manual and automated dispensing
- Colour indication for processing (mixing quality & curing status)

TYPICAL APPLICATIONS

- Electronics (laptops, casing and enclosures)
- General assembly (appliances and enclosures)
- Automotive and transportation interior and exterior parts

FOCUSED ON PERFORMANCE

BOSTIK ENGINEERING ADHESIVES
FOCUSED ON PERFORMANCE

Born2Bond™ MMA Adhesives are designed for high-performance structural bonding, **offering exceptional strength and durability**. They can bond a variety of substrates, including **metals**, **plastics** and **composites**, and provide excellent gap-filling properties for robust bonds. These adhesives are engineered to withstand environmental factors like temperature changes, chemicals and moisture, ensuring long-lasting adhesion. Their **fast curing times** enhance production efficiency, making them ideal for assembly processes in various industries.

BORN2BOND™ 2K MMA

The list of features in the following table will help you identify which products best match your needs.

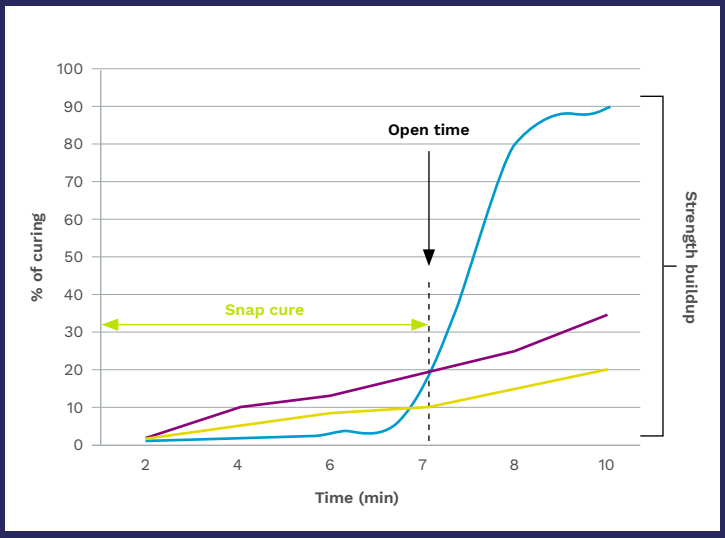
	XMA 5005	XMA 3015	XMA 5010
COLOUR	Blue (before)/Green (after)		
OPEN TIME	3 min	5 to 7 min	5 to 8 min
FIXTURE TIME	5 min	12 to 15 min	8 to 12 min
MODULUS (ISO 527)	800 to 1,100 MPa	1,000 to 1,200 MPa	650 MPa
ELONGATION (ISO 527)	60%	30%	100%
LAP SHEAR (Al)	18 MPa	20 MPa	18 MPa
SERVICE TEMPERATURE	-55 to 140 °C		
PACKAGING	Cartridge: 50 mL		

BOSTIK ACADEMY

Benefits of methyl-methacrylate (MMA) adhesives.

MMA adhesives provide a unique balance of high strength, impact and fatigue resistance, as well as flexibility, elongation, shear and peel strength. They are two-component adhesives and are usable within a wide range of temperatures. They are 100% reactive with 10 to 1, 4 to 1 and 1 to 1 mixing ratios.

MMA requires little, if any, surface preparation depending the material and can bond plastics, composites and metals. They cure at ambient temperatures and have a controlled cure speed with appropriate mixing but can tolerate off ratio mixing up to 10%. MMA adhesives are not sensitive to moisture, resists to water and chemicals.



Handling time is shorter with MMA versus 2K PU and 2K Epoxy, resulting in higher productivity while maintaining high strength.

TDS and **SDS** available at **born2bond.bostik.com**

Always use glasses and gloves when applying adhesives.

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

BACK
TO PRODUCT
SELECTOR

ASSEMBLE

2K EPOXY

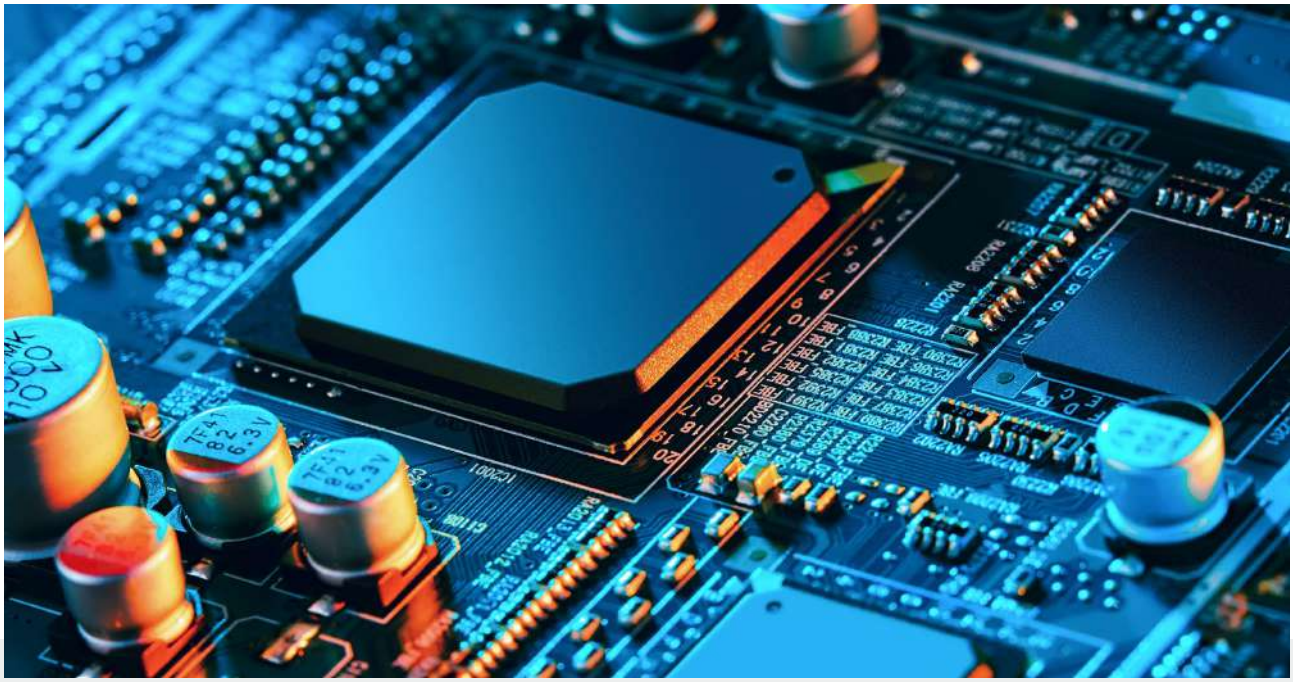
POLYTEC PT
2K EPOXY

Polytec PT

2K Epoxy

Polytec PT 2K Epoxy adhesives deliver exceptional bonding strength and chemical resistance. Designed for applications in medical devices, semiconductors and high-precision electronics, they ensure high durability under harsh conditions.

With a focus on precision and performance, these adhesives support efficient production processes and provide robust, long-lasting bonds across diverse, demanding industries.



2K Epoxy

Polytec PT

2K STRUCTURAL ADHESIVE FOR BONDING DISSIMILAR SUBSTRATES

Polytec PT EP 655 T is a 100% solid, two component, non-flowing, highly thixotropic, tough-elastic modified, high-temperature-, moisture-and chemical-resistant epoxy adhesive.

Certified to USP Class VI Biocompatibility Standards, it is designed for medical, semiconductor, hybrid, piezo and fibre optic applications. It has excellent adhesion to glass, metal, ceramics, ferrite and most plastics and is recommended for adhesion and encapsulation.

Its tough-elastic properties allows the assembly of substrates with dissimilar coefficients of thermal expansion. **Polytec PT EP 655 T** has passed more than 1,000 autoclave steam cycles.

High Temperature Resistance

Chemical Resistance

Higher Durability

24 hour Long Open Time

FEATURES

- Multi-substrate adhesion
- High temperature resistant
- Moisture and chemical resistant
- Thixotropic consistency allows for precise application

TYPICAL APPLICATIONS

- Medical devices
- Semiconductors
- Glass fibre bonding

FOCUSED ON PERFORMANCE

Polytec PT 2K Epoxies offer strong adhesion to a variety of materials, including metals, plastics, glass and ceramics. They are **highly resistant to moisture and chemicals**, ensuring durability in harsh environments. They provide **reliable and robust bonding solutions**, contributing to the long-lasting life and robustness of the finished goods.

POLYTEC PT 2K EPOXY RANGE

The list of features in the following table will help you identify which products best match your needs.

