



Oil Drilling SOLUTIONS

What Are Enzymes?

- Enzymes are Proteins
- Enzymes are Biocatalysts
- Manufactured from Plant, Animal and Microbial sources
- Specific in Action (pH / temp / Substrate)

Why Enzymes ?

- Environment-friendly (100% bio-degradable) .Required in significantly less quantity as Compared to conventional.
- Chemicals, thereby reducing storage and handling costs drastically.
- Safe & Easy to handle and apply in process Rapid acting, leading to reduced process time and improved Efficiency.
- High specificity ensures that enzymes only act on the substrate intended for, leaving other things intact.

Why Advanced Enzymes??

- Vast range of enzymes for variety of Substrates State of art R & D set-up to support customers for application development.
- Ability to offer customized enzymes as per requirement in any quantity.
- Large capacity to cater to bulk requirements typical in Oil Drilling.

Challenges & Solutions

Challenges :

- Proppant slippage out of fracture due to fluid viscosity.
- Filter cake formation on bore wall & fractures reducing oil productivity of the well.
- Difficulty of solid – liquid separation in drilling fluid during disposal in mud pit / poor settle ability of Solids in mud pit .
- Difficulty to handle bulk volumes of conventional chemicals for viscosity reduction.
- Poor biodegradability of drill mud.

Solution :

- SEBStar HT Max (for starch based viscofiers / higher temperatures in operation)
- ViscoSEB HTX / SacchariSEB C6 L (CMC / Xanthan based viscofiers).
- SacchariSEB ML (Guar gum based viscofiers)

Products we can offer

Product Enzyme Type End application / Substrate:

- SEBStar HT Max / SEBStar HTL
- High Temperature Alpha Amylase
- Starch hydrolysis / viscosity breakdown of starch based viscofiers
- SEBStar MT Medium Temperature
- Alpha Amylase
- Starch hydrolysis / viscosity breakdown of starch based viscofiers
- SEBAmyl GL Max Glucoamylase Rapid viscosity breakdown in combination with alpha amylase for starch based viscofiers .

Product Enzyme Type End application / Substrate

- ViscoSEB HTX Multienzyme complex Multienzyme complex for a host of polysaccharides including cellulose,hemicellulose,xylanes
- ViscoSEB TBG Betaglucanase Viscosity breakdown for gums with high glucan content
- SacchariSEB C6L Cellulase Viscosity reduction for cellulose based viscofiers – CMC
- SacchariSEB ML Mannanase Viscosity breakdown for mannan based gums liked guar,xanthan

Product offered / Marketed By :



H. K. GROUP

Mail: info@hkggroup.net , piyushhke@gmail.com Website : www.hkggroup.net