

Product Summary

Single sack precise blend of A drilling fluid additive/chemical for oil & gas drilling operation, made of a blend of micronized polycrystalline material and organic vegetable derived cellulose fibers in the form of a free – flowing solid powder. The material is used as a specialized lost circulation material in drilling fluid for drilling in weak & fractured formation zones.

Physical Properties:

Appearance: Tan to dark brown, granular, free flowing powder

Basic Properties:

- Particle size concentration: 1-500 microns (approx. ±50 microns)
- Appearance: Tan to dark brown, granular, free flowing powder,
- Temperature range: up to 500 deg F BHST,
- Specific gravity: 0.8-1.0,
- Bulk density: 0.4-0.8 g/c.c

Recommended Treatment

- System Treatment: 2-6 ppb
- Sweeps: First Response Plus (5-25 ppb)
- Pill: First Response Plus (15-70 ppb) can be run alone or with SYN-Seal® (10-30 ppb) to maximize effectiveness in zones where there are whole mud losses.

First Response Plus PSD

U.S. Mesh Screen (Micron)	Product Retained, g
6 (3400µ)	5.0
8 (2360µ)	6.0
10 (2000µ)	4.0
14 (1400µ)	9.0
18 (1000µ)	9.0
35 (500µ)	15.0
60 (250µ)	12.0
100 (150µ)	38.0

Wellbore Stability Benefits:

- First Response Plus is a carefully selected broad particle size range LCM proven to seal multi-sized fractures and reduce effective response time to whole mud losses.
- Can be pumped through down hole tools up to 75 ppb.
- Proven to be highly effective when staged or pumped ahead of EZ Squeeze® or cement.
- Effective at both low and high wellbore temperatures.
- Easily mixed through the hopper.
- Compatible mixing in all drilling fluids.
- Maximum effect in sweeps/pills when used with SYN-Seal® or Bore-Seal 100.

Handling and Storage

Proper PPE should be worn while handling this product. Minimize dust exposure. Please review SDS before using.

Packaging

First Response Plus is available in 25 lb. sacks, 50 sacks/pallet. Customized packaging also available on request.