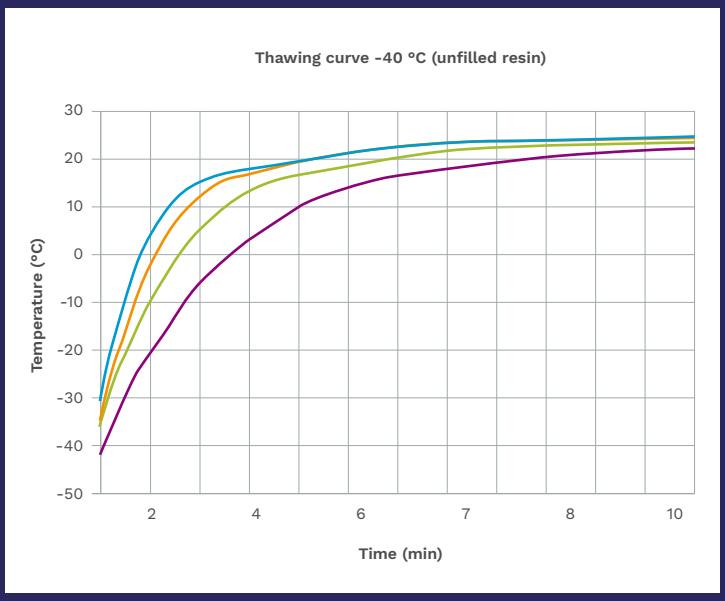
	EP 655 T	EP 601 T
GENERAL CURE CONDITIONS	> 80 °C	> 15 °C
1K / 2K	2K	
MIX RATIO BY WEIGHT	100:10	100:35
VISCOSITY MIX	11,500 mPa·s	3,000 mPa·s
POT LIFE	24 h	4 h
TYPICAL CURE CONDITIONS (determined by DSC)	150 °C/5 min	150 °C/12 min
SHORE HARDNESS	D 85	D 80
GLASS TRANSITION TEMPERATURE	105 °C	65 °C
LAP SHEAR STRENGTH (Al / Al)	16 MPa	37 MPa
ELONGATION AT BREAK	2.8%	2.9%
CERTIFICATIONS	USP VI	–
PACKAGING	Two separate containers: 250 g, 500 g and 1 kg	

BOSTIK ACADEMY

Pre-mixed frozen products.

Premixed frozen products are particularly interesting for medical applications. There is no need for mixing by the user (this is done at Bostik's production plant prior to shipping), therefore reducing complexity, risk and costs associated with dispensing equipment.

They are shipped with dry ice to ensure the low temperature is maintained but thawing is necessary prior to use. Some 2K hot cure systems are also available in premixed frozen form (please get in touch with your Bostik representative to find out more).



TDS and **SDS** available at **born2bond.bostik.com**

Always use glasses and gloves when applying adhesives.
Cure conditions (temperature/duration) will have an influence on the above shown cured product properties. Depending on the curing temperature, the maximum curing volume may be limited due to the exothermic curing reaction.

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

ASSEMBLE

1K MA/1K EPOXY

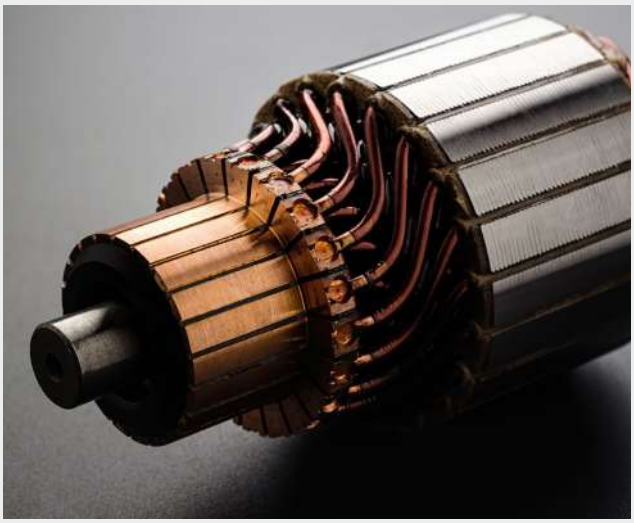
POLYTEC PT
1K MA/1K EPOXY

Polytec PT

1K MA/1K Epoxy

Polytec PT single-component (1K) structural adhesives eliminate the need for mixing, ensuring convenience and consistent performance.

Available in methacrylate (MA) for fast curing and multi-substrate bonding or epoxy for superior chemical and temperature resistance, they offer versatile solutions tailored to modern manufacturing needs.



1K MA/ 1K Epoxy

Polytec PT

SINGLE-COMPONENT, STRUCTURAL, MULTI-SUBSTRATE ADHESIVE

Polytec PT AC 2441 is a single component, thermal curing acrylate/methacrylate hybrid adhesive. It is thixotropic and offers very good adhesion to various substrates.

Additionally, it boasts very high strength, impact resistance, rubber toughening and thermal shock resistance. This makes it ideal for applications such as bonding, sealing, potting and magnet bonding.

Higher Strength

Impact Resistance

High Temperature Resistant

Long Pot Life & Fast Cure

Chemical Resistance

FEATURES

- Single component
- Multi-substrate adhesion
- Medium viscosity
- Thixotropic behaviour
- Very high strength
- Thermal shock resistant

TYPICAL APPLICATIONS

- Magnet bonding
- Structural bonding of metals
- Electronics

FOCUSED ON PERFORMANCE

Polytec PT's single-component structural bonding adhesives are designed for high functionality in industrial applications. They provide **excellent adhesion to a variety of materials**, including metals, ceramics, glass and some plastics. These adhesives require heat curing, which ensures **strong and durable bonds**. They offer **high tensile and lap shear strength** and can withstand a **wide range of temperatures**. This makes them ideal for applications where **reliable**, **long-lasting bonds** are crucial.

1K MA	AC 2441
CHEMICAL BASE	Hybrid
CURING	Thermal
APPEARANCE	Opaque
VISCOSITY @23 °C	3,500 to 8,500 mPa·s
THIXOTROPY	Yes
FLEXIBILITY	No
SHORE HARDNESS	D 80
SUBSTRATE COMPATIBILITY	Magnets & Metals
PACKAGING	Cartridge: 30 g

1K EPOXY	EP 501
GENERAL CURE CONDITIONS	> 120 °C
VISCOSITY MIX	13,000 mPa·s
POT LIFE	1 month
TYPICAL CURE CONDITIONS (determined by DSC)	150 °C/8 to 10 min
SHORE HARDNESS	D 85
GLASS TRANSITION TEMPERATURE	125 °C
LAP SHEAR STRENGTH (Al / Al)	31 MPa
ELONGATION AT BREAK	4%
PACKAGING	Jars: 250 g, 500 g and 1 kg, Cartridge: 35 g

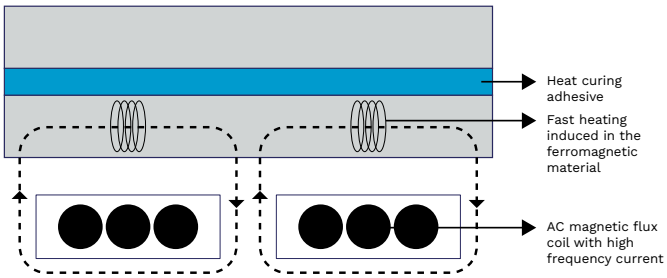
BOSTIK ACADEMY

Induction: a technique allowing (very) fast thermal curing.

Induction heating is particularly suitable for adhesives capable of a very fast cure at high temperatures like AC 2441:

1. An inductor generates a magnetic alternating field.
2. Turbulent electric flows are induced within the ferromagnetic material.
3. By ohmic loss, a rapid heating is achieved.
4. Power and frequency to be adapted to the ferromagnetic material.

Principle of induction with heat cure adhesives



TDS and **SDS** available at **born2bond.bostik.com**

Always use glasses and gloves when applying adhesives.
Cure conditions (temperature/duration) will have an influence on the above shown cured product properties. Depending on the curing temperature, the maximum curing volume may be limited due to the exothermic curing reaction.

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

BACK
TO PRODUCT
SELECTOR

PROTECT

PRODUCT RANGES INCLUDED WITHIN BOSTIK PROTECT

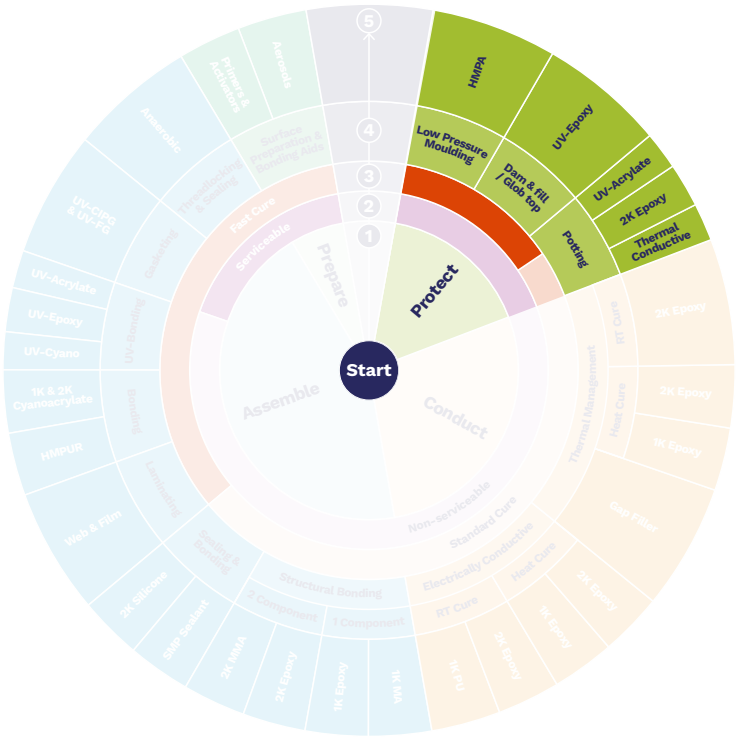
BORN2BOND™ THERMELT® Polytec PT

Protect

SAFEGUARDING MATERIALS AND COMPONENTS FOR LONG-TERM PERFORMANCE

In increasingly demanding environments, ensuring the durability of delicate components is as crucial as bonding them. Designers and manufacturers must ensure their products can withstand exposure to moisture, dust, UV and chemicals, which can compromise performance over time. Bostik's protective adhesives not only provide robust bonding but also form a barrier that shields end products from environmental damage.

