

# STAR SHIELD® 500

## Wellbore Shielding® Technology

## Product Specifications



### DESCRIPTION

The STAR SHIELD® 500 wellbore stabilizer and shielding technology is a preventative additive that enables operators to successfully drill in challenging formations.

This Wellbore Shielding® product protects formations by minimizing fluid and pressure invasion into matrix pores and microfractures, creating a 'shield' at the rock-fluid interface. STAR SHIELD 500 offers a drilling advantage, and has been adopted by major operators in unconventional shale plays.

### ADVANTAGE

Operators drill safely with mud densities greater than the fracture initiation pressure

Eliminates differential sticking in high permeability formations

Does not shear degrade and has a broad particle size distribution

High temperature stability over 204°C (400°F)

### APPLICATION

Seals up to 500 µm fractures even at high differential pressure

Solid control API mesh screens may need to be adjusted slightly

Effective in water-, oil- or synthetic-based drilling fluid systems

### ENVIRONMENTAL ADVANTAGE

Environmentally compliant for use in all areas in North America

Passes the North America 96-hr LC50 bioassay mysid shrimp

### TREATMENT RECOMMENDATIONS

Effective at concentrations as low as 3-10 lb/bbl

Designed for use in the circulating fluid system

Concentration can be monitored by Impact's proprietary Sand Bed Tester

### PHYSICAL PROPERTIES

Appearance: Light tan powder

Specific gravity: 1.4-1.5 g/cm<sup>3</sup>

Does not contain graphite, asphalt, gilsonite or other black powder based material

### HANDLING AND STORAGE

STAR SHIELD® 500 should be stored in a dry environment. Avoid excessive dust and inhalation. Use appropriate PPE and review the SDS before use.

### PACKAGING

STAR SHIELD® 500 is available in 25-lb, multi-walled bags – 48 sack per pallet.