



SPECTON CONSTRUCTION PRODUCTS LTD.

# PURcast HE

## HYDRO-EXPANSIVE POLYURETHANE RESIN

### TECHNICAL DATA

#### SPECTON PURcast HE

A special purpose two-component polyurethane injection resin designed for constructing remedial waterstops and filling of prefabricated injection tubes. PURcast HE cures to form a flexible Hydro-Expansive elastomeric polymer that has the capacity to swell after curing. Subsequent contact with water causes the hydrophilic material to swell or expand up to between 40% to 100%, in a controlled and stable manner. PURcast HE is compatible with a variety of parking deck and waterproofing membranes.

#### RECOMMENDED FOR

Producing cast-in-place waterstops and filling injectable tubing systems in:

- Parking Garages
- Processing Plants
- Industrial, Commercial and Residential Poured Concrete Foundations
- Hydro Dams and Powerhouses
- Waste Water Treatment Plants
- Canals
- Tunnels (Subways and Highways)
- Underground Utility Vaults.

#### FEATURES / BENEFITS

##### Safe –

100% solids and harmless to the environment.

##### Adjustable Accelerator Dosage –

Controlling the accelerator dosage allows the applicator to react to a variety of changing site conditions. Accelerator is optional when using PURcast HE.

##### Stable –

Cured elastomer withstands thermal expansion/contraction, wet/dry cycles, freeze/thaw cycles and crack movement without degradation.

##### Chemically Resistant –

Excellent resistance to fungi, gases and chemicals typically found in soil and sewer effluent. Resistant against biological attack.

##### Proven Track Record –

PURcast HE has been successfully used for over 10 years in North America and remains the product of choice by engineers, owners and specialty sewer restoration contractors.

##### Applicator Friendly –

No unpleasant odors, and PURcast HE can be injected using single or plural component injection equipment.

#### COMPOSITION / CHARACTERISTICS

##### SPECTON PURcast HE – A Component

|                          |               |                    |
|--------------------------|---------------|--------------------|
| Appearance               |               | Yellow Pale Liquid |
| Viscosity at 25°C        | ASTMD-4878-98 | 950 cps ± 50       |
| Relative Density at 25°C | ASTMD-789-98  | 1.050 ± 0.005      |
| Flashpoint               | ASTMD-1310-86 | 156°C              |

##### SPECTON PURcast HE – B Component

|                          |               |               |
|--------------------------|---------------|---------------|
| Appearance               |               | Yellow Liquid |
| Viscosity at 25°C        | ASTMD-4878-98 | 25 cps ± 20   |
| Relative Density at 25°C | ASTMD-789-98  | 1.020 ± 0.005 |
| Flashpoint               | ASTMD-1310-86 | 180°C         |

##### SPECTON PURcast HE – Mixture Uncured (mixing ratio-volume 7:1)

|                          |               |              |
|--------------------------|---------------|--------------|
| Viscosity at 25°C        | ASTMD-4878-98 | 500 cps ± 50 |
| Pot Life at 20°C approx. |               | 25 min       |

##### SPECTON PURcast HE – Mixture Cured

|                  |               |      |         |
|------------------|---------------|------|---------|
| Shore A Hardness | ASTMD-2240-00 | ± 30 | Shore A |
| Elongation       | ASTMD-1623-78 | 50%  |         |

# PURcast *HE*

## HYDRO-EXPANSIVE POLYURETHANE RESIN

### MIXING AND HANDLING

- 1 Wear rubber gloves and safety glasses and/or a safety shield when mixing or handling the products. Familiarize yourself with the MSDS guidelines and information. Mix and install the materials in a well ventilated area.
- 2 Using clean and dry graduated measuring equipment, measure out A and B components precisely. Add 7 volumes of PURcast *HE* A component to 1 volume of PURcast *HE* B component.
- 3 Mix the A and B components thoroughly until a homogeneous mixture has been obtained. When using single component injection equipment, mix small batches of PURcast *HE* at a time to minimize the chances of the mixture flash setting. The pot life can be estimated to be approximately 25 minutes at 20°C. We always recommend that a small cup test be performed on site to determine a more accurate pot life.
- 4 Install or inject the resin mixture using a single or plural component pump.
- 5 Clean the injection pump with Specton Pump Flush as required.

### APPLICATION

Contact a Specton Technical Representative for specific application guidelines for your injection project.

### STORAGE

Specton polyurethane resins and accelerators are moisture sensitive and should be stored in their unopened original packages in dry conditions at temperatures below 24°C (75°F). Do not allow the polyurethane resins and accelerators to freeze or to be stored in temperatures below 0°C (32°F).

### SAFETY PRECAUTIONS

- **Avoid contact with skin or eyes.**
- **Familiarize yourself with the MSDS and follow safety precautions indicated.**
- **Mix and apply the materials in a well ventilated area.**
- **In addition to conventional construction safety equipment, wear rubber gloves and a safety visor.**

### PACKAGING

Specton PURcast *HE*  
A Component – 20 Kg PAILS  
B Component – 2.6 Kg BOTTLES

All recommendations, data and statements contained within this document are based on tests we believe to be correct, but are not to be construed as a warranty either expressed or implied. The user shall rely on his or her own tests and information to determine the suitability of the product for the application and assumes all risk and liability resulting from his or her use of the product. The seller's and manufacturer's sole responsibility shall be to replace that portion of product that is proven to be defective. Neither the seller nor the manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from the use or inability to use the product.

### PLEASE CONTACT US FOR ADVICE AND PRODUCT INFORMATION

Specton Technical Representatives are available to assist you with specific guidelines for your project and product requirements. We can be reached at:

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