

POLYSWELL

POLYSWELL copolymer is used in lost circulation and expands to 200 times its volume in freshwater. This material is environmentally safe.*

Typical Physical Properties

Physical appearance..... White powder
 Specific gravity0.8–1.0
 Solubility..... Swells on contact with water

Applications

POLYSWELL copolymer is used to fill or seal fractures. As the material fully hydrates the fracture/void is sealed. This product can also be spotted in caving zones to reduce caving problems.

Directly after placing the POLYSWELL pill, pull up above the problem zone to prevent sticking. Full hydration occurs in 20 to 30 min. Circulate with mud and lost-circulation material (LCM) to fill the bridge.

Advantages

- POLYSWELL copolymer can be prehydrated before adding
- Because of its swelling capacity and variability in size, POLYSWELL additive can accumulate in a variety of fracture sizes

Method of Addition

POLYSWELL additive can be mixed in water or drilling mud with or without LCM. Add 1 to 3 lb (0.5 to 1.5 kg) per 4 gal (20 L) of water or mud in a pail. (Lesser and greater amounts have been used.) Pump the mixture as soon as possible once the dry polymer beads are mixed. When using POLYSWELL additive in core drilling, be sure the core tube has been pulled before pumping the solution downhole. Repeat as necessary to stop fluid loss.

Limitations

Improper placement of the POLYSWELL additive can result in stuck drill rods.

Toxicity and Handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheets (MSDS).

Packaging and Storage

POLYSWELL copolymer is packaged in 5-gal (18.9-L) buckets.

Store in a dry location away from sources of heat or ignition.

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