

Enviro Gel 155

HIGH PERFORMANCE, FAST SETTING, WATER REACTIVE HYDROPHOBIC INJECTION POLYURETHANE FOAM

Enviro Gel 155 is a catalysed polyurethane foam which requires only mixing with Enviro Gel 155-ADD (accelerator) to form a high foaming, fast setting, water reactive hydrophobic injection resin. Enviro Gel 155 is designed for the sealing/grouting and elastic connection of concrete cracks, rock fissures, structures etc.

FEATURES AND BENEFITS

- ④ Low viscosity for fine crack penetration
- ④ Fast reacting, effective water stopping technology
- ④ Excellent adhesion properties to multiple surfaces
- ④ Elastic properties to accept movement between construction elements
- ④ Large volume, no shrinkage

APPLICATION SOLUTIONS

- ④ Basements
- ④ Tunnels
- ④ Retaining walls
- ④ Ground anchors
- ④ Ground stabilisation
- ④ Concrete foundations

Directions for Use

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 EnviroSystems for additional information.

MIXING

Calculate the required volume of Enviro Gel 155-ADD to be combined with Enviro Gel 155 within the range specified on this data sheet. Measure the required quantity and mix using a slow speed mixer (400rpm) for at least 3 minutes.

APPLICATION

Commence from the widest part of the crack 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 process. Continue until crack is full and has been adequately sealed. Monitor the effectiveness of the work and allow to settle for 2 days before returning to site and completing additional injection if required.



REMEDIAL



Product Data

PHYSICAL PROPERTIES

PROPERTY	
Packaging	21kg kit (20kg Enviro Gel 155 and 1kg Enviro Gel 155-ADD)
Mix Ratio	0 - 10% Enviro Gel 155-ADD addition
Viscosity	@ 300cps
Colour	Amber
Shelf Life	12 months

REACTION TIMES OF ENVIRO GEL 155 WITH 5% ENVIRO GEL 155-ADD				
Initial Temperature	5°C	10°C	15°C	25°C
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 OF ENVIRO GEL 155 WITH 10% ENVIRO GEL 155-ADD				
Initial Temperature	5°C	10°C	15°C	25°C
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

PROPERTY	TEST METHOD	RESULTS
Density	ASTM D-1622	64kg/m ³
Water Absorption	ASTM D-2127	<1%
Shear Strength	ASTM C-273	135kPa
Tensile Strength	ASTM D-1623	186kPa
Elongation	ASTM D-1623	50%



Contact Enviro systems

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HEALTH & SAFETY ADVICE

Enviro Gel 155 is non-hazardous according to Safe Work Australia criteria, however, as a precaution, always provide good ventilation when applying. Wash off splashes of material with clean water, wear gloves and eye protection. If irritation is experienced seek medical advice. Refer to the Safety Data Sheet for full safety and handling procedures.

NOTE: Safety Data Sheets are available upon request.

KEEP OUT OF REACH OF CHILDREN

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 of application and no warranty as to accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

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

NOTE: All products manufactured by Enviro systems comply with the description and properties indicated in the technical data sheet that was current at the date of manufacture.