

# **INFORMATION**

# **MICRO-SEAL**

MUD AND BOREHOLE CONDITIONER

#### **DESCRIPTION**

MICRO-SEAL is a liquid blend of colloidal hydrocarbons, surfactants, and lubricants in a liquid hydrocarbon base. MICRO-SEAL is an effective and cost-efficient agent for controlling sloughing shales, maintaining lubricity, and reducing fluid loss. MICRO-SEAL remains stable at elevated down hole temperatures and does not interfere with fluorescence of crude oils that may be discovered in drill cuttings.

#### **BENEFITS**

- Ease of Application MICRO-SEAL has a low pour point (-25° F), assuring excellent fluidity in virtually all climates. The product mixes quickly and easily into any mud system.
- Torque Reduction MICRO-SEAL reduces drill string torque, thereby reducing wear and tear on rig and tools. The improved lubricity of MICRO-SEAL treated muds reduces stuck pipe and allows for faster penetration rates.
- Borehole Stability and Improved Drilling Efficiency Increased lubricity and borehole stability avoid delayed drilling operations due to stuck pipe, fishing jobs, and sloughing shale.
- Fluid Loss Reduction Fluid loss is reduced by MICRO-SEAL forming a better wall
  cake which limits fluid penetrating the formation while reducing sticking
  tendencies.
- Emulsification MICRO-SEAL acts as an emulsifier for diesel and crude oil in the mud system.

#### RECOMMENDED TREATMENT

Torque reduction is proportional to the concentration (up to 6%) of MICRO-SEAL. Prior to downhole use, specific treatment rates should be determined through the use of pilot tests. Concentrations of 1 to 3 % help stabilize sloughing shales and reduce water loss.



## **MISCELLANEOUS**

Prices and delivery schedules are available from any Messina office, local agent, or distributor.

## **PACKAGING**

MICRO-SEAL is packaged in 55 gal/200 litre export quality drums. Smaller drums are available on request.

MICRO-SEAL is a Messina trademark