



enventives

VEN-PEL I™

RECOMMENDATIONS

Ven-Pel I™™ is recommended as a unique approach to preventing or overcoming severe lost circulation encountered when drilling with water base drilling fluids.

Ven-Pel I™™ is designed to disintegrate and form fibrous particles when brought into contact with water.

If allowed to disintegrate on surface, Ven-Pel I™™ can be used similar to any of the conventional lost circulation products on the market. It will disperse to form a concentrated slugging pill similar to the techniques used with nut hulls, mica, wood fibers, cane fibers, and multi component blended products.

Concentrations of pretreatment can vary between 5 and 40 lb/ bbl. Concentrated slugs can be prepared in even higher concentrations if desired. Ven-Pel I™™ will act in the same way as conventional, nondensified, fibrous lost circulation material when added to a water base drilling fluid.

It will not react with conventional mud system components. Ordinary precautions should be taken to see that Ven-Pel I™™ is fully disintegrated and uniformly mixed when pumping down hole through jet bits.

GENERAL INFORMATION

Ven-Pel I™™ is used in water-base drilling fluids to prevent or overcome lost circulation. It is ideally suited for use in porous gravel, fractured formations, and vugular cavernous strata. Ven-Pel I™™ is a densified, fibrous, lost circulation material designed to expand up to five times or more its volume when brought into contact with water.

Even without expanding, the controlled pellet size will provide initial high water loss bridging properties in large void spaces. However, once in a void space and contacted with water, the pellets will expand similar to clay. The key difference, however, is that the pellets will produce a fibrous end product. In addition, the ultimate expansion and disintegration of the pellets provides a secondary plugging mechanism the development of a wide particle size range of many small, pliable fibers. This results in the formation of a tight mat-like seal.

Ven-Pel I™™ is a selected and blended mixture of both long and short organic fibers designed to provide specific end properties such as chemical composition, particle size, distribution, density, disintegration rates, reactivity, compatibility, etc. Both chemical and physical properties can be widely varied to meet specific problem requirements.

Special processing of Ven-Pel I™™ destroys most of the fermentable materials that cause decomposition (commonly referred to as "souring") of ordinary organic plugging and bridging agents.

The key benefit of Ven-Pel I™™ is thaters an economical way of reducing (1) freight costs, (2) storage area requirements, and (3) labor handling that exists with conventional fibrous lost circulation materials. Such costs are becoming more critical in operations in remote are locations.

Ven-Pel I™™ can reduce such costs and yet still produce a voluminous, fibrous lost circulation product when brought into contact with water. Furthermore, it is ideally suited to emergency air shipping requirements where time is an important cost factor.

Because of the physical configuration of Ven-Pel I™™, coupled with the fact that it is fibrous and will expand like clay, it can be used like a conventional lost circulation material for pretreatment or for pills, or it can be used as high water loss squeezes.

In addition, it can be slurried in a nonaqueous carrier like diesel oil, pumped into the loss zone, and allowed to swell and set up on contact with water. Due to its chemical and physical nature, Ven-Pel I™™ can be used to span the spectrum of many of the conventional lost circulation products and techniques on the market today.



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Such precautions will prevent bit plugging. Ven-Pel I™ can be added to a system through conventional jet mud mixing equipment.

In severe cases of lost circulation, Ven-Pel I™ can be displaced in the form of pellets through open-ended drill pipe and placed in, or as close as possible to, the loss zone.

This technique takes advantage of the bridging and expansion properties of the pellets. Care must be taken not to allow the pellets to bridge in the drill pipe.

The use of diesel oil or other non-aqueous carriers to form a slurry, compipe and placed in, or as close as possible to, the loss zone.

This technique takes advantage of the bridging and expansion properties of the pellets.

PACKAGING

Ven-Pel I™ is packaged in 25 lb, three-ply Kraft paper bags.

TYPICAL PROPERTIES

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| Composition | : Primarily long & short cellulose base fibers |
| Color | : Medium to Dark Brown |
| Form | : Pellets |
| Diameter | : 7/16 inch |
| Size, Length | : Less than 3/4 inch |
| Bulk Density (lb/ft3) | : compacted: 31-35 uncompacted: 26-30 |
| Swelling Volume | : Minimum 5 times original volume in fresh water at ambient temperature |
| Solubility, water | : Dispersible in water |
| Solubility, oil | : Insoluble in nonaqueous solvents |

PRECAUTIONS

See the Safety Data Sheet for more detailed information concerning storage, handling, transportation, disposal and safety requirements.