



# Enviro Gel 165

## High Performance Hydrophilic Injection Polyurethane



### DESCRIPTION

Enviro Gel 165 is a low viscosity hydrophilic polyurethane formula with high elongation properties for sealing leaking cracks or joints where movement is possible and structures with continuous moisture exposure.

Enviro Gel 165 is typically used as a single component system (base resin) however Enviro Injection Gel Accelerator can be incorporated into the system for quicker reaction times. The accelerator can be used by experienced applicators to control the reaction time as warranted by the site conditions. Being a hydrophilic formulation, when reacted with water, the resulting foam will create a flexible seal with the injected repair.

### FEATURES

- 100% Solids
- No VOC's
- Non-Flammable
- Excellent Adhesion
- Expands to 25 times initial volume
- Pumps as Single Component
- Controllable Reaction Times
- Non-Toxic Permanent Seal
- No TDI's
- Solvent Free

### TYPICAL USES

Enviro Gel 165 can be used for sealing joints such as construction joints less than 50mm in concrete slabs, concrete panels, fibre cement sheets, block and brickwork, around window and door frames. Enviro Gel 165 can also be used for;

- Water Related Facilities
- Waste Treatment Plants

- Storm Water Systems
- Parking Garages
- Manhole Facilities
- Concrete Structures
- Dams & Water Containment
- Elevator Lift Pits
- Concrete Tunnels
- Basement Repairs

### PHYSICAL PROPERTIES

Elongation (cured) ASTM-638	400%
Density (cured) ASTM-1622	80kg/m <sup>3</sup>
Tensile (cured) ASTM-638	170psi
Toxicity (cured)	Non-toxic
Viscosity (liquid) ASTM D-1638	Part A – 650cps Part B – 25cps
Specific Gravity (liquid) ASTM D-1475	Part A – 1.07 Part B – 0.95
Flash Point (liquid) ASTM D-92	Part A - >121°C Part B - 107°C
Colour	Part A – Pale Yellow Part B - clear

### SUBSTRATE PREPARATION

Each crack should be individually evaluated for suitability. Holes should be drilled angled towards the crack at approximately 45° and starting 120mm from the crack. The injection packers should be inserted to a depth of approximately 100mm. Prior to pumping, the crack should be pre-injected with water to facilitate the hydrophilic reaction.

**NOTE:** The above information should be used as a guide only. Each crack should be gauged individually, and the amount of injection packers used, depth of packers, size of packers should be determined by the applicator.

For further information on substrate preparation or for project specific advice, please consult EnviroSystems.

[customerservice@envirosystems.com.au](mailto:customerservice@envirosystems.com.au)





## APPLICATION

Injection should commence at the widest section of the crack, moving outwards in both directions. Start injection until the pressure reaches a maximum of 30 bar. Injection should be stopped after every litre injected to allow gel to set. Allow 1-2 minutes before starting again. Continue with this method until the packer will no longer accept Enviro Gel 165 or until the 30-bar pressure is reached. Move to the next injection packer and repeat process as above until the crack is full and sufficiently sealed.

The crack should then be monitored for several days to ensure the effectiveness of the injection. Additional Enviro Gel 165 can be injected into the crack if required.

For further information regarding application of Enviro Gel 165 or for project specific advice please consult EnviroSystems.

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## USE OF ACCELERATOR (PART B)

The reaction profile can be adjusted prior to pumping by the addition of the accelerator into the base resin and is affected by temperature and the amount of moisture encountered. At 1.25% the expansion will start in approximately 50 seconds and be complete in approximately 5 minutes. At 2.5% the expansion will start in approximately 30 seconds and be complete in approximately 3 minutes.

Reaction times will vary with temperature and moisture presence. The above reaction times were determined at 25°C. Reaction times can be affected on site due to variables such as volume of water. It is recommended that the applicator conduct their own on-site trial to determine if Enviro Injection Gel Accelerator is required.

**NOTE:** Enviro Gel 165 can be used without the addition of Enviro Injection Gel Accelerator.

## CLEANING

Cleaning of equipment should be done with Enviro Thinner No. 7. Ensure all hoses and fittings are flushed for several minutes. Dispose correctly and safely of any contaminated fluid and re-flush with clean Enviro Thinner No. 7 ensuring no further injection resin is present.

## PACKAGING & COLOURS

Enviro Gel 165 is supplied in a 20kg pail. The Injection Gel Accelerator is supplied in a 250gm can.

## SHELF LIFE

Enviro Gel 165 can be stored in its original sealed containers for 12 months, when placed in dry and cool conditions. If stored in high temperature and humidity locations, the shelf life may be reduced. Always check product quality before using after prolonged periods of storage. If unsure contact EnviroSystems for advice.

## HEALTH & SAFETY ADVICE

Enviro Gel 165 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 by emailing [customerservice@envirosystems.com.au](mailto:customerservice@envirosystems.com.au)

## We're here to help you!

It is a good idea to keep a journal of your waterproofing job, whether big or small.

- Take pictures at all stages of your work, including preparation
- Record the quantity and description of products used with corresponding batch numbers
- Record dates and times of when you applied products, from start to finish

Please do not hesitate to contact us for any questions you may have.

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