

POLYSWELL

Copolymer

APPLICATIONS

- Filling and sealing fractures

ADVANTAGES

- Can be prehydrated before adding
- Can accumulate in various fracture sizes due to swelling capacity and variability in size

LIMITATIONS

- Improper placement of the POLYSWELL* copolymer can result in stuck drill rods

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

Directly after placing the 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. This material is environmentally safe.

Method of addition

POLYSWELL copolymer 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 galUS [20 L] of water or mud in a pail. (Lesser and greater amounts have been used.) Pump the mixture as soon as possible after the dry polymer beads are mixed. When using POLYSWELL copolymer in core drilling, be sure the core tube has been pulled before pumping the solution downhole. Repeat as necessary to stop fluid loss.

Toxicity and handling

Bioassay information is available upon request. Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the MSDS.

Packaging and storage

POLYSWELL copolymer is packaged in 5-galUS [18.9-L] buckets. Store in a dry location away from sources of heat or ignition.

Typical Physical Properties

Physical appearance	White powder
Specific gravity	0.8–1.0
Solubility	Swells on contact with water