The **PROTECT** section showcases advanced solutions designed to improve product durability and reliability across industries. Discover how Bostik's protective technologies deliver lasting performance and essential peace of mind.

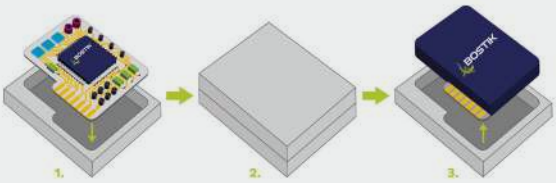


HMPA

THERMELT®

HOT MELT POLYAMIDE RESIN FOR ELECTRONICS LPM

Resin **Thermelt® 867** is a pure copolymer polyamide hot melt resin. Non-reactive, it is specially designed for Low Pressure Moulding of electronic components, connectors and cables.



BOSTIK

PRODUCT
IN FOCUS

LPM PRODUCTS are supplied in pellet form

Scan to access product TDS

Bostik Thermelt® TH 867

Fast Processing

Higher Durability

Sustainability /Bio-based Content

Encapsulation

Made from up to **90%** bio-based raw materials

FEATURES

- Wide temperature range of use
- High mechanical performance
- High resistance to temperature and oil
- Suitable for various materials including sensitive electronic components
- Single component & non curing

TYPICAL APPLICATIONS

- Automotive sensors
- Onboard electronics
- LEDs
- PCBs overmoulding
- Cables, connectors and antennas

SUSTAINABILITY ENABLERS

SUSTAINABILITY ENABLER

Thermelt® resins are made from **up to 90% bio-based raw materials** including **rapeseed and castor bean** derivatives. Additionally, these high performance products **can be disassembled** at their end of life thanks to the thermoplastic nature of the resin.

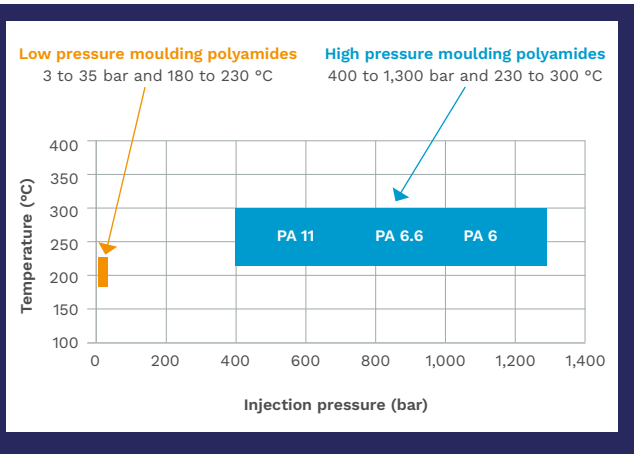
	TH 867	TH 858	TH 865
OPERATING TEMPERATURE RANGE	-40 to 150 °C		-55 to 120 °C
SHORE HARDNESS (ISO 868) (15 s)	27 D	32 D	15 D
SOFTENING POINT (ASTM D3461)	183 ± 7 °C	180 ± 5 °C	157 ± 8 °C
TYPICAL CHARACTERISTICS	General purpose high performance mouldable polyamide with good adhesion and environmental and thermal shock resistance. Used for applications such as automotive exteriors.	Mouldable polyamide with very good thermal stability as well as UV and moisture resistance. (Available in black only).	Mouldable polyamide with very good low temperature resistance and good adhesion for automotive applications.
BIO-BASED CONTENT	50 to 90%		
CERTIFICATIONS	UL94 V0 Natural colour: ISO 10993-4 ISO 10993-10, ISO 10993-11 ISO 10993-23*	UL94 V0, UL F2	UL94 V0
PACKAGING	Bag: 20 kg		

	TH 195	TH 866	TH 870	TH 964
OPERATING TEMPERATURE RANGE	-20 to 160 °C	-25 to 115 °C	-10 to 110 °C	-60 to 150 °C
SHORE HARDNESS (ISO 868) (15 s)	40 D	12 D	23 D	25 D
SOFTENING POINT (ASTM D3461)	200 ± 4 °C	156 ± 6 °C	144 ± 5 °C	183 ± 5 °C
TYPICAL CHARACTERISTICS	Mouldable polyamide with excellent thermal stability and increased hardness for electronics overmoulding.	Mouldable polyamide with excellent adhesion to PES, PC and other demanding substrates.	General purpose mouldable polyamide with increased adhesion for electronic applications.	Specialty polyamide with enhanced adhesion and flexibility at low temperatures.
BIO-BASED CONTENT	50 to 90%			
CERTIFICATIONS	UL94 V2 Natural colour: ISO 10993-4, ISO 10993-5 ISO 10993-10, ISO 10993-11 ISO 10993-23	–	UL94 V0	–
PACKAGING	Bag: 20 kg			

BOSTIK ACADEMY

Hot Melt Polyamides for low pressure moulding.

- Solutions to encapsulate, seal and protect delicate electronic components.
- Halfway between classic plastic injection and resin potting.
- Fast cycle of c.60 seconds.
- No mixing: 1K (single component).
- Uses high performance, non-toxic and environmentally friendly raw materials.



TDS and **SDS** available at **born2bond.bostik.com**

*For RTI please contact your Bostik representative. Values based on internal estimations, for informational purposes only. **Always use glasses and gloves when applying adhesives.**

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

UV-Epoxy

Polytec PT

BORN2BOND™

SOLVENT-FREE ONE-COMPONENT CATIONIC EPOXY RESIN

Polytec PT UV 3174 T is a single component cationic epoxy resin that cures under UV/VIS light.

It has a medium viscosity, is thixotropic and offers excellent impact, temperature shock and moisture resistance. After curing, it dries as a solid surface, making it ideal for conformal coating, corrosion protection and general purpose encapsulation.

High Viscosities | Chemical Resistance | Fast Curing | Toughened | Light Cure

FEATURES

- Available in multiple viscosities
- High precision and high-speed automated dispensing
- High resistance to thermal cycling
- Excellent temperature and humidity resistance
- High Young's modulus

ASSEMBLE – DUAL FUNCTION RANGE – PROTECT

TYPICAL APPLICATIONS

- Conformal coating
- Corrosion protection
- General purpose encapsulation
- Bonding
- Sealing
- Potting
- Chip encapsulation (glob top, dam and fill)

BOSTIK ENGINEERING ADHESIVES – FOCUSED ON PERFORMANCE

FOCUSED ON PERFORMANCE

Bostik's products offer freedom of design, allowing for different shapes and configurations and support **low energy curing**, making them an **energy-efficient solution**.

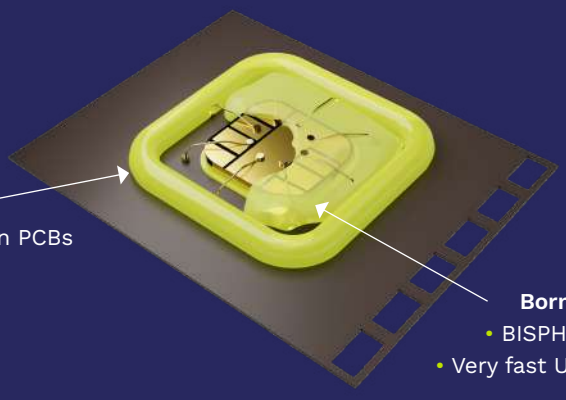
	UV 3174 T	UV 3174
CHEMICAL BASE	BISPHENOL-A-free epoxy resin	BISPHENOL-A-free cationic epoxy
CURING	UV/Visible	
APPEARANCE	Yellow/Opaque	Yellow
VISCOSITY @23 °C	2,800 mPa·s	1,040 mPa·s
THIXOTROPY	Yes	No
FLEXIBILITY	No	
SHORE HARDNESS	D 82	
TENSILE STRENGTH	41 MPa	
ELONGATION	8%	
Tg	99 °C	
PACKAGING	Cartridges: 10 g and 30 g	

		UV EE 3610	UV EE 3611	UV EE 3615
VISCOSITY @25 °C	50 rpm/Spindle 5	4,000 to 7,000 mPa·s	5,000 to 8,000 mPa·s	35,000 mPa·s
THIXOTROPIC INDEX* @25 °C		2.1 to 2.2	2.2 to 2.6	5.0 to 5.5
DENSITY		1.4		
FILLER CONTENT (by weight)		40		
UV CURING		365 to 385 nm UVA		
HARDNESS		78 to 82 D		75 to 80 D
TENSILE STRENGTH		36 MPa		
ELONGATION		2 to 4%		< 4%
Tg		65 to 70 °C		55 to 65 °C
PACKAGING		Bottle: 1 L		Cartridge: 600 cc

BOSTIK ACADEMY

Dam & fill encapsulation.

