



BAROID DIAMOND SEAL[®]

Absorbent Polymer for Lost Circulation

Description DIAMOND SEAL[®] lost circulation material is a 100% active, water-swellable, synthetic polymer. DIAMOND SEAL polymer LCM absorbs hundreds of times its own weight in water. It is intended for use primarily as a lost circulation material for horizontal directional drilling (HDD).

Applications/Functions *The use of DIAMOND SEAL absorbent polymer can assist the following:*

- Lost circulation material for horizontal directional drilling
- Prevent inadvertent returns in river crossing applications
- Stabilize borehole in cobble and gravel
- Stabilize unconsolidated formations

Advantages

- Rapid water absorption
- Effective in mitigating lost circulation
- Economical – small quantity yields large volume
- Easy to use
- Non-fermenting

Typical Properties

- | | |
|------------------------------------|---|
| • Appearance | off-white crystals |
| • Specific gravity | 0.75 |
| • Dry screen analysis | 96% through 5 mesh (4.0 mm) |
| • Swelling capacity in fresh water | 3.5 ft ³ /lb (0.22 m ³ /kg) |

Recommended Treatment

For slug treatment:

- Add 0.5 to 1 pound (0.25-0.5 kg) DIAMOND SEAL polymer LCM per joint

As a pill:

- Add DIAMOND SEAL polymer LCM at 10 - 20 lb/100 gallons of drilling fluid
- Add DIAMOND SEAL polymer LCM at 12 - 24 kg/m³ of drilling fluid

Treatment for Loss of Circulation or Inadvertent Returns in HDD

Operations:

(Prior to pumping remove all in-line screens in circulating system)

Add the following to existing drilling fluid and displace:

BAROLIFT[®] - 0.25 - 0.5 lb/100 gallons (0.3 - 0.6 kg/m³)

N-SEAL[™] - 3 - 5 lb/100 gallons (3.6 - 6.0 kg/m³)

DIAMOND SEAL - 10 - 20 lb/100 gallons (12 - 24 kg/m³)

Packaging DIAMOND SEAL® absorbent polymer is packaged in 10 x 2-lb bags per case.

Availability DIAMOND SEAL absorbent polymer can be purchased through any Baroid Industrial Drilling Products Retailer. To locate the Baroid IDP retailer nearest you contact the Customer Service Department in Houston or your area IDP Sales Representative.

Baroid Industrial Drilling Products

Product Service Line, Halliburton

3000 N. Sam Houston Pkwy E.

Houston, TX 77032

Customer Service	(800) 735-6075 Toll Free	(281) 871-4612
Technical Service	(877) 379-7412 Toll Free	(281) 871-4613
