

BORN² BOND™



UV Cure-In-Place Gasket
(UV-CIPG) Solutions

Our Vision

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

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

Bostik **Born2Bond™**

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

As engineering adhesive applications develop, they raise new challenges. These include questions on 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 detailed and precise bonding applications. These products sit under the **Born2Bond™** brand – this name reflects our purpose and the collaborative bond we have with our customers.

Born2Bond™ UV Cure-In-Place Gasket (UV-CIPG) Solutions

The Bostik **Born2Bond™ UV Cure-In-Place Gasket (UV-CIPG)** range is a revolutionary gasket system, commonly used in applications that require a fast, cost effective and cutting edge solution such as in electronics manufacturing and automotive sectors.

The **UV-CIPG** adhesives can be easily applied with an automated dispenser which can be programmed to follow a specific application area. This method of application can save many hours of preparation and applying the gasket onto a product housing, and also helps to reduce the volume of materials used. The gasket is cured immediately during application using UV light.

The **Born2Bond™ UV-CIPG** range is Bostik's latest innovation in engineering adhesives and has been designed to address the detailed and precise bonding requirements demanded by modern industry.



Bostik **Born2Bond™** UV-CIPG Solutions

How does it work?

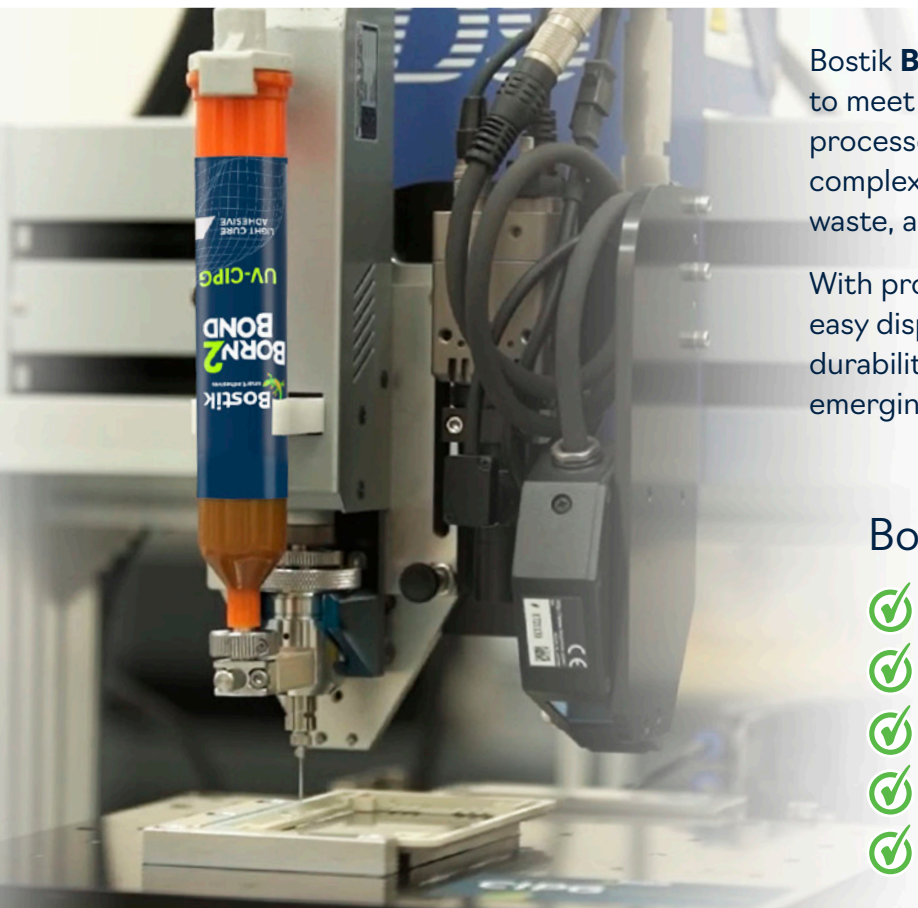


For water and dust proofing applications, moulded and cut gaskets are widely used. These gaskets are typically assembled by hand.

However, moulded gaskets are labour intensive.