Born2Bond™ UV EE 3615 (Dam)
- Selective component protection on PCBs
- High ion purity
- Stress-free curing
- Resistance to humidity
- T-Shock and cycling resistance
- CTE is critical



Born2Bond™ UV EE 3610 (Fill)
- BISPHENOL-A-free epoxy resin
- Very fast UV-cure with eco-friendly and safe LED 395 nm

TDS and **SDS** available at **born2bond.bostik.com**

*Thixotropic index = viscosity ratio measured @ 5 rpm vs. 50 rpm/Spindle 5.
Always use glasses and gloves when applying adhesives.

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

2K Epoxy/ UV-Acrylate

Polytec PT

OPTICALLY CLEAR, MULTI-SUBSTRATE 2K EPOXY

Polytec PT EP 601 is an optically clear, two component epoxy adhesive of very low viscosity. It has excellent adhesion to glass, PMMA, quartz, silicone, ceramic, metals, FR4, wood and most plastics.

Polytec PT EP 601 is designed for applications in optics, fibre optics, optoelectronics, medical and semiconductor technology. It is ideal for fine cavity filling and is medical approved (USP Class VI).

This adhesive can be applied via dispensing, jet-dispensing, potting or manually.

Long Pot Life

Multiple Viscosities

Chemical Resistance

Multi-substrate Adhesion

Encapsulation

FEATURES

- Translucent
- Multiple viscosities
- Excellent multi-substrate adhesion
- Suitable for encapsulation, bonding, potting and surface coating

TYPICAL APPLICATIONS

- Bonding & potting:
  - Optics
  - Fibre optics
  - Optoelectronics
  - Medical devices
  - Semiconductors
- Automotive

ASSEMBLE – DUAL FUNCTION RANGE – PROTECT

FOCUSED ON PERFORMANCE

BOSTIK ENGINEERING ADHESIVES – FOCUSED ON PERFORMANCE

Polytec PT's potting materials provide excellent protection against mechanical and environmental stress and offer superior temperature resistance compared to standard potting materials like polyurethanes. They offer unique features such as **high temperature resistance**, **low viscosity** for better penetration and flexibility options, making them particularly **suitable for demanding applications**. Additionally, they are **free from isocyanates and silicones**.

2K EPOXY	EP 601	EP 610-2	EP 630
GENERAL CURE CONDITIONS	> 15 °C		> 100 °C
MIX RATIO BY WEIGHT	100:35	100:50	100:10
VISCOSITY MIX	460 mPa·s	830 mPa·s	2,500 mPa·s
POT LIFE	4 h	6 h	24 h
TYPICAL CURE CONDITIONS (determined by DSC)	150 °C/12 min	100 °C/90 min	150 °C/10 min
SHORE HARDNESS	D 80	A 80/D 30	D 85
GLASS TRANSITION TEMPERATURE	73 °C	10 °C	119 °C
LAP SHEAR STRENGTH (Al / Al)	37 MPa	9.3 MPa	19 MPa
ELONGATION AT BREAK	2.9%	80%	2.9%
CERTIFICATIONS	USP VI, FDA	–	ISO 10993-5, FDA
PACKAGING*	Two separate containers: 250 g, 500 g, 1 kg and 25 kg	Two separate containers: 250 g, 500 g and 1 kg	Two separate containers: 250 g, 500 g, 1 kg and 25 kg

UV-ACRYLATE**	DC 2307
CHEMICAL BASE	Methacrylate/acrylate
CURING	UV/Visible/Thermal
APPEARANCE	Transparent, fluorescent
VISCOSITY @23 °C	2,000 to 3,000 mPa·s
THIXOTROPY	No
FLEXIBILITY	Yes
SHORE HARDNESS	D 44
SUBSTRATE COMPATIBILITY	Universal‡
PACKAGING	Cartridge: 30 g

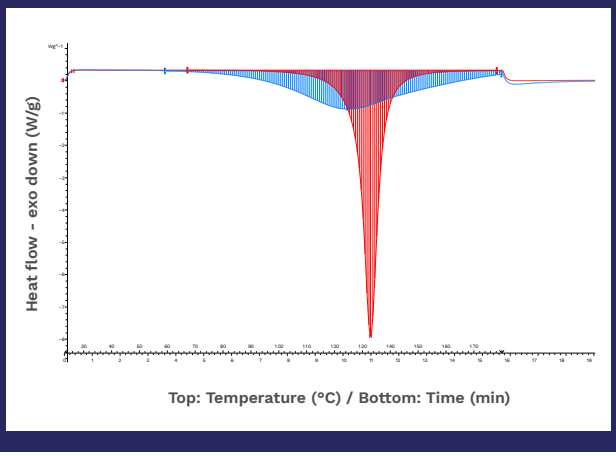
**For small potting applications with low depth and good access to light, UV potting with a dual-cure mechanism for shadow areas can be used to optimise cycle times.

BOSTIK ACADEMY

Potting applications and product suitability.

It is important to know the end application for potting, especially the volume. Depending on the volume, the products for potting applications can be very different.

The graph shows the exothermic behaviour of two different epoxy systems. Polytec PT EP 601 (blue) is suitable for potting big volumes due to the slow reaction. Polytec PT EP 630 (red) releases a large amount of energy in a short period of time, therefore is only suitable for small volume applications.



*Bigger container on request. ‡Some specific materials might be more challenging to bond than others, please consult our technical support for guidance.
Always use glasses and gloves when applying adhesives.
Cure conditions (temperature/duration) will have an influence on the above shown cured product properties. Depending on the curing temperature, the maximum curing volume may be limited due to the exothermic curing reaction.

TDS and **SDS** available at **born2bond.bostik.com**

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

BACK TO PRODUCT SELECTOR

Thermal Conductive

Polytec PT

THERMALLY-CONDUCTIVE, ELECTRICALLY-INSULATING EPOXY

Polytec PT TC 417-2 is a two component, thermally conductive, electrically insulating epoxy.

It is used in various thermal management applications, especially for potting of large volumes. It has excellent chemical and moisture resistance and adheres excellently to glass, metal, ceramic, FR4 and most plastics. The room temperature cure allows to bond temperature sensitive substrates very conveniently. The epoxy can be applied via dispensing or manual application.

Long Pot Life

Chemical Resistance

Multi-substrate Adhesion

Thermal Conductivity

Encapsulation

FEATURES

- Thermal conductivity
- High chemical and oil resistance
- Excellent adhesion to glass, metal, ceramic, FR4 and most plastics
- Room temperature cure
- Suitable for temperature sensitive substrates

TYPICAL APPLICATIONS

- Potting sensors
- Potting electronics

BOSTIK ENGINEERING ADHESIVES
FOCUSED ON PERFORMANCE

FOCUSED ON PERFORMANCE

Thermal conduction enables heat dissipation, protecting the finished product from premature ageing and damage, thereby **extending its lifespan**. This also opens up **possibilities for further miniaturisation**.

POLYTEC PT THERMAL CONDUCTIVE RANGE

The list of features in the following table will help you identify which products best match your needs.

	TC 417-2	VP 2040-1	VP 2041
GENERAL CURE CONDITIONS	> 15 °C	> 20 °C	> 15 °C
1K / 2K		2K	
MIX RATIO BY WEIGHT	100:13	100:10	100:5
VISCOSITY MIX	4,000 mPa·s	4,200 mPa·s	8,300 mPa·s
POT LIFE		6 h	
DENSITY MIX	1.83 g/mL	1.67 g/mL	2.65 g/mL
TYPICAL CURE CONDITIONS (determined by DSC)	80 °C/60 min		80 °C/120 min
GLASS TRANSITION TEMPERATURE	70 °C	63 °C	–
THERMAL CONDUCTIVITY	0.8 W/m.K	1.1 W/m.K	1.6 to 1.7 W/m.K
LAP SHEAR STRENGTH (Al / Al)	25 MPa	4 MPa	10 MPa
ELONGATION AT BREAK	1.1%	1%	0.7%
TEMPERATURE RESISTANCE CONTINUOUS	-55 to 180 °C	-55 to 120 °C	-55 to 180 °C
CERTIFICATIONS	–	UL94 V0 (performance test)	–
PACKAGING*	Two separate containers: 250 g, 500 g and 1 kg	Two separate containers: 250 g and 1 kg	Two separate containers: 250 g, 500 g and 1 kg

BOSTIK ACADEMY

Thermal conductivity.

A good thermally conductive potting solution is a compromise between high thermal conductivity, high content of fillers and low viscosity. The addition of fillers increases the viscosity and the risk of sedimentation.

MATERIAL	~ TC in W/m.K
Air	0.025
Expanded PS	0.035 to 0.05
Plastics w/o additives	0.2 to 0.3
Thermally conductive adhesives	0.5 to 5
Glass, ceramic	1 to 30
Metals, alloys	10 to 400

Low < 0.8 W/m.K

Good ≈ 1.0 W/m.K

Excellent > 1.5 W/m.K

Thermal Conductivity: Measure of the capability of a material to conduct heat in (W/m.K)
Higher thermal conductivity → Higher heat transfer

TDS and **SDS** available at **born2bond.bostik.com**

Always use glasses and gloves when applying adhesives. *Bigger container on request. Cure conditions (temperature/duration) will have an influence on the above shown cured product properties. Depending on the curing temperature, the maximum curing volume may be limited due to the exothermic curing reaction.

