SPETEC® F400

HYDROPHOBIC CLOSED CELL
POLYURETHANE FOAM INJECTION RESIN

TECHNICAL DATA

Description

Spetec® F400 is a solvent and phthalate free, water-reactive, hydrophobic, closed cell, low viscosity, shrink-free, flexible, one component polyurethane injection resin designed to shut off water leaks

Formerly Spetec PUR F400.

Uses

- Shut off water leaks in concrete, brickwork and sewers where movement and settlement may occur
- Water cut-off of water leaks in foundations such as diaphragm walls, sheet piling and secant piles
- Sealing water-carrying cracks and joints in tunnel segments
- Curtain grouting behind tunnel, concrete, brickwork and sewer walls
- Injection of water cut-off membranes and liners in tunnels

Advantages

- Single-component
- Adjustable reaction times
- Chemically resistant
- Closed-cell
- NSF/ANSI/CAN 61 Certified (approved for contact with drinking water)

SPETEC F400 Physical Properties - Uncured		
Appearance	White liquid	—
Viscosity at 77°F (25°C)	350 cP (350 mPa·s)	ASTM D4878
Density at 77°F (25°C)	64.3 lbs/ft³ (1.03 kg/dm³)	ASTM D1475
Alchatek Gen Cat		
Appearance	Yellow-orange liquid	—
Viscosity at 77°F (25°C)	75 cP (75 mPa·s)	ASTM D4878
Density at 77°F (25°C)	65.5 lbs/ft³ (1.05 kg/dm³)	EN ISO 2811-1
Flash Point	313°F (156°C)	—
Alchatek Gen Cat Fast		
Appearance	Yellow-orange liquid	—
Viscosity at 77°F (25°C)	70 cP (70 mPa·s)	ASTM D4878
Density at 77°F (25°C)	65.5 lbs/ft³ (1.05 kg/dm³)	EN ISO 2811-1
Flash Point	313°F (156°C)	—
Physical Properties - Cured		
Elongation at break	100%	ASTM D3574-03
Application temperature range	41-95°F (5-35°C)	—

Reaction Rate with Alchatek Gen Cat (10%)

41°F (5°C)		59°F (15°C)		77°F (25°C)	
Start	**End**	**Start**	**End**	**Start**	**End**
60 sec.	165 sec.	24 sec.	104 sec.	17 sec.	73 sec.

Reaction Rate with Alchatek Gen Cat Fast (10%)

40°F (4.4°C)		60°F (15.6°C)		77°F (25°C)	
Start	**End**	**Start**	**End**	**Start**	**End**
21 sec.	72 sec.	14 sec.	59 sec.	14 sec.	47 sec.

Storage and Shelf Life
Store between 50–80°F (10–26°C). Shelf life is 24 months in unopened containers stored within this temperature range.

Estimating Quantities
Consumption has to be assessed on site and is influenced by the amount of water leaking, thickness of the concrete.

Application and Safety Precautions
When applying Alchatek polyurethane systems, always wear appropriate personal protective equipment and avoid contact with eyes and skin. Review the Safety Data Sheet at Alchatek.com before use. The recommended application temperature range is 41-95°F (5-35°C). Excessive foam build-up in confined spaces can result in high internal temperatures and expansion pressures. In large void fills, stage injections and allow cooling time between lifts. For step-by-step procedures and typical project setups, see the Crack Injection application guide. For safety and application guidance, contact the Alchatek Technical team.

Supplier Details
Alchatek
4508 Bibb Blvd
Tucker, GA 30084
T: (404) 618-0438

Emergency Phone Numbers
Call CHEMTREC
Day or Night
1-800-424-9300
+1 703-527-3887

Limited Warranty
Alchatek warrants this product to be free from manufacturer's defects and to meet all published properties on current Technical Data Sheet for a period of one year if used according to published instructions and within the shelf life. The user is responsible for determining suitability for intended use and assumes all risk. No other warranties expressed or implied shall apply including any warranty of merchantability or fitness for a particular purpose. Purchaser's sole remedy is limited to the purchase price or product replacement exclusive of cost of labor or other materials.

Latest Information
Before each use read latest Technical Data Sheets, Safety Data Sheets, and instructions available at Alchatek.com. Nothing contained in any Alchatek materials or verbal instruction relieves the user of the obligation to read and follow all usage instructions and warnings for each product contained in the latest Technical Data Sheets and Safety Data Sheets. All information given by Alchatek about Alchatek products and procedures is given in good faith based on our current experience level and knowledge when materials are properly stored, handled, and applied. Jobsite conditions always vary, and for this reason Alchatek assumes no liability for the provision of such information or instructions. Neither shall any legal relationship be created by the provision of such information.

FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. READ MATERIAL SAFETY DATA SHEET PRIOR TO EVERY USE.

Properties will vary depending on application conditions.