Moulded Gaskets

- ❌ Labour intensive
- ❌ High labour cost
- ❌ High defect rate
- ❌ Mould cost



Bostik **Born2Bond™** UV-CIPG has been developed to meet the demands of modern manufacturing processes: high efficiency, automated processes, complex designs, smaller size, lightweight, less waste, and water/dust proof.

With products that offer excellent elasticity and easy dispensability, along with exceptional quality, durability and strength, **Born2Bond™** UV-CIPG is emerging as a top choice for industry players.

Bostik **Born2Bond™** UV-CIPG

- ✅ UV curable
- ✅ Low labour cost
- ✅ No mould
- ✅ High precision
- ✅ Automatic robot dispensing

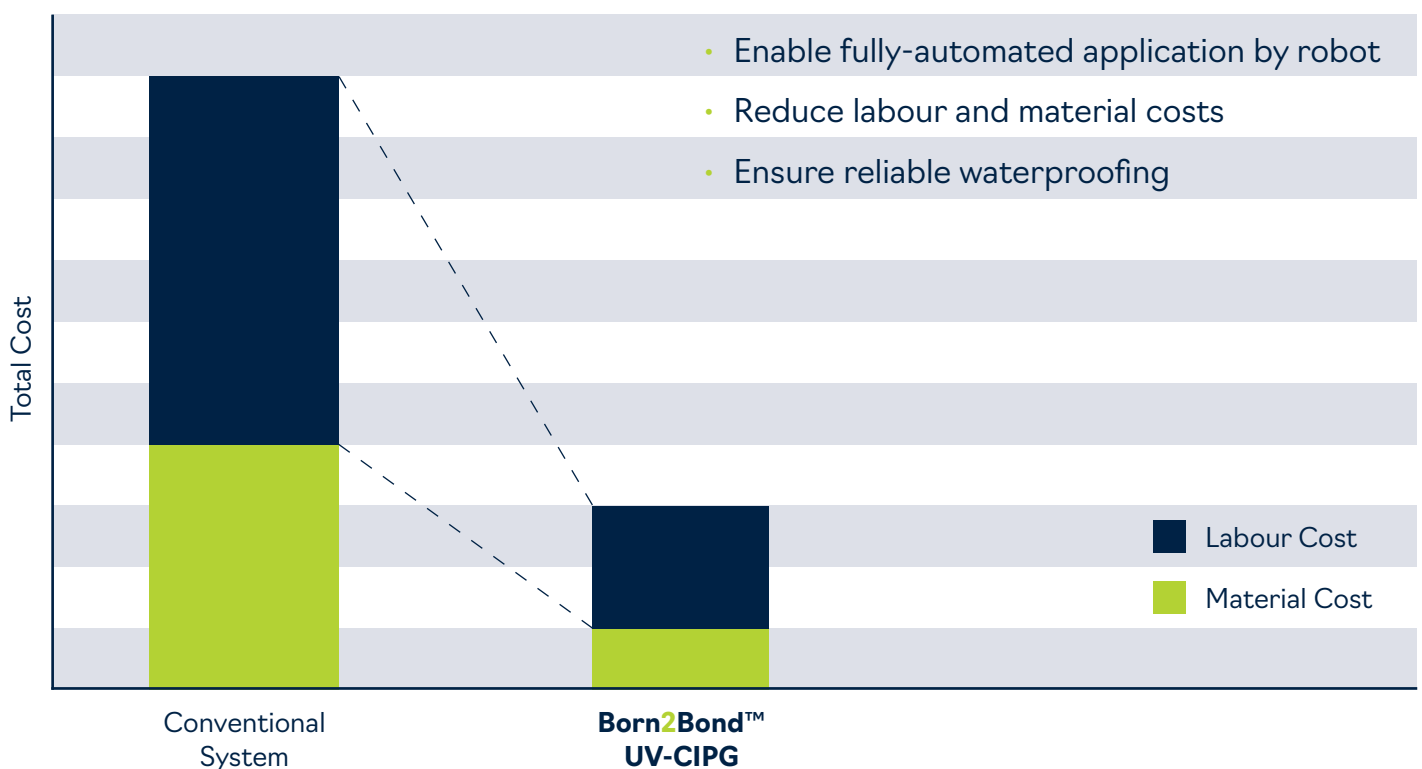
Bostik **Born2Bond**™ UV-CIPG Solutions

Key features

- Extremely flexible and tough, it does not crack even when compressed or deformed
- High thixotropic indexes enable the creation of complex gaskets on flat surfaces or shallow grooves
- Immediate curing using UV light
- Enables micro-dispensing