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

CONDUCT

PRODUCT RANGES INCLUDED WITHIN BOSTIK CONDUCT

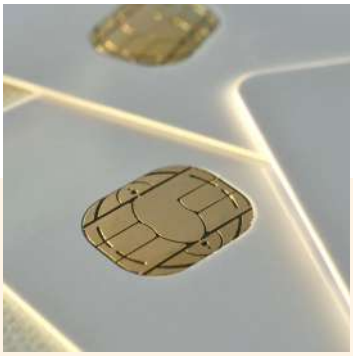
Polytec PT

*RT = Room Temperature.

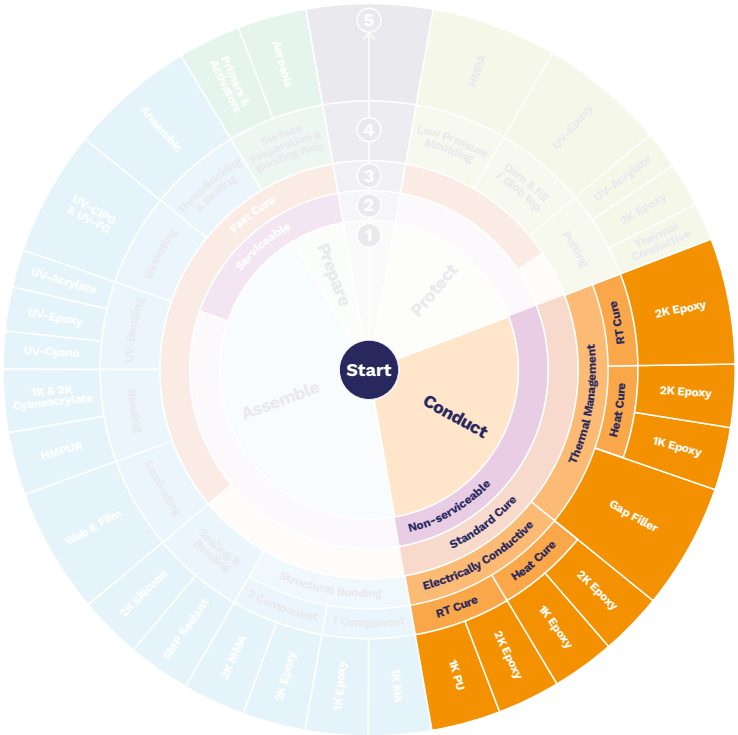
Conduct

ENABLING FUNCTIONALITY BEYOND BONDING

Today's applications demand adhesives that do more than bond – they must also facilitate thermal management and lend additional product performance by conducting heat or electricity. For designers and manufacturers of these innovative products, managing thermal loads in electronics and ensuring strong, reliable electrical connections in compact assemblies are key to the overall performance of end product. Bostik's conductive adhesives meet these demands, delivering precise bonding with advanced functionality to optimise high-tech applications.



The **CONDUCT** section offers solutions tailored for microelectronics, automotive engineering and beyond, empowering innovation with adhesives that perform to expected levels.



2K Epoxy/1K Epoxy
RT cure/Heat cure

Polytec PT

ADHESIVES FOR EFFECTIVE ELECTRONICS THERMAL MANAGEMENT

Polytec PT TC 406 is a paste-like, two-component, thermally conductive epoxy that cures at room temperature. It is designed for thermal management in electronics, hybrid technology, sensor technology and power engineering.

This adhesive complies with UL94 V0 rating and offers good thermal resistance and excellent thermal conductivity. It can be applied directly from the side-by-side cartridge with a static mixing nozzle in a dispensing gun.

- Long Pot Life
- Chemical Resistance
- Multi-substrate Adhesion
- Gap Filling
- Thermal Conductivity

FEATURES

- Easy to dispense
- High thermal conductivity
- Good thermal resistance
- Good chemical resistance
- High bonding strength

TYPICAL APPLICATIONS

- Thermal management of:
  - Electronics
  - Sensor technology
  - Power engineering

FOCUSED ON PERFORMANCE

BOSTIK ENGINEERING ADHESIVES FOCUSED ON PERFORMANCE

Bostik offers a range of thermal management products that also provide **high-strength bonding**, allowing, for example, a reduction of screws where thermal pastes are used in a mounted device. This combination **enhances the durability and lifespan** of the final product.

POLYTEC PT 2K EPOXY/1K THERMAL MANAGEMENT EPOXY RANGE

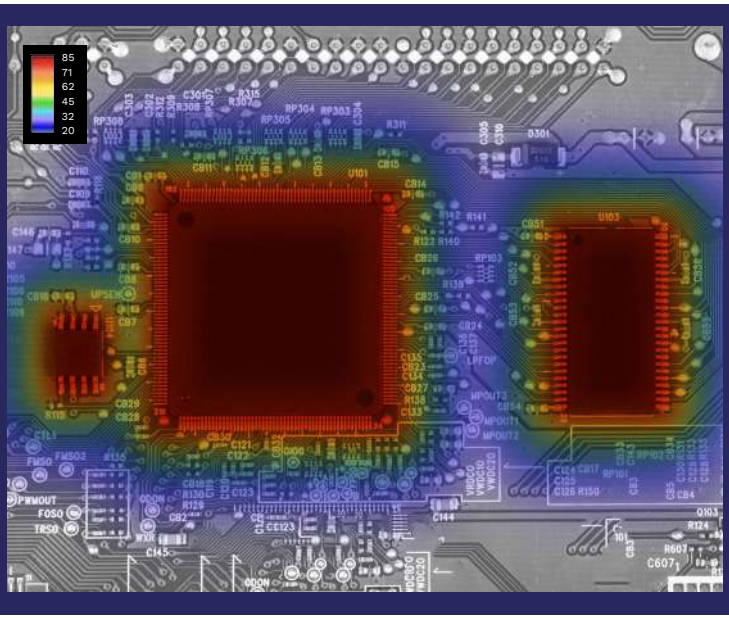
The list of features in the following table will help you identify which products best match your needs.

	TC 406 (RT CURE)	TC 423-2 (RT CURE)	TC 430 (HEAT CURE)	TC 351 (HEAT CURE)
GENERAL CURE CONDITIONS	> 15 °C		> 80 °C	> 120 °C
1K / 2K	2K			1K
MIX RATIO BY WEIGHT	100:47	100:1.8	100:4	–
VISCOSITY MIX	80,000 mPa·s	87,000 mPa·s	13,000 mPa·s	65,000 mPa·s
POT LIFE	30 min		2 days	1 month
DENSITY MIX	1.8 g/mL	3.1 g/mL	1.35 g/mL	1.9 g/mL
TYPICAL CURE CONDITIONS (determined by DSC)	80 °C/60 min	120 °C/30 min	150 °C/15 min	150 °C/10 min
GLASS TRANSITION TEMPERATURE	65 °C	90 °C	98 °C	87 °C
THERMAL CONDUCTIVITY	2.2 W/m.K	3.1 W/m.K	0.7 W/m.K	0.8 W/m.K
LAP SHEAR STRENGTH (Al / Al)	10 MPa	14 MPa	11 MPa	20 MPa
ELONGATION AT BREAK	0.4%	0.5%	0.9%	0.7%
TEMPERATURE RESISTANCE CONTINUOUS	-55 to 180 °C	-55 to 160 °C	-55 to 250 °C	-55 to 200 °C
CERTIFICATIONS	UL94 V0 (performance test)	–		
PACKAGING*	Side by side cartridges: 50 mL and 400 mL	Two separate containers: 250 g, 500 g and 1 kg		Cartridges: 10 g and 30 g Containers: 250 g, 500 g and 1 kg

BOSTIK ACADEMY

Benefits of using TIMs
(Thermal Interface Materials).

- Hot spot reduction.
- Increased device lifetime.
- Performance improvement.
- Energy and noise reduction (e.g. fans).
- Possibility of further miniaturisation.



TDS and **SDS** available at **born2bond.bostik.com**

Always use glasses and gloves when applying adhesives. *Bigger container on request. Cure conditions (temperature/duration) will have an influence on the above shown cured product properties. Depending on the curing temperature, the maximum curing volume may be limited due to the exothermic curing reaction.

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

Gap Filler

Polytec PT

2K REMOVABLE, HIGHLY THERMALLY CONDUCTIVE GAP FILLER

GF HT 200 is a thermally conductive, silicone free and non-abrasive removable two part gap filler.

It is designed specifically for heat sinking and thermal management applications in the electronics and automotive industry by filling and levelling gaps between components that will heat up during use.

Gap Filling | Thermal Conductivity | Debondable | Flexible & Elastic | Vibration Resistant | Reworkability

FEATURES

- Good thermal conductivity
- Easy to remove
- Silicone free
- Non-abrasive
- UL94 V0 compliant

TYPICAL APPLICATIONS

- Thermal management of battery packs and power circuits
- Thermal connection of modules and LED

SUSTAINABILITY ENABLER

Polytec PT's gap fillers offer a significant advantage over pre-made thermal pads, which often lack gap tolerances and generate more waste. The adaptable paste-like consistency of the gap filler allows it to conform to various gaps and surfaces, **ensuring efficient thermal conduction while minimising material waste**. This flexibility makes it a **more efficient option** compared to rigid thermal pads. Additionally GF HT 200 is classified as not hazardous according to EU regulation (EC) 1272/2008 (CLP).

POLYTEC PT GAP FILLER RANGE

The list of features in the following table will help you identify which products best match your needs.

