

SPECTON CONSTRUCTION PRODUCTS LTD.

# ULTRATHIN *H40*

## WATER ACTIVATED POLYURETHANE RESIN

### TECHNICAL DATA

#### SPECTON ULTRATHIN *H40*

A single component hydrophobic polyurethane injection resin designed specifically for soil stabilization in water saturated ground layers. Ultrathin *H40* reacts with water and penetrates and encapsulates fine sands and silts to create a rigid, hydrophobic and chemically resistant conglomerate. The cured hydrophobic foam is tough and quickly develops good compressive strengths in addition to being resistant to degradation resulting from repeated freeze/thaw and wet/dry cycles.

#### RECOMMENDED FOR

Soil stabilization in Water Cut Off applications typically found in:

- Mine Shafts
- Large Excavations
- Sheet Pile and Shoring Projects
- Segmental and Cut and Cover Tunnels
- Precast Culverts and Manholes
- Pipe Penetrations
- Dams and Powerhouses
- Industrial and Commercial Poured Concrete Foundations.

#### FEATURES / BENEFITS

##### Safe –

100% solids system is harmless to the environment.

**Adjustable Accelerator Dosage –** Controlling the accelerator dosage allows the applicator to react to a variety of changing site conditions.

##### Stable –

Cured hydrophobic resin withstands thermal expansion/contraction, wet/dry cycles, freeze/thaw cycles.

##### Chemically Resistant –

Resists attack from mild acids, most organic solvents, biological attack, gases and chemicals typically found in soil and standard commercial structures.

##### Proven Track Record –

Ultrathin *H40* has been successfully used for over 14 years in North America.

##### Applicator Friendly –

No harsh solvent odor, and Ultrathin *H40* is easily injected using single component injection equipment.

#### COMPOSITION / CHARACTERISTICS

##### SPECTON ULTRATHIN *H40* – Uncured Resin

Appearance		Brown Liquid
Viscosity at 25°C	ASTMD-4878-98	40 cps ± 10
Relative Density at 25°C	ASTMD-789-98	1.150 ± 0.002
Flashpoint T.O.C.	ASTMD-1310-86	>150°C

##### SPECTON ULTRATHIN *H40* – Uncured Accelerator

Appearance		Clear Grey Liquid
Viscosity at 25°C	ASTMD-4878-98	10 cps ± 5
Relative Density at 25°C	ASTMD-789-98	0.996 ± 0.003
Flashpoint T.O.C.	ASTMD-1310-86	>150°C

##### SPECTON ULTRATHIN *H40* + Accelerator – Cured, injected in sand

Compressive Strength	ASTMD-4219-93a	12 Mpa
----------------------	----------------	--------

# ULTRATHIN H40

## WATER ACTIVATED 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 mixing containers and measuring cups, add between 0.5% to 2% Accelerator to the Resin depending on the desired reaction time. Refer to the *Reaction Time vs Temperature* graph as a guideline to assist with accelerator dosages. It is always recommended to perform a small site test to determine the reaction time of the resin and accelerator mixture.

**3** Mix the resin and accelerator thoroughly with an electric drill and mixing paddle.

**4** Install or inject the resin mixture using a single component pump.

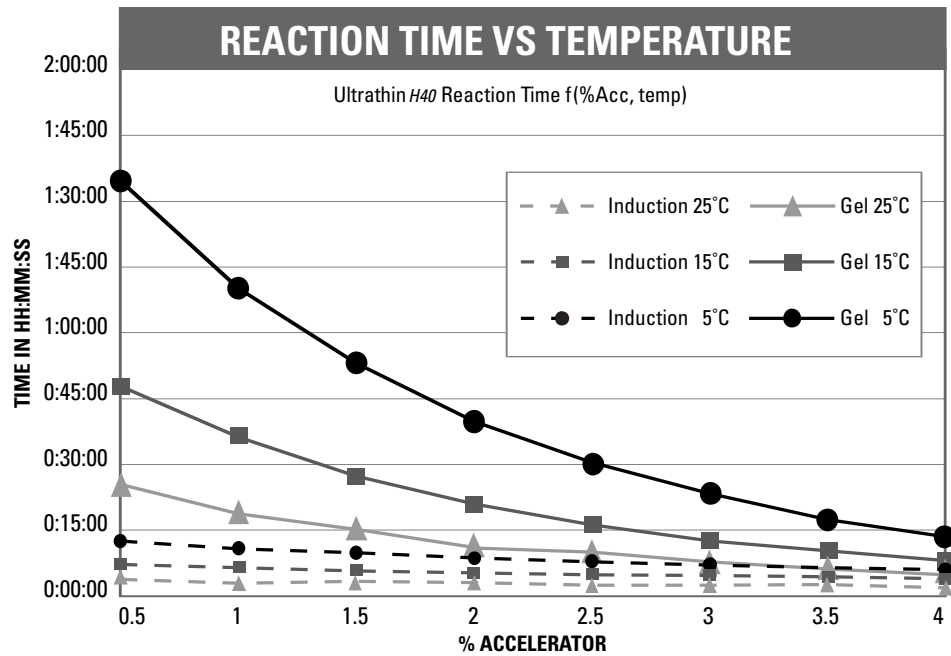
**5** Clean the injection pump every few hours with Specton Pump Flush or when the injection work is completed.

### 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 ULTRATHIN H40  
– 20 Kg METAL PAILS  
Accelerator – 2 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:

SPECTON CONSTRUCTION PRODUCTS LTD.  
12 WALLACE STREET, ACTON, ONTARIO  
CANADA L7J 2V6

TEL: **519-853-9118**  
**1-866-SPECTON (773-2866)**

FAX: **519-853-1732**

EMAIL: **info@specton.com**

WEB: **www.specton.com**

**SPECTON**

SPECTON CONSTRUCTION PRODUCTS LTD.