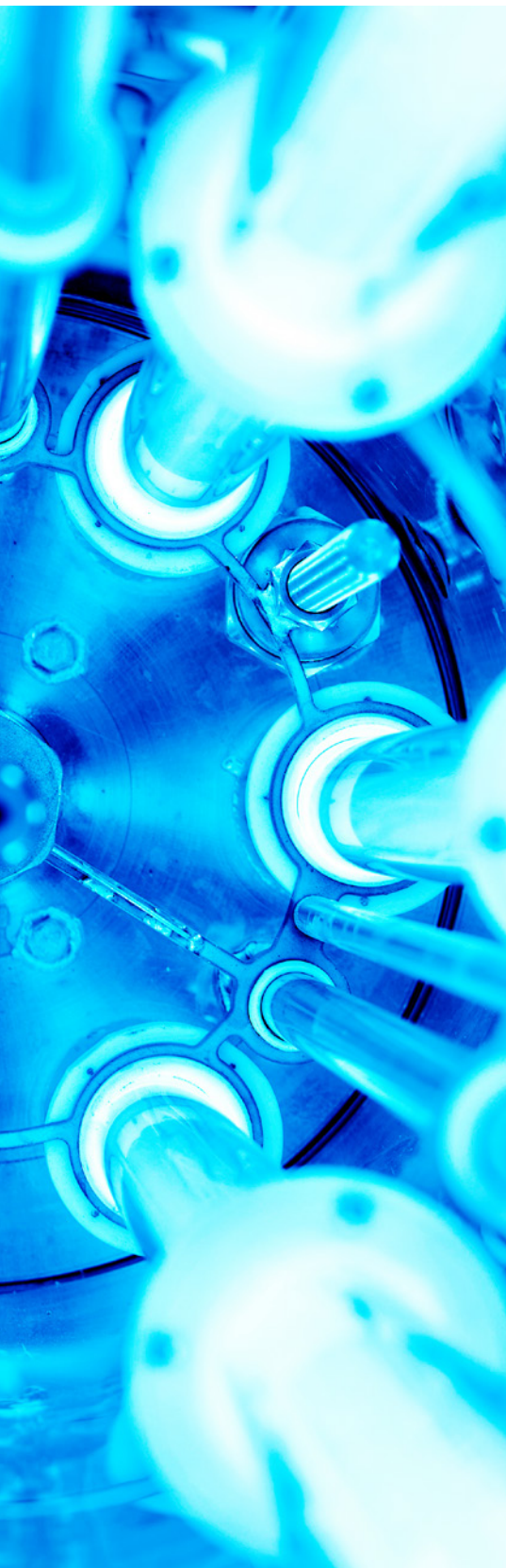


Key benefits of Bostik **Born2Bond**™ UV-CIPG Solutions



Bostik **Born2Bond™** UV-CIPG Solutions

Application and equipment



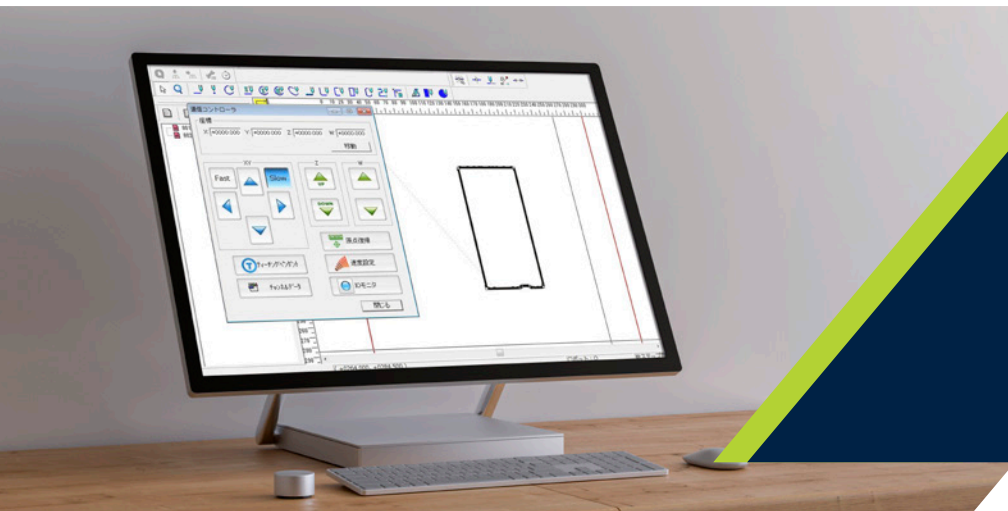
Bostik **Born2Bond™** UV-CIPG Solutions can be dispensed using all technologies, and Bostik can adjust the formula to cure at a specific wavelength if required.