	GF HT 200	TP 300
GENERAL CURE CONDITIONS	> 20 °C	–
1K / 2K	2K	1K (paste)
MIX RATIO BY WEIGHT	100:10	–
VISCOSITY MIX	160,000 mPa·s	
POT LIFE	> 30 min	–
DENSITY MIX	2.45 g/mL	2.1 g/mL
CURE CONDITIONS FOR TDS VALUES	RT (20 to 28 °C)	–
THERMAL CONDUCTIVITY	2.0 W/m.K	3.0 W/m.K
TEMPERATURE RESISTANCE CONTINUOUS	-40 to 150 °C	-40 to 80 °C
MIN LAYER THICKNESS @1 bar pressure	–	200 µm
SPECIFIC ELECTRICAL VOLUME RESISTIVITY	10^{10} Ω·cm (@ 1 KV - cured 7d/RT)	50 · 10^{8} Ω·cm
DIELECTRIC STRENGTH	≥ 10 kV/mm	10 kV/mm
RECOMMENDED STORAGE TEMPERATURE	Room Temperature (do not freeze)	< 35 °C
CERTIFICATIONS	UL94 V0 (performance test)	
PACKAGING*	Side by side cartridge: 645 g	Cartridge: 580 g, Pail: 30 kg, Drum: 300 kg

BOSTIK ACADEMY

Enhanced battery serviceability with Polytec PT removable gap filler.

1. Battery is removed from the car.
2. Defective cells/modules are identified.
3. Defective cells/modules are pulled out with low forces thanks to the gap filler.
4. The gap filler is then easily removed.
5. The gap filler is instantly re-applied at the bottom of the module.
6. Modules are positioned back in the battery. The battery is ready to move back into the car.

TDS and **SDS** available at **born2bond.bostik.com**

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

2K Epoxy/1K Epoxy
Heat cure

Polytec PT

ELECTRICALLY-CONDUCTIVE 2K HC EPOXY RESIN

Polytec PT EC 101 is a two component, solvent-free, heat curing epoxy resin with a long pot life and excellent electrical conductivity. It is ideal for high volume chip and substrate bonding, micro-electronic, medical, hybrids and optoelectronic applications.

It is certified to USP Class VI Biocompatibility Standards, making it suitable for medical applications. It can cure at 95 °C or in rapid cure cycles at higher temperatures. This adhesive can be applied automatically or manually.

Electrical Conductivity | Thermal Conductivity | Long Pot Life | High Precision Dispensing | Impact Resistance | Higher Durability

FEATURES

- Excellent electrical conductivity
- Lower process temperature vs. soldering (can be used on more sensitive substrates)
- Suitable for a variety of application methods
- Process versatility (available as 2K or frozen)

TYPICAL APPLICATIONS

- High volume chip and substrate bonding
- Micro electronics
- Medical devices
- Optoelectronic applications

FOCUSED ON PERFORMANCE

Polytec PT's heat cure electrically-conductive adhesives offer a **robust, lead-free alternative to traditional soldering techniques**. These adhesives provide similar performance to soldering but without the need to clean flux residues, making the process **more efficient and environmentally friendly**. They cure at lower temperatures than soldering, **ensuring strong and durable bonds** without altering the substrate's surface or structure.

POLYTEC PT 2K EPOXY/1K EPOXY ELECTRICALLY CONDUCTIVE RANGE

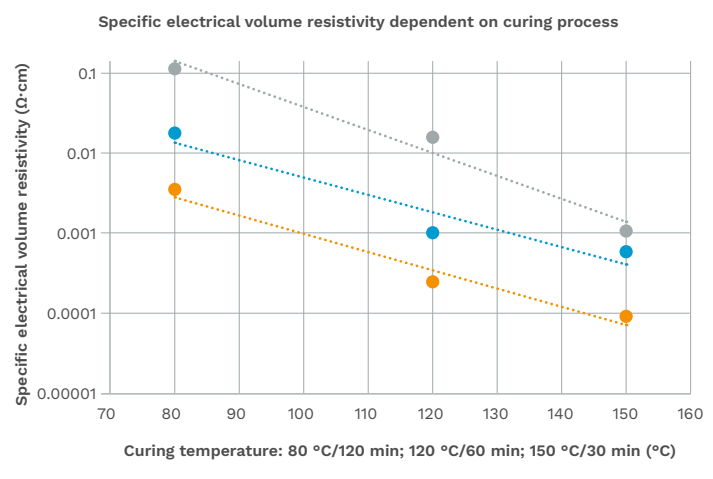
The list of features in the following table will help you identify which products best match your needs.

	EC 101 2K EPOXY	EC 201-2 2K EPOXY	EC 242-FROZEN 1K PRE-MIXED FROZEN EPOXY
GENERAL CURE CONDITIONS		> 95 °C	
MIX RATIO BY WEIGHT	100:100	100:70	–
VISCOSITY MIX	12,000 mPa·s	7,500 mPa·s	35,000 mPa·s
POT LIFE	48 h	60 min	48 h
TYPICAL CURE CONDITIONS (determined by DSC)	150 °C/3 to 4 min	150 °C/15 min	150 °C/5 min
SHORE HARDNESS	D 85	D 55	D 90
TEMPERATURE RESISTANCE CONTINUOUS	-55 to 200 °C	-55 to 170 °C	-55 to 220 °C
GLASS TRANSITION TEMPERATURE	74 °C	< 23 °C	110 °C
THERMAL CONDUCTIVITY	1.3 W/m.K	1.5 W/m.K	4.2 W/m.K
SPECIFIC ELECTRICAL VOLUME RESISTIVITY	1 to 4 · 10^{-4} Ω·cm	2 to 5 · 10^{-4} Ω·cm	5 · 10^{-5} Ω·cm
ELONGATION AT BREAK	0.4%	7.6%	0.4%
CERTIFICATIONS	USP VI	–	
PACKAGING*	Two separate containers: 30 g, 250 g and 500 g	Two separate containers: 30 g, 250 g, 500 g and 1 kg	Cartridges: 14 g, 24 g, 50 g and 150 g
STORAGE TEMPERATURE	RT (2K) / -40 °C (frozen version)	RT	-40 °C (frozen version)

BOSTIK ACADEMY

Electrical volume resistivity dependent on curing process.

- Substrates need to be considered since some metallic substrates tend to oxidise below the adhesive, forming an electrically isolating layer, reducing the electrical performance of the bond.
- Higher curing temperatures increase shrinkage and thus the electrical conductivity.



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

1K PU/2K Epoxy
Room Temperature cure

Polytec PT

ELECTRICALLY-CONDUCTIVE 1K RT PU

Polytec PT PU 1000 is a single component, room temperature curing, highly flexible polyurethane adhesive with excellent electrical conductivity.

It has been specifically developed for contacting chip modules on dual interface smart cards and is ideal for use in micro electronics, hybrid and electronic applications. It is also suitable for electrical contacting of copper surfaces. This adhesive can be applied by dispensing, jet dispensing or manually.

Electrical Conductivity | Thermal Conductivity | High Precision Dispensing | Room Temperature Cure

FEATURES

- Electrically conductive
- Thermally conductive
- Room temperature curing (can be accelerated with heat)

TYPICAL APPLICATIONS

- Electro conduction in chip to antenna bonding
- Electrical contacting of copper surfaces
- EMI/shielding
- Temperature sensitive electronics

FOCUSED ON PERFORMANCE

BOSTIK ENGINEERING ADHESIVES
FOCUSED ON PERFORMANCE

Polytec PT's room temperature curing electrically conductive adhesives offer a **reliable alternative to welding or soldering**, especially for bonding difficult material combinations without altering the substrate's surface or structure. These adhesives **reduce thermal stress** on components by curing at moderate or room temperatures, unlike traditional soldering. They can be applied using various methods such as dispensing, jetting, screen printing or stamping.

POLYTEC PT 1K PU/2K EPOXY RANGE

The list of features in the following table will help you identify which products best match your needs.

	PU 1000	EC 244	EC 262-2-N
GENERAL CURE CONDITIONS	> 15 °C	> 23 °C	
1K / 2K	1K	2K	
MIX RATIO BY WEIGHT	–	100:10	100:100
VISCOSITY MIX	12,000 mPa·s	9,000 mPa·s	33,000 mPa·s
POT LIFE	–	15 min	90 min
TYPICAL CURE CONDITIONS (determined by DSC)	Room Temperature	80 °C/15 min	150 °C/30 min
SHORE HARDNESS	D 35	D 70	D 55
TEMPERATURE RESISTANCE CONTINUOUS	-40 to 100 °C	-40 to 150 °C	-55 to 180 °C
GLASS TRANSITION TEMPERATURE	–		40 °C
THERMAL CONDUCTIVITY	1.8 W/m.K	–	1.6 W/m.K
SPECIFIC ELECTRICAL VOLUME RESISTIVITY	2 to 4 · 10^{-4} Ω·cm	< 5 · 10^{-3} Ω·cm	5 · 10^{1} Ω·cm
ELONGATION AT BREAK	1.2%	0.7%	1.7%
PACKAGING*	Cartridges: 5 g, 7 g, 17 g and 45 g	Two separate containers: 30 g, 250 g and 500 g	Two separate containers: 250 g, 500 g and 1 kg

BOSTIK ACADEMY

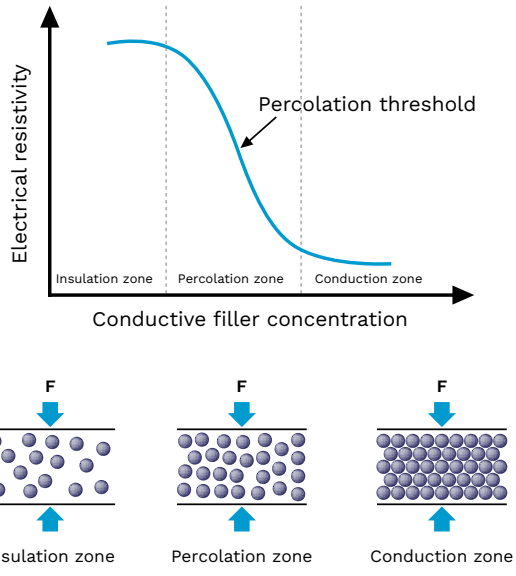
Conductive filler concentration and electrical resistivity.

