

# TROL-STAR LV



**TROL-STAR LV modified starch is a high-quality, easily mixed dry product designed to control fluid loss without contributing to an increase in viscosity.**

**TROL-STAR LV controls fluid loss and provides viscosity in freshwater, seawater, KCl and salt muds. Forming a thin, resilient, low-permeability filter cake TROL-STAR LV minimizes the potential for differential sticking and the invasion of filtrate/mud solids into permeable formations. TROL-STAR LV generates less viscosity than regular PAC products. The viscosity generated will depend on the solids concentration, salinity and makeup-water chemistry. TROL-STAR LV is an anionic starch which will encapsulate exposed clay and shale drill cuttings and the borehole walls. This protective polymer "envelope" inhibits the dispersion of shale cuttings and restricts fluid interactions with exposed shale.**

- Economical alternative to low viscosity PAC and CMC
- Easily mixed
- Effective in low concentrations for controlling fluid loss without viscosity increases
- Encapsulates shale particles to inhibit swelling and dispersion
- Resists bacterial attack, requiring no biocides or preservatives
- Applicable in most water-based mud systems

## Advantages

## Typical Usages

## Properties

## Packaging

Typical Amounts of TROL-STAR LV Added to freshwater			
Drilling Application	lb/100 gal	lb/bbl	kg/m <sup>3</sup>
Normal fluid loss treatment	1.7 - 5	0.75 - 2	2 - 5
Saltwater systems	2.4 - 7.2	1 - 3	3 - 8.5

Physical Appearance	White free-flowing powder
Specific Gravity	1.5 - 1.6
pH (1% solution)	6.5 - 8.0

**TROL-STAR LV is packaged in 50-lb (22.7-kg) multi-wall bags and in 5 gallon (18.9L) buckets**