



PRODUCT DATA SHEET

VEN-PLUG™/VEN-PLEX II™

RECOMMENDATIONS

VEN-PLUG™ is recommended as a polymer-based lost circulation product for use in water-base mud systems. It is particularly effective in providing a highly viscous, pretreatment type of pill ahead of low viscosity cement slurries, LCM polymer pills, etc. Although the pill is temporary, it is generally stable for 24 hours up to several days. A longer plug life can be achieved by the addition of a suitable biocide and can extend the stability of the pill for several months.

VEN-PLUG™ can be further strengthened by cross-linking with VENPLEX™ cross-linking agents. The cross-linked polymer results in a rubbery type of gel. The particle size range of the cellulose fibers in VENPLUG™ allows the product to be pumped through the bit and other downhole tools. VEN-PLUG™ can be made up as a pill in regular mixing or slugging tanks, or it can be added continuously "on-the-fly" as the pill is being displaced. If suitable pumping equipment is available, VEN-PLEX™ can be added to VEN-PLUG™ on a continuous basis as the LCM pill is pumped away. Another method is to displace certain concentrations of VENPLUG™, break connection, pour in a few gallons of VEN-PLEX™, and resume pumping. This procedure can be repeated as often as necessary and will provide a tougher, rubbery type pill. Overflush techniques with VEN-PLEX™ can also be used.

BENEFITS

Although VEN-PLUG™ is not designed to be a permanent pill, it will stay in place for a sufficient length of time to allow other types of permanent LCM pills, filter cake, or cement to be placed and set.

Use of biocides will increase the life of the plug. VEN-PLUG™ can be used as a base fluid (rather than mud or gel) to build highly concentrated slurries with other types of LCM pills. VEN-PLUG™ can be run ahead as a wiper ahead of cement jobs to provide a better distribution of cement throughout the hole.

GENERAL INFORMATION

Ven-Plug™ is a blend of water-soluble polymers and fibrous cellulose bridging agents. Ven-Plug™ is designed to be used as a highly viscous, temporary plugging agent in severe cases of lost circulation during drilling operations. It can also be used as a top hole drilling fluid and as a hole sweep.

Ven-Plex I™ is an alkaline complexing agent designed to crosslink and further strengthen a Ven-Plug™ pill. Ven-Plex II™ is an alkaline complexing agent designed to crosslink and further strengthen a Ven-Plug pill. Ven-Plex I™ is a liquid product and Ven-Plex II™ is a powder that can be field prepared into a liquid.

TYPICAL PROPERTIES OF VEN-PLUG

Form	: Fibrous solid
Color	: Light brown
Bulk Density	: 25 lb/cu ft.
Dispersibility	: Readily dispersible in water

TYPICAL CONCENTRATION

Typical use concentration for Ven-Plug™ is 25 - 50 lb/bbl.
Ven-plex I™ is typically added at 5 -10 gal/25 - 50 bbl of Ven-Plug™ pill.
A Ven-Plex II™ solution can be prepared in the field by using one (2 lb) package of
Ven-Plex II™ with approximately 2 lb (one viscosity cup) of caustic soda per 5 gal. of water.

PACKAGING

Ven-Plug™ is packaged in 25 lb Kraft paper bags. Ven-Plex I is packaged in 5 gallon pails. Ven-Plex II™ is packaged in 2 lb polyethylene bags.

PRECAUTIONS

See Safety Data Sheet for specific information concerning storage, handling, transportation and safety requirements