

## **DIAMOND SEAL**<sup>®</sup>

Absorbent Polymer for Lost Circulation

		DIAMOND SEAL® lost circulation material is a water-swellable but not water-soluble, 100% crystalline synthetic polymer. DIAMOND SEAL polymer absorbs hundreds of times its own weight in water. It is intended for use primarily as a lost circulation material for horizontal directional drilling.			
Applications/Functions	<ul> <li>Lost circulation material for horizontal directional drilling</li> <li>Can prevent inadvertent returns in river crossing applications</li> <li>Can stabilize borehole in cobble and gravel</li> <li>Can stabilize unconsolidated formations</li> </ul>				
Advantages	<ul> <li>Rapid water absorption</li> <li>Effective in mitigating lost circulation</li> <li>Economical – small quantity yields large volume</li> <li>Easy to use</li> <li>Non-fermenting</li> </ul>				
<b>Typical Properties</b>	Appearance		off-white free-flowing crystals		
	Specific gravity		0.75		
	Dry screen analysis		96% through 5 mesh (4.0 mm)		
	Swelling capacity in free	sh water	3.5 ft <sup>3</sup> /lb (0.22 m <sup>3</sup> /kg)		
Recommended Treatment	<ul> <li>For slug treatment:</li> <li>Add 1/2 to 1 pound (0.25-0.5 kg) DIAMOND SEAL polymer per j</li> </ul>				
	<ul> <li>As a pill:</li> <li>Add DIAMOND SEAL polymer at 10 - 20 lb/100 gallons of drilling fluid</li> </ul>				
	<ul> <li>Add DIAMOND SEAL polymer at 12 - 24 kg/m<sup>3</sup> of drilling fluid</li> </ul>				
	Treatment for Loss of Circulation or Inadvertent Returns in HDDOperations:(Prior to pumping remove all in-line screens in circulating system)Add the following to existing drilling fluid and displace:BAROLIFT® additive $0.25 - 0.5$ lb/100 gallons ( $0.3 - 0.6$ kg/m <sup>3</sup> )N-SEAL <sup>TM</sup> additive $3 - 5$ lb/100 gallons ( $3.6 - 6.0$ kg/m <sup>3</sup> )DIAMOND SEAL polymer $10 - 20$ lb/100 gallons ( $12 - 24$ kg/m <sup>3</sup> )				

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Packaging	DIAMOND SEAL polymer is packaged in 10-lb (4.5-kg) resealable plastic containers.			
Availability	DIAMOND SEAL 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	