

## Blu**Rez** CSW

#### PENETRATING POLYURETHANE RESIN

Blu**Rez** CSW is a two component catalysed polyurethane liquid which requires only mixing with Blu**Rez** CSW - X to form a high foaming very fast setting water reactive injection resin.

BluRez CSW is designed for the sealing/grouting and elastic connection of concrete cracks, rock fissures, civil engineering structures, brickwork and natural stone. Application uses include tunnel linings, carpark decks, concrete foundations, subterranean curtains, retaining walls, slab on ground and bridge abutments.

## Advantages

- Ultra low viscosity for fine crack and fissure penetration
- Fast reacting, effective water stopping properties
- Excellent adhesion properties with both mineral and metallic surfaces
- Superb elastic properties that accommodate considerable movement between construction components
- Large volume, no shrinkage, makes it a very cost effective product

#### Preparation

Evaluate joint or rock fissure for injection. Drill holes either side of the defect, sloping towards the defect at an angle of approximately 45°. The depth and distance from the crack will vary depending on water flow rates and site conditions. Insert packer at a depth which will allow resin to enter the defect without impediment. Consult Bluey for additional information.

## Mixing

Calculate the required volume of BluRez CSW - X to be combined with BluRez CSW within the range specified on this data sheet. Measure the required quantity and add the two components together. Mix together using a slow speed mixer (400rpm) for at least 3 minutes or until a uniform mixture is achieved.

## **Application**

Commence from the widest part of the crack or fissure and proceed injecting outwards along the crack or fissure in each direction. Turn on pump and slowly increase pressure to a maximum of 30 bar. Stop pumping for every litre injected and allow 1 - 2 minutes for reaction. Start and stop injection until the packer will no longer accept material or if the specified pressure has been reached. Move to the next packer and repeat injection process. Continue injection until crack is full and has been adequately sealed. Monitor the effectiveness of the work and allow to settle for 2 - 3 days before returning to site and completing additional injection if required.



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## Product Data

Please refer to Important Notice on following page

Packaging	21kg kit (20kg BluRez CSW and 1kg BluRez CSW - X)	
Mix Ratio	0% to 10% BluRez CSW - X addition	
Viscosity	@100cps	
Colour	Amber	
Shelf Life	I2 months	

REACTION TIMES OF BLUREZ CSW AND BLUREZ CSW - X					
Initial Temperature	5°C	I0°C	I5°C	25°C	
Reaction Times Measured with 5% BluRez CSW - X					
Start of Foaming	10 seconds	9 - 10 seconds	9 - 10 seconds	8 - 9 seconds	
End of Foaming	56 seconds	58 seconds	47 seconds	45 seconds	
Foaming Factor*	35 - 50	35 - 50	35 - 50	35 - 50	
Reaction Times Measured with 10% BluRez CSW - X					
Start of Foaming	10 - 11 seconds	10 - 11 seconds	9 seconds	8 seconds	
End of Foaming	47 seconds	45 seconds	38 seconds	32 seconds	
Foaming Factor*	35 - 50	35 - 50	35 - 50	35 - 50	

TESTED CHARACTERISTIC	STANDARD	RESULT
Density	ASTM D-1622	64kg/m³
Water Absorption	ASTM D-2127	<1%
Shear Strength	ASTM C-273	135kPa
Tensile Strength	ASTM D-1623	186kPa
Elongation	ASTM D-1623	50%

<sup>\*</sup> The reaction is started by addition of 10% water to the fresh blend



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## Contact Bluey

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