



PC-Sealant® GB 55

Elastomeric high performance gun-grade poly sulphide joint sealant

PC-Sealant® GB 55 represents a two-component polysulphide joint sealant engineered for chemical curing. Tailored for moderate movement and control joints to establish a waterproof barrier, this sealant comprises a liquid polysulfide polymer that, upon amalgamation with the hardener, generates a robust, pliable, and non-staining rubber-like seal. Demonstrating exceptional adhesion to typical building surfaces, the cured sealant exhibits high resilience against environmental factors and UV radiation, averting deterioration. Applicable for both vertical and horizontal installations, **PC-Sealant® GB 55** can accommodate movement levels of up to ±25%.

AREAS OF APPLICATION

- Water treatment structures
- Metal and concrete sea walls
- Parapet walls
- Airport runways and pavements with aprons

JOINT PREPARATION

The joint surface should be dry, clean, and free of oil, loose particles, and other pollutants that may affect adhesion. To expose a clean and sound substrate, thorough wire brushing, grinding, sandblasting, or solvent cleaning may be needed. To expose a uniform joint depth, the compressible joint filler is cut back.

PRIMING

To ensure optimal results, it's recommended to apply **PC-Prime®PS** onto a clean and dry surface before fixing the backer rod or bond-breaking tape. The primer should be applied using a thin-coat brush and left to become tack-free before proceeding with the sealant application. If the sealant application is not executed within three hours of the primer application, it's advised to apply a fresh coat of primer onto the joint edges. For added precision, masking tape can be used on both edges of the groove before the primer application.

YIELD

The following formula is an approximate guideline to calculate foreseen yield for 1000ml of **PC-Sealant®GB 55**.

$$L = 1000 / (W \times D)$$

Where: L = Length of joint filled in meters (per Litre) D = Depth of the joint in mm

W = Width of the joint in mm

The below table contains approximate values of L for usually found joint widths and depths

ADVANTAGES

- Highly resilient
- Permanent water resistance
- Excellent fatigue resistant
- Non-toxic
- Non-staining

TECHNICAL DATA

Mixing ratio: 100: 5

Pot Life: > 2 hours Density: Part A: 1.11 / Part B: 1.6

Physical Properties	Test Method	Typical Value
Color	--	Grey
Specific gravity	ASTM D 1475	1.55 ± 0.05
Consistency	--	Thixotropic paste
Elongation [%]	ASTM D 412	>300
Shore 'A' Hardness	ASTM D 2240	20-35
Shrinkage	ASTM C 531	Negligible
Adhesion to concrete [N]	BS 4254	>25
Tack free time [hours]	-	5
Application life [minutes]	BS 4254	>120
UV resistance @300 hours	ASTM G 53	No deterioration
Water potability	BS 6920	Passes
Chemical resistance	ASTM D 543	pH 2.5 to 11.5, Hydrocarbon fuels, vegetable oil, urea, seawater
Cracking & chalking after heat ageing @70°C	TT-S-00227E	No deterioration
Initial cure @ standard conditions [hours]		24
Full cure @standard conditions [days]		7
Application temperature [°C]		+5 to +40
Service temperature [°C]		-20 to +80
Reaction to fire	ASTM E84	Class A



MIXING

PC-Sealant® GB 55 is available in a ready-to-mix container and is packed in a single tin with all the components. The material blends very well with a gradual speed drill (300-400 rpm) equipped with a flat-bladed paddle for 2-3 minutes until uniform color and consistency are achieved.

STORAGE AND SHLEF LIFE

PC-Sealant® GB 55 must be stored in a cool, dry place and keep away from all heat sources and sunlight. The shelf life is 12 months if stored as per recommendation. In hot climates, store in an air-conditioned room. Excessive exposure to sunlight, humidity and heat will reduce the shelf life.

HEALTH AND SAFETY

Caution should be exercised with all chemical products. If handled without proper protection, it may cause skin burns. For full details, refer to the SDS of the product. Protective apparel should be worn, such as gloves and goggles. Treat the skin or eyes with fresh water immediately for any splashes. Do not induce vomiting, but immediately call for medical assistance if any of the products are accidentally swallowed.

BACK-UP MATERIAL

The backer rod shall be inserted into the joint to avoid a three-sided adhesion. The use of a backer rod ensures the proper depth of the joint and facilitates the formation of an hourglass profile on the applied sealant at the same time. The backer rod will also provide resistance to the tooling pressure of the sealant and help achieve proper wetting of the substrate when the sealant is tooled. The size of the backer rod must be at least 20% greater than the joint to make sure that it remains in a compressed position during the sealant application. Do not damage the backer rod during or after installation, because it may cause air bubbles to trap in the sealant and affect its performance.

CLEANING

Take off all excess sealant with a scraper. Spilt off material can be cleaned using cleaning solvents. Clean all apparatus immediately after the tooling. Hardened materials can only be removed mechanically.

PACKAGING

2.5 KG /4 KG Kit . Available in grey color.



PC-WC GLOBAL FZ-LLC

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TECHNICAL DATA SHEET UPDATED IN
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TDS/PC-SEALANT® GB 55/20

All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our [website www.pc-wc.com](http://www.pc-wc.com)