Dispensing and curing equipment

Dispensing Head	Air	Cost effective
		Does not need cleaning
	Mechanical	Precise
		High viscosity
	Jetting	Suitable for ultra-fine dispensing
		Unaffected by irregularities on the substrate
3-Axis Robot	N/A	Can be enabled to dispense automatically
		Can be pre-programmed to dispense in a complex pattern
UV-Curing Device	Metal-halide	Low tackiness at multiple wavelengths
		Quick curing time
		Can be cured completely
	LED	No heating during UV irradiation, therefore no damage
		Affordable and durable

Bostik **Born2Bond™** UV-CIPG Solutions

Automated application process



1.

Making a programme

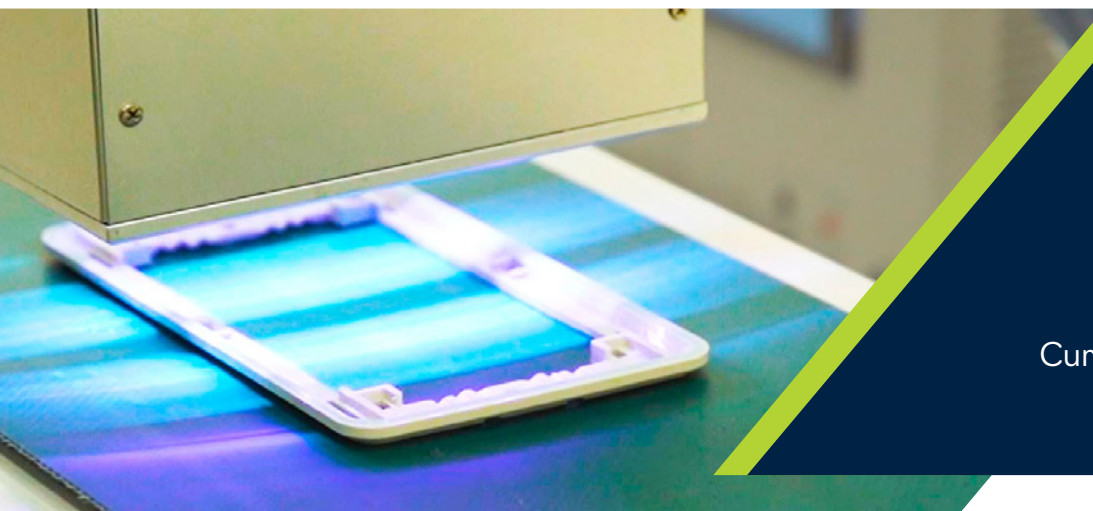
Design precise application areas



2.

Dispensing UV-CIPG

Dispense automatically and accurately



3.

