



AE 853

ANIONIC EMULSION SHALE INHIBITOR

DESCRIPTION

HYPERDRILL® AE 853 is a high molecular weight, medium charge, polyacrylamide supplied as a low viscosity emulsion. By design, it mixes easily and yields rapidly.

TYPICAL PROPERTIES

Appearance:	Opaque Liquid
Ionic Character:	Anionic
Specific Gravity:	1.02 - 1.06
Viscosity as Supplied:	500-1500 cps
pH of 1% Soln. @ 25 deg. C:	6.5 - 7.5
Pour Point:	5°F (-15°C)
Flash Point:	> 200°F (93°C)
Shelf Life:	6 Months

APPLICATIONS

HYPERDRILL® AE 853 is a very versatile polymer which can be used for oil, gas, water and mineral drilling. It can be added to fresh, KCL or sea water based drilling fluid systems. **HYPERDRILL® AE 853** functions primarily as a:

- SHALE INHIBITOR
- VISCOSIFIER
- FLOW LINE FLOCCULANT
- FRICTION REDUCER/LUBRICANT
- FOAM STABILIZER

PRINCIPAL FUNCTIONS

Shale Inhibitor

HYPERDRILL® AE 853 can be used alone or in conjunction with KCL to stabilize active shales by decreasing the shale's tendency to absorb water, swell and slough-off. As an additional benefit, fluid loss is often reduced when using this product. The recommended dosage rate is 0.5-2 ppb as supplied.

Viscosifier

The addition of 0.5-2.0 ppb of **HYPERDRILL® AE 853** is a cost effective way to generate viscosity in fresh or low salinity drilling fluids. Its shear thinning capacity assures maximum power at the bit under high shear while retaining excellent carrying capacity under low shear conditions.

Flow Line Flocculant

HYPERDRILL® AE 853 is an excellent product for clear water or low solids drilling fluids. The addition of a 0.5% solution of **HYPERDRILL® AE 853** into the flow line or just prior to any mechanical separation equipment will greatly enhance the removal of drill solids.

Friction Reducer

The addition of **HYPERDRILL® AE 853** into a drilling fluid will help reduce turbulent flow, friction and power losses at points of high shear. Lowering turbulent flow also helps reduce erosion and washouts of fragile geologic structures.

Foam Stabilizer

HYPERDRILL® AE 853 assists in foam drilling by creating a very stable foam, thereby increasing foam life. This results in enhanced cuttings removal and reduced water requirements. The product is compatible with most commonly used foamers.

PACKAGING AND STORAGE

HYPERDRILL® AE 853 is supplied in bulk, 275 gal. (2300lbs. net) semi-bulk containers, 55 gal. (450lbs. net) non-returnable steel drums or 5 gal. (42lbs. net) plastic pails.

HYPERDRILL® AE 853 should be stored in a heated building at a temperature of 40-95°F (5-35°C). When stored under these conditions, the product has a shelf life of approximately six months. If frozen, the product should be allowed to thaw completely and mixed prior to use.

HEALTH AND SAFETY

HYPERDRILL® AE 853 exhibits a low order of toxicity. However, precautions should be taken to avoid inhalation, ingestion or contact with skin or eyes. For additional information, see the relevant MSDS.

SPILLS: Polymer spills are extremely slippery and therefore hazardous. They should be addressed immediately. An absorbent material should be applied to the spill, then swept up and disposed of according to local, state or federal regulations. The area should then be washed down with a bleach solution. **Do not add water to a spill.**

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