CHEM-CRETE HYDRO FOAM CCC526H

One Component Hydro Active Polyurethane Foam for Cutting Off Active Water Leaks

PRODUCT DESCRIPTION

CHEM-CRETE HYDRO FOAM CCC526H is a low viscosity, single component, ready-to-use, expansive, non-flammable and hydro active Polyurethane resin. CHEM-CRETE HYDRO FOAM CCC526H reacts quickly to water to form flexible, but tough closed cell polyurethane foam that can be used in structures of all types.

CHEM-CRETE HYDRO FOAM CCC526H can be pumped using single or two-component injection pump. CHEM-CRETE HYDRO FOAM CCC526H cures to an extremely tough and adhesive foam capable of withstanding extreme thermal cycles and crack movement due to its high flexibility.

FIELDS OF APPLICATION

CHEM-CRETE HYDRO FOAM CCC526H is extensively used to inject the leaking structures for stopping the running water flows in the following fields:

- ☐ Wastewater treatment plants.
- ☐ Water reservoirs, tanks, and swimming pools.
- ☐ Foundations, basements and abutments.
- ☐ Underpasses, tunnels, fountains, etc.

Basic applications of CHEM-CRETE HYDRO FOAM CCC526H are:

- ☐ Sealing of damp and wet cracks in concrete or stone.
- ☐ Blocking water leaks.
- ☐ Sealing of leaking expansion joints in damp or wet conditions.
- ☐ Injection of water bearing cracks, honeycombs under most difficult conditions, e.g.: high pressure and strong ground water.
- ☐ Injection and sealing of live cracks in damp or wet conditions.

PRODUCT FEATURES

- One component ready-to-use system.
- Low viscosity permits reliable penetration.
- Rapid reaction on contact with water producing an expanded closed cell foam that stops water flow immediately.
- Good adhesion to substrate.
- Suitable for injection with one or two component injection pumps.
- Good flexibility.

PACKAGING

Product	Packaging
CHEM-CRETE HYDRO FOAM CCC526H	45 LB (20.4 KG) PAIL
	463 LB (210 KG) DRUM

TECHNICAL DATA

Uncured: Chem-Crete Hydro Foam CCC526H

Property @ 25°C (77°F)	Value	Test Method
Color	Yellow	Visual
Density Lb/Gal (Kg/Liter)	9 (1.08)	ASTM D891
Viscosity, centipoises	750	ASTM D4878
Storage stability	Minimum 12 months	-
pH	not established	-
Hazard class	not regulated	-
Solids	80%	-
Reaction time, seconds	25	-
Flash point	212ºF (100ºC)	-

Physical properties of cured materials:

Property	Value	Test Method
Elongation, %	300	In-house
Tensile Strength, psi (kPa)	370 (2.5)	ASTM D1621
Bonding Strength, psi (kPa)	260 (1.75)	ASTM D4541, Method C

Expansion: free expansion up to 8X original volume, expansion is dependent upon pH level of water and confinement.

APPLICATION DATA

Consumption: variable depending on moisture content and water pressure.

Limitations: application at ambient temperatures below approx. 5°C is not recommended. Exposure to temperatures exceeding 65°C for prolonged periods is not recommended.

Setting of Injection Ports: sealing of leaking cracks, expansion joints and bonding adhesive packers onto the wet substrate is usually not possible. Therefore, drill packers should be installed in all cases of wet conditions.

Injection of Chem-Crete Hydro Foam CCC526H:

Pre-treatment of Substrate: the substrate must be sound, clean and free from oil and grease. All loose material and laitance along the crack length should be removed with suitable hand tools such as needle guns, wire brushes or angle grinders.

Injection Packers: two types of injection packers are available, adhesive (surfaces) packers and drilled packers. The selection of the packer type depends on the thickness of the substrate and the nature of the crack (width, depth, shape and propagation). The crack nature will affect the operating pressure used in the injection process. Normally, drilled packers can be operated at higher pressures than adhesive packers.

Setting Injection Ports: the crack nature and substrate will affect the distance between the packers. Generally, packers should be installed at distances between 20-50 cm along the crack length.

Adhesive Packers are recommended mainly in dry or slight damp concrete. Adhesive packers are recommended for wide or surface cracks and clear in nature cracks and when the substrate thickness is small. Injection of minor cracks is possible but subject to site inspection and demonstrations and will be dependent on a slow operating injecting pressure.

Drilled Packers can be recommended for both dry and wet concrete and for all sizes and nature of cracks. Drilled packers can be installed along the crack length or alternating on both size of the crack length. When drilling on the side of the crack at 45° inclination a special care must be taken in insuring that drilled holes crosses the crack section.

Pot life: CHEM-CRETE HYDRO FOAM CCC526H does not possess any pot life. The activation starts upon contact with water or moisture.

- ☐ Induction: 35-40 seconds starts the reaction.
- ☐ In 60-90 seconds, the water and resin start reacting.
- ☐ Complete reaction is 3-5 minutes and becomes like a creamy gel. This stage is considered tack free.
- ☐ Curing time is 3-5 minutes.

Injection: sealing of leaking cracks and joints is not required. Drilled packers are used in the injection of Chem-Crete Hydro Foam CCC526H. Pour the mixture of CHEM-CRETE HYDRO FOAM CCC526H into a suitable injection pump. For a wall, commence injection at the lowest point. For a slab, commence the injection at one side of the crack then progress to the adjacent packer, until the whole crack length is completely injected. Due to the low viscosity and long pot life of CHEM-CRETE HYDRO FOAM CCC526H and with the adequate injection pressure, the injection resin will flow, fill and seal all voids and subsiding cracks.

Curing: allow the injected CHEM-CRETE HYDRO FOAM CCC526H to cure for at least 48 hours before removing, of any expanded access outside the crack surface. Remove the injection packers using angle grinders. Repair irregularities in the concrete surface using Chem Versatile, if needed.

CLEANING

Tools and equipment must be cleaned immediately after use with Blended Solvents, Xylene or Toluene, etc.

Caution: solvents are flammable and also may affect the injection pump's seals if exposed to solvent for long period.

Spills: cover spill with absorbent materials. Remove from surface and deposit in an open empty container. Add equal amount of water and stir until foam develops. Allow at least 48 hours for curing before disposal.

STORAGE

CHEM-CRETE HYDRO FOAM CCC526H is sensitive to moisture and to high storage temperatures. Store at temperatures 5°C to 16°C under dry conditions. Storage temperature should not exceed 27°C.

SAFETY PRECAUTIONS

After full cure CHEM-CRETE HYDRO FOAM CCC526H is physiologically harmless. Keep the resin and hardener away from the eyes, mouth and skin. Do not breathe in the vapors. The uncured mixture can cause irritation of the skin. For best protection, wear rubber or plastic gloves. In case of contamination, wipe the resin immediately from the skin using paper towels and then wash with soap and water or hand cleaning detergent.

TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Personnel.

WARRANTY

LIMITED WARRANTY: International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of acceptance of the order.

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Manufactured By:

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