

## HOLEPLUG<sup>®</sup> CG

Crude Grade Sodium Bentonite

-LIBURY			
Description	HOLEPLUG <sup>®</sup> CG is naturally occurring, Crude Grade Wyoming sodium bentonite clay that is a chip bentonite material with a broad particle size distribution used primarily for plugging and abandonment operations, annular seals and backfill operations.		
Applications /Functions	<ul> <li>The use of HOLEPLUG CG Crude Grade Sodium Bentonite assists or promotes the following:</li> <li>Grouting annulus in all types of wells, particularly environmental monitoring well applications</li> <li>Sealing above gravel packs</li> <li>Plugging decommissioned boreholes</li> <li>Stemming shotholes</li> <li>Sealing around conductor pipe</li> <li>Sealing severe lost circulation zones</li> </ul>		
Advantages	<ul> <li>NSF/ANSI/CAN Standard 60 certified</li> <li>Helps prevent entry of surface water into boreholes</li> <li>High swelling potential and low permeability</li> <li>In situ swelling to provide a superior seal with excellent casing stabilization</li> <li>Cost effective</li> <li>Simple to apply, mixing not required</li> <li>Helps prevent vertical movement of fluids in the hole between porous zones</li> </ul>		
Typical Properties	<ul> <li>Uncompacted Bulk Density</li> <li>Permeability</li> <li>Appearance</li> <li>71.17 lbs/ft<sup>3</sup> (1140.56 kg/m<sup>3</sup>)</li> <li>1.5 x 10-9 cm/sec (in fresh water)</li> <li>Beige to tan chips</li> </ul>		
Treatment Considerations	<ul> <li>Adequate annular space, at least two inches on either side of the outside dimension of the casing, should be present to facilitate placement of HOLEPLUG CG Crude Grade Sodium Bentonite into the desired area without bridging. The use of a tremie line may be necessary to ensure proper placement and is recommended for placement in deep hole applications.</li> <li>The grouting material and method selected will depend upon the specific subsurface environment including all prevailing geological and hydrological factors and any existing regulatory requirements.</li> <li>The use of bentonite may not be appropriate in environments where the formation water chemistry has a total hardness greater than 500 parts per million and/or a chloride content of greater than 1500 parts per million.</li> <li>If questions arise regarding subsurface environments it is always best to consult your local Baroid IDP representative to determine if the Baroid product of choice is appropriate for the given conditions.</li> </ul>		

Because the conditions of use of this product are beyond the seller's control, the product is sold without warranty either express or implied and upon condition that purchaser make its own test to determine the suitability for purchaser's application. Purchaser assumes all risk of use and handling of this product. This product will be replaced if defective in manufacture or packaging or if damaged. Except for such replacement, seller is not liable for any damages caused by this product or its use. The statements and recommendations made herein are believed to be accurate. No guarantee of their accuracy is made, however.

Packaging	HOLEPLUG <sup>®</sup> CG Crude Grade Sodium Bentonite is packaged in 2205-LB and 3000-lb (1000 or 1361 kg) super sacks			
Availability	HOLEPLUG CG Crude Grade Sodium Bentonite 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	
	<b>Technical Service</b>	(877) 379-7412 Toll Free	(281) 871-4613	