- Increasing volume fraction of the filler will increase the electrical conductivity.
- Threshold to pass to have a good/reliable electrical conductivity.
- Typical specific electrical volume resistivities of 10^{-3} down to 10^{-5} Ω•cm can be achieved.
- Higher curing temperatures increase shrinkage and thus the electrical conductivity.

Insulation zone: No electrical conductivity

Percolation zone: Electrical conductivity starts

Conduction zone: Good electrical conductivity. Adding more fillers at this point will not improve conductivity much further



TDS and **SDS** available at **born2bond.bostik.com**

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

EXPERT INSIGHTS

EXPERT INSIGHTS AND KNOWLEDGE

BOSTIK

BACK
TO PRODUCT
SELECTOR

Dispensing for optimal performance

Efficient and accurate dispensing is vital for achieving optimal adhesive performance. We collaborate with trusted partners to support manufacturers in selecting the right systems.

This section is an overview on best practices for adhesive application, ensuring precision, consistency and efficiency across manual, semi-automated and fully automated processes. Bostik's adhesive range is designed for compatibility with a variety of dispensing methods, allowing flexibility to meet specific production requirements.

MANUAL DISPENSING

Manual dispensing is the simplest approach, ideal for small-scale operations or applications requiring precise hand control. Adhesives can be dispensed directly from containers like tubes, bottles or syringes, offering flexibility and simplicity. For more controlled flow, dispensing tools such as hand-dosing guns provide improved accuracy and ease of use.

ASSISTED MANUAL DISPENSING

Assisted manual systems bridge the gap between manual and automated processes, allowing consistent, repetitive product flow while maintaining manual control of the application.

These systems can be **mechanical guns**, **peristaltic pumps** or **pressure pumps**, with the latter able to push cartridge pistons into tanks for bigger packaging. For low viscosity products and to have an extra control of the flow, membrane valves are preferable.

For **two-component (2K) adhesives**, syringe guns with pressure move plungers are a practical solution.

AUTOMATIC DISPENSING

For high-volume production, automatic dispensing systems provide the greatest efficiency and precision. These systems use robots or production lines to control both adhesive placement and flow. Advanced technologies ensure consistency, speed and adaptability to complex requirements:

1 PRESSURE AND PERISTALTIC PUMPS

Pressure and peristaltic pumps can be used the same way as in semiautomatic dispensing, but with the advantage of automatic repetitive positioning, they can dramatically accelerate the speed of production lines.

These methods also **require less complex technology** than the most advanced dispensing equipment, like volumetric or jet pumps.

2 VOLUMETRIC DISPENSING

This method provides precise control by displacing a constant volume of adhesive, **ensuring uniform flow**. It works seamlessly with **cartridges**, **containers** and **2K adhesives**, supporting applications where continuous or micro-dispensing is required. **Volumetric dispensing** is ideal for environments demanding high repeatability, such as electronics assembly and medical devices.

Screw pumps (progressive cavity pumps) are some of the most usual forms of industrial volumetric dispensing.

3 JET DISPENSING

A high-speed, contactless method tailored for micro-dispensing tasks. By rapidly "jetting" adhesive droplets, this technique **achieves exceptional precision**, even for intricate or miniature applications. It is **particularly suited for tasks requiring non-thixotropic adhesives**, such as microelectronics, where minimal volumes must be applied accurately and efficiently.

Need guidance on selecting the right dispensing system for an engineering adhesive? Talk to your local Bostik representative today.

SPECIAL REQUIREMENTS FOR DISPENSING

Certain adhesives require specific conditions during application to ensure optimal performance:

- **HEATING ELEMENTS** – Used for temperature adhesives to allow the flow of the product.
- **CURING LEDS** – For UV-curable adhesives, integrated curing LEDs allow for precise control over curing times. This reduces waste, speeds up production and ensures strong, durable bonds.

1

2

3

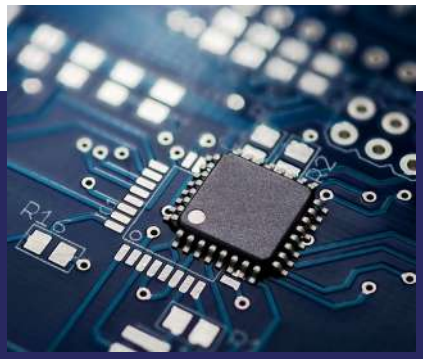
Engineering Adhesives: is UV the future?

UV adhesives rely on photoinitiators that trigger a polymerisation reaction when exposed to UV light, transforming the adhesive from liquid to solid within seconds. This fast-curing mechanism eliminates the need for heat, making UV adhesives particularly suited for applications involving sensitive materials such as microchips, plastics or delicate substrates.

Modern curing systems, including LED-based UV systems, offer significant advantages over traditional mercury lamps. LEDs emit specific, controlled wavelengths of UV light, reducing energy consumption, increasing efficiency and enabling compatibility with heat-sensitive components. For example, Bostik's **Born2Bond™ Light Lock** adhesives use UV-visible blue light (405-420 nm) to achieve precise, energy-efficient curing in a fraction of the time, supporting high-throughput production processes.

APPLICATIONS ACROSS INDUSTRIES

UV adhesives are transforming production in multiple industries by combining speed, precision and strength:



ELECTRONICS

UV adhesives play a critical role in encapsulating microchips and protecting components in devices such as SIM cards, sensors and smart electronics.
Bostik's **Born2Bond™ UV-Epoxy** range excels in these applications, providing high-precision encapsulation and sealing solutions. These adhesives withstand temperature variations, moisture and mechanical stresses, ensuring reliable, long-term performance.

AUTOMOTIVE

In the automotive sector, UV adhesives are used for gasketing, sealing and structural bonding, particularly in advanced electronics and lightweight assemblies. Bostik's **Born2Bond™ UV Cure-In-Place Gasket (CIPG)** technology delivers exceptional durability and resistance to harsh environmental conditions such as humidity and extreme temperatures, making it ideal for sealing sensors, cameras, displays and battery housings.

LUXURY GOODS

UV adhesives are highly valued in luxury product manufacturing due to their clarity and clean finish. Unlike chemically cured adhesives, which can leave residues or yellow over time, Bostik's **UV adhesives** remain transparent and free of blooming. This makes them perfect for high-end items like perfume bottles, jewellery and optical devices, where aesthetic quality is paramount.

ADVANCING SUSTAINABILITY AND EFFICIENCY

UV adhesives align with modern manufacturing's drive toward sustainability by reducing energy consumption, material waste and production times.

For instance, UV adhesives cure on demand, meaning they only harden when exposed to UV light. This gives manufacturers the flexibility to make adjustments during production, significantly reducing scrap from misaligned parts and production errors.

Additionally, innovations like LED-based curing systems not only improve efficiency but also reduce harmful emissions. LEDs consume far less energy compared to traditional UV lamps and do not produce ozone, contributing to safer and more sustainable production environments.

CHALLENGES AND ONGOING INNOVATION

While UV adhesives offer considerable benefits, challenges remain, such as ensuring compatibility with recycling processes and integrating seamlessly into automated production lines. Bostik addresses these challenges through continuous research and development:

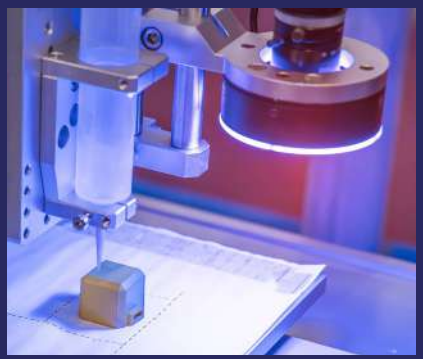
- **JET DISPENSING TECHNOLOGY**: Enables high-speed, contactless application for precision bonding in miniature and intricate designs, such as electronics and medical devices.
- **DURABILITY IMPROVEMENTS**: New formulations enhance chemical, moisture and temperature resistance, ensuring that UV adhesives perform reliably even under demanding conditions.

Through ongoing advancements, Bostik continues to expand the capabilities of UV adhesives to meet evolving industrial requirements.

THE FUTURE OF UV ADHESIVES

As manufacturing processes evolve, UV adhesives remain at the forefront of innovation. Their rapid curing times, versatile applications and strong bonding properties make them indispensable for modern production. With solutions like Bostik's **Born2Bond™ UV-Epoxies** and **UV-Acrylates**, manufacturers can improve efficiency, reduce waste and deliver high-quality products across industries.

