**GROUND GAS** PROTECTION **GP® SEALANT TECHNICAL DATA** SHEET





# EALANT

GP® SEALANT is a novel low modulus expansion joint sealant and adhesive, especially formulated to ensure bubble free cure event at very high temperature and humidity climatic conditions. The product displays excellent thixotropy allowing its use even in very large voids.

## **TITANTECH**<sup>®</sup>

For developers of brownfield and contaminated sites the TITANTECH<sup>®</sup> family of products represent a major step forward in safeguarding projects against gaseous and chemical contamination.

It cures by reaction with atmospheric humidity to produce a joint sealant with a 50% joint movement accommodation factor and excellent adhesion on substrates traditionally problematic for PU Sealants, e.g. glass, aluminium, steel, polycarbonate, etc. The extrusion rate and tooling of the sealant remain the same throughout a very wide range of temperature and humidity conditions.

GP® SEALANT is CE certified according to EN 15651-1, and specifically designed for sealing GP® Membranes reinforcement bar (RE-BAR) penetrations, and complex detailing areas such as fillet, tight corner transitions, terminations to concrete panels, facades, metal frames glass and granite materials. GP® SEALANT exhibits excellent chemical resistance and provides a gas/air tight seal when used in accordance with the instructions provided.

Weight	1.45 gr/cm <sup>3</sup>	
Cure Rate	2.0 - 3.0 mm/day	
Adhesion to Concrete	> 20 kg/cm <sup>2</sup> > 2 N/mm <sup>2</sup>	
<b>CE Certified</b>	EN 15651-1	

BBA

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Bespoke Solutions For High Risk Applications

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Feature	Characteristics	Test Method	<b>GP<sup>®</sup> SEALANT</b>
Mechanical Properties	Reaction to Fire	EN ISO 11925-2	CLASS E
	Elastic Recovery (%)	EN ISO 7389	> 70%
	Resistance to Flow (mm)	EN ISO 7390	≤ 3 mm
	Tensile Properties - Secant Modulus @23°C	EN ISO 8339	≤ 0.4 MPa
	Tensile Properties - Secant Modulus @30°C	EN ISO 8339	≤ 0.4 MPa
	Loss of Mass/Volume	EN ISO 10563	≤ 10%
	Specific Weight	ASTM D1475 / DIN53217 / ISO 2811, @20°C	1.45 gr/cm <sup>3</sup>
	Tack Free Time, @77°F (25°C) & 55% RH		2.5 - 3.5 hours
	Cure Rate		2.0 - 3.0 mm/day
	Service Temperature		-40 to 80°C
	Hardness	ASTM D2240 / DIN 53505 / ISO R868	± 27 Shore A
	Modulus at 100% Elongation	ASTM D412 / EN-ISO-527-3	0.3 N/mm <sup>2</sup>
	Elongation	ASTM D412 / EN-ISO-527-3	> 700°C
	QUV Accelerated Weathering Test (4hr UV, at 600C (UVB Lamps) & 4hr COND at 500C)	ASTM G53	Passed (> 2000 hrs)
	Thermal Resistance (100 days, 80°C)	EOTA TR011	Passed
	Toxicity		No restrictions after full cure
	Resilience	DIN 52458	> 90%
	Hydrolysis (8% KOH, 15 days @ 50°C)		No elastomeric property change
	HCI (PH=2, 10 days at RT)		No elastomeric property change
	Hydrolysis (H <sub>2</sub> 0, 30 days cycle 60-100°C)		No elastomeric property change
	Adhesion to Concrete	ASTM D4541	> 20 kg/cm <sup>2</sup> > 2 N/mm <sup>2</sup>
	Methane Transmission (1.0mm)	ISO 15105-1	< 42.4 ml/m²/day/atm
	Carbon Dioxide Transmission (1.0mm)	ISO 15105-1	< 221 ml/m²/day/atm
Compliance and			

Certification CE Certified - EN165651-1

## JUTA UK

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For additional information or assistance, please contact JUTA UK directly.

# Application

Slide the sealant into the applicator gun, cut off the very end of the sealant packaging and fit gun with the nozzle that has been cut to deliver the right bead size (min 5 mm). Extrude the sealant into the joint, or around the RE-BAR penetration ensuring that no air is trapped in the joint. Tooling is recommended immediately after the application of sealant. The ratio width to depth should be 2:1 subject to a minimum depth of 10 mm.

### Packaging

600CC sausage, 15 sausages per box - applicator gun provided. 12 month shelf life. Use once opened.



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