Irradiating UV

Cure immediately with UV light

Bostik Born2Bond™ UV-CIPG Product Range

		AU521C	AU521C-R2	AU551C	AU512	
Specificities		Best seller for wearables. Highest flexibility on the market. No cracks even with 50% compression	Improved adhesion, especially on plastics	High flexibility for display sealing	Excellent adhesion on PC and ABS	
Viscosity (mPa.s / 25°C)	0.5rpm	1,400,000	720,000	870,000	840,000	
	5.0rpm	230,000	115,200	130,000	120,000	
Thixotropy index (0.5 rpm / 5 rpm)		6.1	6.3	6.7	7.0	
Density	23°C	1.2	1.2	1.2	1.2	
Strength at break (23°C)	MPa	4.0	4.2	0.9	1.1	
Elongation (23°C)	%	1,800	2,460	1,300	600	
Hardness	Shore	A	17	10	6	13
		00	69	-	50	60
Compression set 70°C / 22Hrs. (%)		25%	12	15	32	8
		50%	12	30	30	14
Hydrolysis resistance 85°C x 95%RH		200h	200h	200h	1,000h	
Shelf life		4 months	4 months	4 months	4 months	
Main applications		Smart watches, Security cameras	Smart watches, Security cameras	Tablets, Smartphones, Displays, Digital Cameras	Tablets, Smartphones	

Why **Born2Bond™** UV-CIPG Solutions?

INNOVATION

Bostik is leading the way in pioneering materials science. As we expand, diversify and innovate, our lead adhesive technologies evolve with us to address manufacturers' ever-changing needs.

TECHNOLOGY (SOLUTIONS)

Innovation is our DNA. We are on a constant quest to find newer and smarter ways of doing things. With our focus on centralised R&D and materials science, our innovation strategy can be broken down into three distinct levels:

- Adhesive research and technology development
- Product development and innovation
- Technical support

LEADERSHIP

As an industry leader, Bostik understands the macro changes which influence the markets and industry; and provides innovative smart solutions to meet these pressing challenges for electronic and automotive manufacturers.

AU525A	AU060R	AU588
Good adhesion to metal	Hydrolysis resistant grade for auto application	Great durability, great dispensability
740,000	400,000	836,000
110,000	66,000	176,000
6.7	6.1	4.8
1.2	1.0	1.2
9.0	4.0	10.0
750	400	800
36	32	39
-	-	-
16	1	8
16	3	10
200h	1,000h	1,000h
4 months	10 months	10 months
Digital cameras	Automotive ECUs, Transmission modules, ADAS	Automotive ECUs (ADAS, Ivl etc.)

Bostik's Worldwide Technical Service network of industry and application experts are organised by market segments to bring dedicated support in all process and manufacturing specificities.

Our extensive technologies portfolio and adhesive expertise are at your service to define the best solution for each and every single situation. For more information, please contact Bostik today.

AU588

The new **AU588** gasket solution is the latest innovation in engineering adhesives as part of the company's goal to create smart solutions for Industry 4.0, globally.

AU588 is UV reactive and delivers high seal performance and exceptional elasticity. It also offers reliable durability in high-temperature environments and excellent hydrolysis resistance. Its unique balance of high elongation and high tensile strength ensures that it will not crack even when exposed to high compression ratios.