Through continued investment in research, Bostik is driving the development of safer, more sustainable UV adhesive solutions that meet the needs of tomorrow's manufacturing landscape.



BORN2BOND™

Born2Bond™ Academy

UNLOCKING ADHESIVE EXPERTISE WITH BORN2BOND™ ACADEMY

Maximising the potential of advanced adhesives requires more than just choosing the right product. Understanding how to apply **Born2Bond™** and recently added **Polytec PT** adhesives effectively and appreciating the unique properties that set them apart is essential for achieving the best results.

Born2Bond™ Academy provides the training and resources needed to build this expertise through hands-on experience and in-depth technical learning.

COMPREHENSIVE TRAINING TAILORED TO YOUR NEEDS

Born2Bond™ Academy is designed to enhance understanding of adhesive technologies, applications and dispensing equipment. Our global team of experts create tailored training programs to match the specific needs of participants, ensuring relevant and practical learning.

Whether you are a distributor training your sales team or an OEM developing your technical team's adhesive expertise, **Born2Bond™ Academy** can build a program suited to your goals.

TRAINING INCLUDES

- Technical presentations on **Born2Bond™** technologies
- Product introductions and practical application examples
- Visits of Bostik Research & Development centres
- Laboratory demonstrations and hands-on product use

Participants gain practical skills with adhesive application under expert supervision, receiving a certificate of completion at the end of the session.

BOSTIK

ACADEMY

GLOBAL LEARNING NETWORK

Every year, manufacturers and specialists from across the globe attend Born2Bond™ Academy sessions, reflecting the growing need for adhesive knowledge across industries. The academy encourages open discussion and project-focused learning to address the specific needs of each participant.

SUPPORTING RESOURCES INCLUDE:

- Case studies and solution guides
- Application videos and product demos
- Seminars, webinars and industry programs
- Demo kits and plant surveys for practical learning

These tools ensure participants continue developing their knowledge long after the academy ends.

SPECIFIC TO YOUR INDUSTRY

Each **Born2Bond™ Academy** is custom-built to reflect the adhesive needs of different industries, from automotive and aerospace to medical devices and electronics. Programs range from **Adhesives 101 for beginners**, to **advanced technical content** on niche technologies and processes.

Because dispensing is crucial to bonding, lab sessions focus on using adhesives with various application equipment. Participants gain confidence in working with **Born2Bond™** products, learning correct techniques in a safe environment.

To enrol or learn more, scan to contact your local **Born2Bond™** representative

BUILDING EXPERTISE FOR THE FUTURE

Born2Bond™ Academy reflects Bostik's commitment to innovation and technical excellence. By investing in adhesive education, we help companies improve their bonding processes, reduce waste and enhance product performance.

BORN2 BOND™

Bostik: innovation across industries

Bostik is globally recognised for its leadership in engineering adhesives, driving advancements in industries such as automotive, electronics, medical devices and luxury goods. Through its **Born2Bond™**, **Thermelt®** and **Polytec PT** brands, Bostik addresses recent industry challenges like bonding smaller, more complex components, accelerating curing times and reducing waste. Yet, Bostik's impact extends far beyond engineering adhesives, delivering innovative solutions for construction, assembly, mobility and durable goods manufacturing.

BUILDING STRONG FOUNDATIONS

Bostik provides smart adhesive systems for construction, supporting both new builds and refurbishment projects.

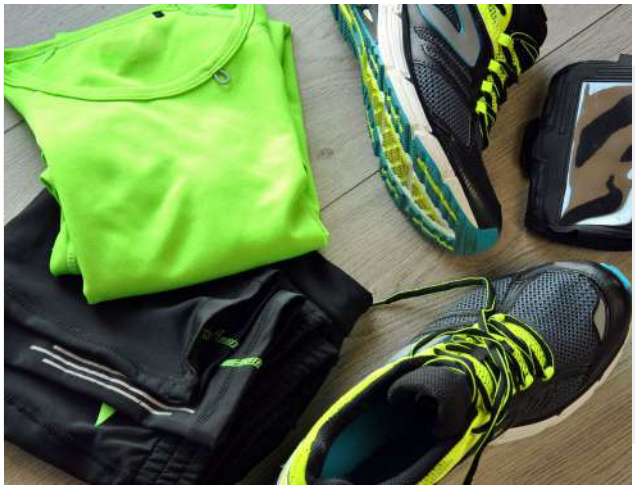
Its solutions span woodworking, waterproofing, sealing and insulation. The Sealing & Bonding range offers reliable interior and exterior adhesives for walls, floors and fenestration, ensuring durability and energy efficiency. These systems help create safe, sustainable homes while enhancing community comfort and well-being.

ENHANCING DURABLE GOODS

In durable goods manufacturing, Bostik's adhesives ensure products are robust and long-lasting.

Whether for household appliances, electronics or industrial machinery, Bostik solutions withstand mechanical stress, environmental conditions and daily wear. Products like **Thermelt®** adhesives and **Born2Bond™** technologies provide durable bonds, replacing traditional methods like welding in dishwashers, washing machines and handheld electronics.

Bostik adhesives also enable design flexibility, helping manufacturers create lighter, more efficient products while maintaining structural integrity. Solutions that offer thermal management and environmental resistance are critical to ensuring modern goods perform reliably over extended lifecycles. By simplifying production processes and reducing material use, Bostik supports sustainability goals.



SMART ASSEMBLY SOLUTIONS

With over a century of experience, Bostik has been a trusted partner in assembly industries worldwide.

Its adaptable adhesives are used in applications like technical textiles, transfer printing, footwear, flooring and filtration. Through ongoing research and development, Bostik continues to deliver high-performance solutions that improve operational efficiency while addressing evolving trends.

DRIVING MOBILITY FORWARD

As the automotive industry transitions to e-mobility, Bostik leads with adhesive technologies designed for structural bonding, thermal management and sustainability.

Its isocyanate-free formulations and thermal interface materials enable manufacturers to assemble batteries, sensors and displays while meeting strict environmental standards. Bostik's solutions ensure reliable performance, faster charging and greater durability, supporting the future of greener, more efficient vehicles.

A PARTNER FOR PROGRESS

From engineering adhesives to construction, assembly, mobility and durable goods, Bostik delivers versatile, sustainability-enabling solutions that align with the demands of today's industries. By leveraging Arkema's expertise in high-performance polymers, Bostik remains committed to creating adhesives that combine innovation, durability and sustainability to meet the needs of an ever-changing world.

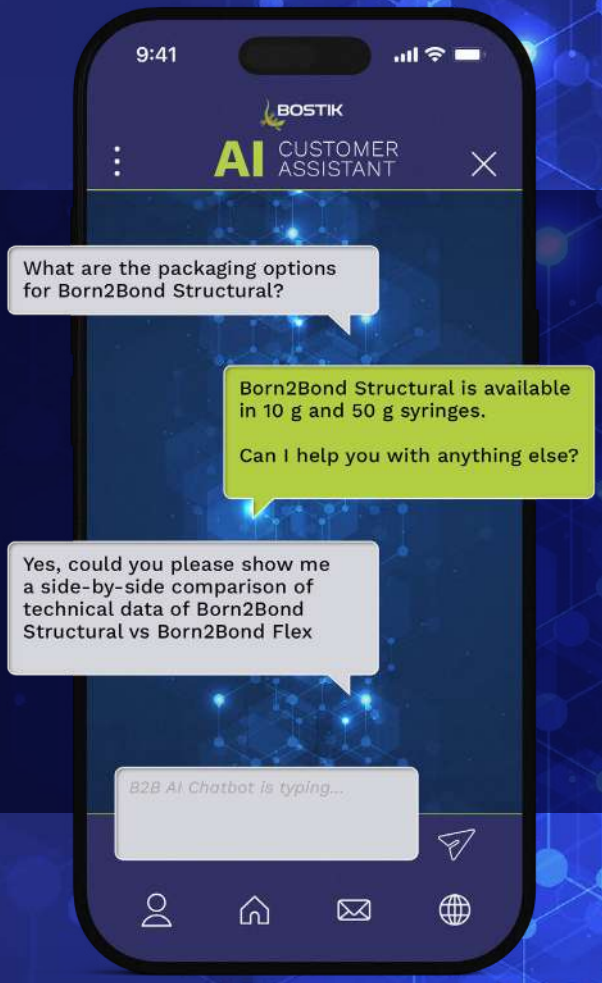
Scan to learn more about the wide variety of markets served by Bostik

BACK TO PRODUCT SELECTOR

Your 24/7 Engineering Adhesives expert has arrived

Don't get stuck on Engineering Adhesives anymore. Meet the **Born2Bond™ AI customer assistant**.

Combining smart AI with Bostik's exceptional technical know-how, our new online assistant makes choosing the right Engineering Adhesive first time easier than ever.



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EXPERT GUIDANCE

Get immediate information on product features and comparisons.

INSTANT RESPONSE

Access product pages, Bostik Academy videos and technical and safety data sheets in seconds.

TAILORED RECOMMENDATIONS

Receive tailored product suggestions based on individual preferences and needs.

ALWAYS AVAILABLE

Get multilingual Engineering Adhesives advice 24/7.

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Connect with **Bostik experts** seamlessly for complex enquiries and further support

No matter your Engineering Adhesives challenge, the **Born2Bond™ AI customer assistant** helps simplifies the process, delivering fast, reliable support when you need it most.

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Product index

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