

## INFORMATION

# HOLE-SEAL-II

### LOST CIRCULATION SQUEEZE

#### DESCRIPTION

HOLE-SEAL-II is a fibrous powdered polysaccharide loss circulation product designed to perform in either oil or water based mud systems. Due to its high solubility in acid and its biological degradation, HOLE-SEAL-II should exhibit little to no formation damage under normal operating conditions. HOLE-SEAL-II is an economic alternative when continuous seepage control is required. This product is biodegradable and nontoxic.

Form	Fibrous, polysaccharide powder
Specific Gravity	Approx. 0.40 - 0.42
Biodegradability	Biodegradable
Particle Size	90% minus 80 mesh
Thermal Stability	400 °F minimum
Bulk Density	
Compacted	38.9 lb/cu ft
Uncompacted	26.7 lb/cu ft

#### APPLICATION

HOLE-SEAL-II is a specialized product designed primarily as a bore hole wall sealant for fracture zones and permeable, depleted sands. It will control seepage loss and whole mud losses in both water base and oil base drilling fluids, and if used in recommended concentrations, should not adversely effect drilling fluid viscosity. High differential pressures across permeable sands can cause severe problems in the hole which can lead to torque and drag, stuck pipe, and whole mud loss. HOLE-SEAL-II helps reduce the sticking tendency of drill pipe exposed to low pressure depleted sands.

HOLE-SEAL II can be used to prepare a coring fluid.

### **RECOMMENDED TREATMENT**

HOLE-SEAL-II can be used as a seepage loss reducing additive either as a pretreatment at 2 to 8 pounds per barrel (5.7 to 22.8 kilograms per cubic meter) or as a slug treatment. It can be used for hole sweeps on a regular basis. Slugs, pills or sweeps can be prepared by mixing high concentrations in a slugging tanks. For this purpose, mix at 10 to 50 pounds per barrel (28.5 to 142.5 kilograms per cubic meter).

HOLE-SEAL-II is ideal for a coring fluid due to a its minimum effect on a mud's rheology and fluid invasion protection given to permeable formations. The existing mud system can be used after the drill solids content has been reduced. The mud system should be isolated to where only a minimum of volume needs to be prepared. Ideally, the coring fluid path through the surface system should be as follows: flow line to shale shakers with 50 to 60 mesh screens, followed by the suction pit. HOLE-SEAL-II is normally recommended at a concentration of 20 to 30 pounds per barrel (57.0 to 85.5 kilograms per cubic meter), although lab pilot testing is required to optimize the loading.

A separate coring fluid can be prepared if it is undesirable to use the active system. It is prepared by mixing 20 to 25 pounds per barrel (57.0 to 71.25 kilograms per cubic meter) of bentonite, adjusting the pH to 8.0 to 8.5, and then adding 20 to 30 pounds per barrel (57.0 to 85.5 kilograms per cubic meter) of HOLE-SEAL-II. As previously mentioned, pilot lab testing is always recommended before field use.

### **PACKAGING**

HOLE-SEAL-II is available in 25 pound multi-walled, polyethylene lined bags.

HOLE-SEAL-II is a Messina trademark