AU588 Applications

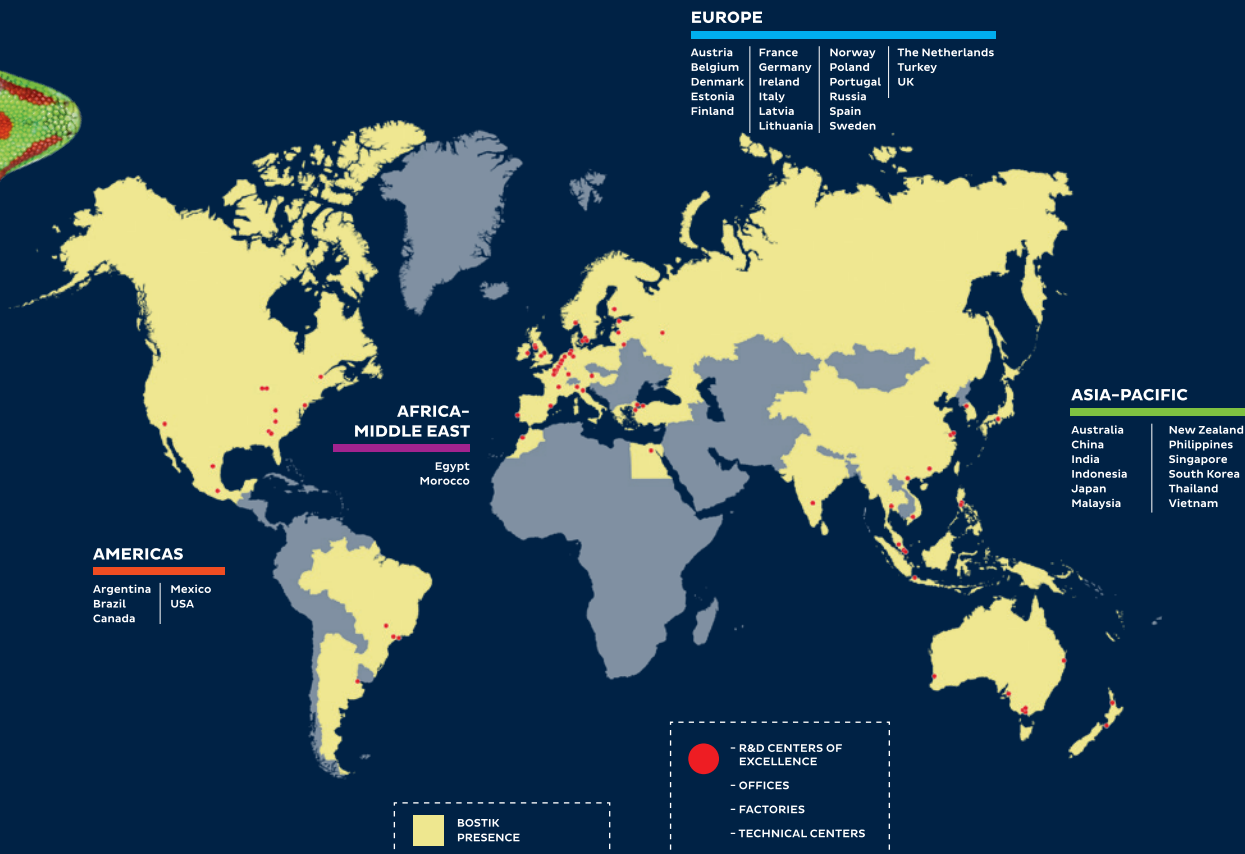
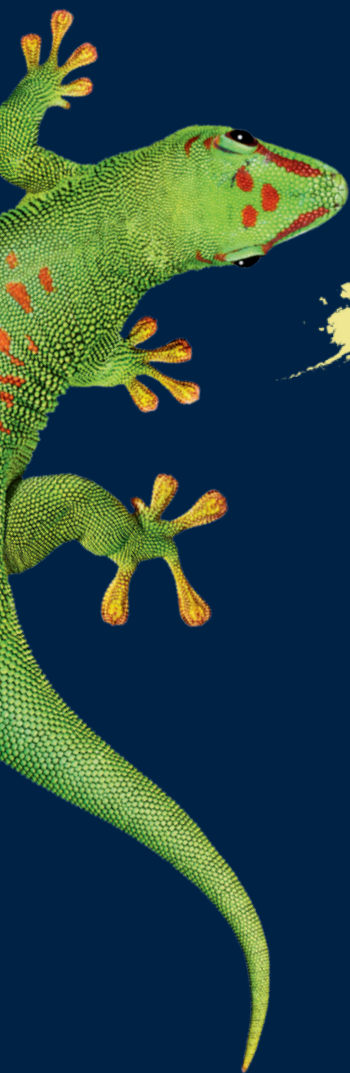


AU588 Strengths

- 1 Great dispensability
- 2 Can withstand high temperatures
- 3 Hydrolysis resistance, high humidity resistance (85°C, 95% relative humidity)

AU588			
Specificities		Great durability, great dispensability	
Viscosity (mPa.s / 25°C)	0.5rpm	836,000	
	5.0rpm	176,000	
Thixotropy index (0.5 rpm / 5 rpm)		4.8	
Density	23°C	1.2	
Strength at break (23°C)	MPa	10.0	
Elongation (23°C)	%	800	
Hardness	Shore	A	39
		00	-
Compression set 70°C / 22Hrs. (%)	25%	8	
	50%	10	
Hydrolysis resistance 85°C x 95%RH		1,000h	
Shelf life		10 months	
Main applications		Automotive ECUs (ADAS, Ivl etc.)	





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