

Advanced
Construction
Technologies



Seal Leaks

SPETEC PUR H100 HOT SHOT CARTRIDGE

Water Activated Semi-Flexible Polyurethane Foam Injection Resin

Product Identifier

Product Name

SPETEC PUR H100 HOT SHOT
CARTRIDGE

*SPETEC PUR H100 HOT
SHOT CARTRIDGE is a one
component, closed cell,
hydrophobic, water reactive,
solvent and phthalate free,
low viscosity polyurethane
injection resin for stabilization
and water cut-off of large
water leaks*

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

Description

SPETEC PUR H100 HOT SHOT CARTRIDGE is a one component, closed cell, hydrophobic, water reactive, solvent and phthalate free, low viscosity polyurethane injection resin for stabilization and water cut-off of large water leaks

Uses

- Water cut-off.
- Dams.
- Manholes.
- Storm pipe joints.
- Box culverts.
- Limited access areas.

Advantages

- Single component cartridge.
- Good compression strengths.
- Rapid set time.
- No volatile solvents.
- Cures to rigid foam
- Certified by Truesdail Labs to NSF/ANSI 61-5 (approved for contact with drinking water).

SPETEC PUR H100 HOT SHOT CARTRIDGE

WATER ACTIVATED SEMI-FLEXIBLE POLYURETHANE
FOAM INJECTION RESIN

Application

Note: the following are a few typical application descriptions. In case of other jobsite parameters, please contact our technical department.

PRELIMINARY ANALYSIS

Hotshot cartridges are typically used to stop small leaks in walls or manholes. Holes are drilled all the way through the wall and the cartridge is used to pump grout into the soil on the other side. The grout reacts with the water in the soil to create a seal.

PRODUCT APPLICATION

1. Wear safety glasses and gloves while mixing and dispensing.
2. If the cartridge does not already have a dasher (mixing) rod installed, then remove the cap from the threaded neck end of the cartridge and insert the dasher rod and screw until snug. Do not over tighten.
3. To ensure that the dasher rod is not overly tight or loose, test the tightness of the dasher rod by turning counter clockwise to loosen, then clockwise to retighten snugly.
4. Remove the tape band from the cartridge.
5. Pull the dasher rod straight up towards the top of the cartridge. This will separate the mixing dasher from the foil.
6. Squeeze the cartridge lightly in the area of the removed tape to deform the foil barrier.
7. Pushing the dasher rod all the way to the bottom of the cartridge with a clockwise motion, begin mixing for 50-75 strokes. Rotate the rod in a clockwise motion with every stroke. Each stroke should extend from the neck of the cartridge to the plunger end of the cartridge. Be sure to keep pressure on the end cap of the cartridge, either by hand or placing the cartridge on a table. This will keep the plunger from pushing out of the bottom on viscous materials.
8. Push the dasher rod all the way in, grasp the cartridge firmly at the plunger end and immediately unscrew the dasher rod and remove.
9. If a nozzle is to be used, screw it into the threaded neck of the cartridge and the cartridge is ready to dispense the material.

COMPLIMENTARY PRODUCTS

If grout begins exiting the drill hole or any wide cracks and dripping outside of the wall, Oakum can be used to plug that grout leak.

ADVICE / FOCAL POINTS

Avoid injecting when temperatures are below -4°F (-20°C). In extreme cold conditions it is recommended to warm the resin and catalyst. Since SPETEC PUR H100 HOT SHOT CARTRIDGE is hydro active, liquid water should be present.

SPETEC PUR H100 HOT SHOT CARTRIDGE

WATER ACTIVATED SEMI-FLEXIBLE POLYURETHANE FOAM INJECTION RESIN

Technical Data

APPEARANCE

Physical Properties - Uncured - (appearance brown liquid)

| | | |
|--------------------------|------------------------|---------------------|
| SPETEC PUR H100 | | |
| Viscosity at 77°F (25°C) | (ASTM D4878-98) | ±160cps (±0.16Pa-s) |
| Flash Point | (ASTM D1310-86) | >302°F (>150°C) |
| Density | (ASTM D3505-96 [2000]) | 1.058 ± 0.005 |

Physical Properties - Uncured - (appearance yellow liquid)

| | | |
|--------------------------|------------------------|-------------------|
| H100 ACC | | |
| Viscosity at 77°F (25°C) | (ASTM D4878-98) | 14cps (0.014Pa-s) |
| Flash Point | (ASTM D1310-86) | >302°F (>150°C) |
| Density | (ASTM D3505-96 [2000]) | 0.9 ± 0.003 |

Physical Properties - H100 + ACC Cured

| | | |
|----------------------|----------------|--|
| SPETE PUR H100 | | |
| Hardness | ASTM D2240-00 | 69 Shore A |
| Compressive strength | ASTM D4219-93a | 942psi (64.9 bar) |
| Tensile strength | ASTM D3574-03 | 290psi (20 bar) |
| Water Absorption | ASTM D2824 | <1% |
| Density Confined | d ASTM D3574 | 55Lbs/cu.ft. (0.88kg/dm ³) |
| Corrosiveness | Non Corrosive | |

Estimating Quantities

Consumption has to be assessed on site and is influenced by the amount of water leaking, thickness of the concrete slab or wall, presence of voids in and around the concrete, etc.

REACTION TIMES

Activation Times

| H100 ACC | % ACC | CREAM | FULL RISE |
|-------------|-------|---------|-----------|
| 77°F (25°C) | 15 | 15 sec. | 40 sec. |

SPETEC PUR H100 HOT SHOT CARTRIDGE

WATER ACTIVATED SEMI-FLEXIBLE POLYURETHANE
FOAM INJECTION RESIN

Packaging

SPETEC PUR H100 HOT SHOT CARTRIDGE Resin and Accelerator are packaged in a 10.5 ounce (298 gram) single cartridge.

Storage and Shelf Life

Store between 50° - 85° F (10° - 29° C).

Safety Precautions

Avoid contact with eyes and skin, always use personal protective equipment in compliance with local regulations. Read the relevant Safety Data Sheet before use. Safety Data Sheets are available on Alchatek.com. When in doubt contact Alchatek Technical Service.