



Drilling Fluids, Inc.

Lost Circulation Material

Description

PRIMA SEAL

PRIMA SEAL is a blend of granular, flake, and fibrous materials. It is available in three grinds to function effectively over the widest range of lost circulation conditions.

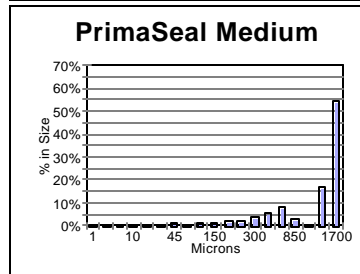
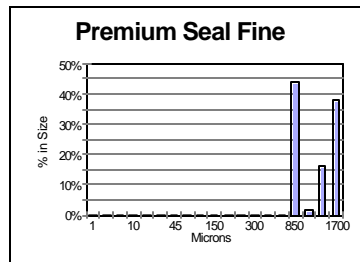
Uses

PRIMA SEAL is used as a primary lost circulation material in water based mud systems. It can be used as a one sack treatment or in combination with other materials.

Benefits

PRIMA SEAL is a specific blend of high strength granules, (bridging agents), fibers (matting agents), and flakes (sealing agents). It functions by first forming a bridge and then packing-off around the bridge to form the final seal. It forms a light, strong seal under high and low differential pressures and can be used to effectively stop loss of fluid in unconsolidated formations and fractures or vugs in hard formations. The seal formed is not easily removed by bit movement or mud circulation. PRIMA SEAL has such wide versatility that it eliminates the need to keep other types of lost circulation material on location.

Particle Size Analysis



Mesh	Micron
400	35.56
75	190.80
60	250.00
50	300.00
40	425.00
30	600.00
20	850.00
14	1400.00
10	1700.00

The data indicates a percent by weight and minimum particle size in microns for each sub-division.



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PRIMA SEAL (Continued)

Treatment

Add PRIMA SEAL through the hopper or directly into a well agitated suction pit. A lost circulation pill of 500 linear , containing 20 - 50 ppb PRIMA SEAL is recommended for spotting across the loss zone. Displace the slurry at a reduced pumping rate and allow it to sit as long as practical.

PRIMA SEAL coarse and medium grinds contain synthetic fibers which are not recommended in oil-based systems. PRIMA SEAL will function at all temperatures compatible with water-based fluids.

Function

PRIMA SEAL's primary function is to stop lost circulation in a wide range of conditions with water-based drilling fluids. Coarse grind is used to seal large fractures and highly permeable formations and can be pumped easily through large jets or open pipe. Medium grind is extremely effective in sealing medium to fine fractures and porous zones and can be used with most bit jet bits. PRIMA SEAL acts as a media to fill in fractures and prop the fracture open. Propping the fracture open will strengthen the well bore and reduce the likeliness of another fracture forming in the same location. Fine grind is used where seepage losses are a problem such as with fine fractures or porous formations. Fine grind will circulate through course-mesh shaker screens and can be maintained in the mud as a filler.

Typical Physical Properties

Bulk Density:20 lb/ft³
Appearance:Yellow to brown blend of particles

Safe Handling Recommendations

PRIMA SEAL is a non-hazardous material and can safely be used in environmentally sensitive areas.

Utilize normal precautions for employee protection when handling chemical products. Use of appropriate respirator, gloves, goggles, and apron is recommended for employee comfort and protection. See Material Safety Data Sheet (MSDS) for this product prior to use.

Packaging

PRIMA SEAL is packaged in 3 cubic foot multi wall bags.