

## INFORMATION

# **CAVI-SEAL-AS**

ACID SOLUBLE LOSS CIRCULATION MATERIAL

#### **DESCRIPTION**

CAVI-SEAL-AS is specially formulated, extrusion spun mineral fiber. This coarse, long flexible fiber will give increased circulation by bridging and plugging off voids, fractures and all types of rock formations.

CAVI-SEAL-AS is compatible with all oil and water based muds and emulsions. The interlocking nature of these strong fibers provides a framework for forming a low permeable mud cake with a resultant reduction in drilling fluid loss and hole caving.

CAVI-SEAL-AS is thermally stable at temperatures up to 1800°F and its specific gravity of 2.6 reduces the tendency to float. Low alkaline, flexible, inorganic CAVI-SEAL-AS is inert to drilling fluids. This fiber in non-corrosive to expensive equipment while maintaining high-solubility in diluted hydrochloric acid. It is particularly adaptable to rework operations.

CAVI-SEAL-AS is coated with a mono-molecular film of a specially formulated surfactant (that speeds separation of the fibers), then formed into nodules. These nodules are formed into loosely connected groups so that when they are immersed in drilling fluids and subjected to agitation the nodules separated into the individual fibers. CAVI-SEAL-AS is acid-soluble, easily-wetted, non-combustible, non-fermenting, inorganic, non-polluting, non-corrosive, non-toxic, and temperature stable.

Scanning Electron Microscope 200X Magnification 550X 1000X Enlargement

CAVI-SEAL-AS's individual fibers interlock to form the foundation for a strong mud cake. This network of fibers trap solids to create an effective seal.



#### APPLICATION

CAVI-SEAL-AS can be used in concentrations of up to 20 + lb/bbl in slug treatments or as anadditive to the entire system. CAVI-SEAL-AS has been used in concentrations of 1/2 bag every 30 min. for ongoing seepage, to concentrations of 5 - 15lb/bbl for seepage/partial or total losses.

CAVI-SEAL-AS is particularly suitable for oil base mud, when more than 6 - 10 bags are mixed at once, an engineer should be at the shaker screen when the slug comes around (to clean or bypass the shaker screen). CAVI-SEAL-AS can be used in all oil and water base mud systems. Because of the product's high thermal stability, CAVI-SEAL-AS is especially applicable to hot or geothermal wells. CAVI-SEAL-AS should be added directly into pits and gunned into the mud, it can be mixed through the mud hopper but it is much slower.

When acid solubility is not important, a combination of materials can be added to ensure a good particle size distribution.

If severe loss circulation persists, other loss circulation or bridging agents can and should be used with CAVI-SEALAS to maximize success in stopping the loss of fluids.

### **PACKAGING**

CAVI-SEAL-AS is normally packaged in 30 lb. net export paper bags. Alternative bags and quality of the bags, as well as special palletizing are available on request.

CAVI-SEAL-AS is a Messina trademark