

ENVIRO-PLUG MEDIUM

WELLBORE SEALANT

ENVIRO-PLUG MEDIUM is the first bentonite chip developed and marketed. It is a pure Wyoming Bentonite designed for use as a sealant.

FEATURES AND BENEFITS:

- Designed for use in hole abandonment, casing seals or for any vertical seal to prevent water movements up and down the bore hole.
- Swells to fill voids, exerting pressure against all surfaces to create a flexible, low permeability seal.
- Is introduced in a “dry” state; shrinkage cannot occur and there is a reserve expansion capacity.
- Generally hydrates in 1-2 hours.

RECOMMENDED TREATMENT:

Cased or Uncased Holes: For holes <3”, use ENVIRO-PLUG MEDIUM. If static water is present, pour chips from the bag at a rate of 1½-2 mins/22.7 kg bag. A funnel device with a 1-1½” opening is recommended to regulate the flow. If the water level is quite low, a screen can be used to drop out “fines” from the material before entering the hole.

Sealing Casing: Slowly pour ENVIRO-PLUG MEDIUM into the annulus and allow to drop to the gravel pack. For bentonite grouting, continue to pour directly into annulus, alternating from one side of the casing to the other. This aids in even distribution of particles around the casing. To avoid bridging problems, pour at a rate of 1½-2 min/bag. If available, a funnel-type device with a 1½” bottom opening has proven very successful in regulating the flow into the hole. When used in conjunction with pumpable grouts, it can be used immediately above the sand or gravel pack and at the top of the hole for a rigid seal.

Grounding Rod/Heat Pump Conductor Holes: After drilling a 4½-5” diameter hole to the desired depth, simply centre the grounding rod with the ground wire attached to the circulating loop from the heat pump in the bore hole. In the case of wet hole conditions, pour ENVIRO-PLUG MEDIUM slowly (1½-2 min/bag) down the bore alternating each bag from one side of the hole to the other. In dry hole conditions, fill the hole with water and then add the ENVIRO-PLUG MEDIUM, displacing the water upward. If the water dissipates into the formation while filling the hole, continue to add water while adding ENVIRO-PLUG MEDIUM until the hole is sealed. Adding ~20L/22.7 kg bag is usually adequate to provide hydration.

PHYSICAL PROPERTIES:

Appearance:	Light grey pellet, odourless
Moisture:	15% ± 2
Permeability:	1 X 10 ⁻⁹ cm/sec
Particle Size Distribution:	100% passing 3/8” mesh

MIXING/HANDLING:

Refer to the SDS for specific precautions and handling requirements.

MICROTOX® THRESHOLD: TBD

PACKAGING: 22.68 kg bag / 60 bags/pallet