## **Technical Data Sheet**

# **BluRez CS NV**

FLEXIBLE POLYURETHANE INJECTION RESIN



Bluey Technologies Pty Ltd ABN 36 115 613 646

PO Box 898, Hamilton QLD 4007 Australia Tel: + 61 7 3399 3635 Fax: + 61 7 3899 9822

#### **DESCRIPTION**

BluRez CS NV is a single component, catalysed polyurethane liquid which reacts with moisture to form a low viscosity, flexible injection resin.

#### **USES**

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

#### **ADVANTAGES**

- Reaction with water results in formation of rigid polyurethane, which forms with the substrate, a hydrophobic and chemically resistant conglomerate
- Good compression strengths are obtained in a very short time without shrinking or swelling
- Solvent free system: the end product is harmless to the environment and resistant to biological attack

### **PREPARATION**

Evaluate joint or crack for injection. Drill holes either side of the crack, sloping towards the crack at an angle of approximately 45°, beginning at a distance of 120 - 150 mm from the crack. Insert packer at a depth of approximately 100mm. For ground stabilisation techniques, consult Bluey Technical Representative.

# **MIXING**

Calculate the required volume of BluRez CS NV - X to be combined with BluRez CS NV 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 and proceed injecting outwards along the crack 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 setting. 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.



## **Technical Data Sheet**

# **BluRez CS NV**

# FLEXIBLE POLYURETHANE INJECTION RESIN



### **PRODUCT DATA**

**Packaging:** 22kg kit - Part A (20kg) and Part B (2kg)

Material Data:	BluRez CS NV	BluRez CS NV - X
Colour	Brown	Clear/Grey
Relative Density @ 25°C	1.100	0.996
Flash Point	>150°C	>150°C
Viscosity @ 25°C	40±10cps	20±5cps

#### **Reaction Times:**

% of BluRez CS NV - X:	0.5	I	1.5	2	2.5	3	3.5	4
Gel 15°C	47s	34s	28s	17s	15s	12s	8s	5s
Gel 25°C	22s	16s	l4s	I2s	10s	8s	5s	3s

BluRez CS NV Cured:

**Compressive Strength:** 6.2MPa

**Clean Up:** Clean application equipment using polyurethane thinners

Flush clean thinners through all hoses and fittings for several minutes Empty the contaminated fluid and re-flush with a clean batch of thinners

for several minutes

Once again discard the contaminated fluid and fill the pump and hoses

with clean thinners until required for later use

Collect all discarded thinners for recycling and take care to avoid spillage

**Storage:** Store in dry conditions

Shelf life is 12 months

#### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this publication is based on the present state of our best knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, their representative or the contractor is responsible for checking the suitability of products for their intended use.

Product properties are dependent upon seasonal and geographical criteria. Product properties and performance may vary between countries and locations within. We recommend that you clarify your specific requirements with your local Bluey representative to ensure that all specific project requirements are met.

## NOTE

Field service where provided, does not constitute supervisory responsibility. Suggestions made by Bluey Technologies Pty Ltd either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Bluey Technologies Pty Ltd are responsible for carrying out procedures appropriate to a specific application.

© Bluey Technologies Pty Ltd

