



Tiam Earth Advanced Materials

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## Technical Datasheet

# HOLE-CLEANING POLYMER



[www.teamchem.co](http://www.teamchem.co)

### Description

Hole-Cleaning Polymer is a high-quality grade of high molecular weight bio-polymer which is widely used in water-based mud systems to optimize hole cleaning and suspend cuttings and weighting agents in deviated or horizontal wells. It is in low-saline to high-saline waters, and provides excellent shear-thinning properties while drilling, and suitable gelling properties to suspend cuttings when pumps are off in operations.

### Application

Hole-Cleaning Polymer has been successfully used as high-viscosity pills for hole-cleaning of off-shore top-hole sections. Main function of Hole-Cleaning Polymer is to optimize rheological properties in water-based muds in order to maximize hole cleaning, lowering possibility of hole pack off and weighting agent settlement. Hole-Cleaning Polymer is excellent for cleaning high deviated holes due to providing high LSRV and low 'n' values in Herschel-Bulkley rheological model. Hole-Cleaning Polymer can be used in workover and completion operations as well as drilling.

### Advantages

- Sweeping cuttings in offshore top-hole wells
- Prevent high torque and drag that is related to poor hole cleaning
- Excellent for hole-cleaning due to shear thinning rheology and improving hydraulics
- Provides excellent rheological characteristics.
- Easy to mix
- Suitable for hole cleaning in deviated or horizontal wells
- Compatible with most types of regular water-based muds
- Compatible with sea water and brackish water
- Stable up to 250°F
- Improving Low-shear rate viscosity
- Compatible with sodium chloride, potassium chloride and other common salts in industry
- Environment-friendly
- Applicable in wide range of pH

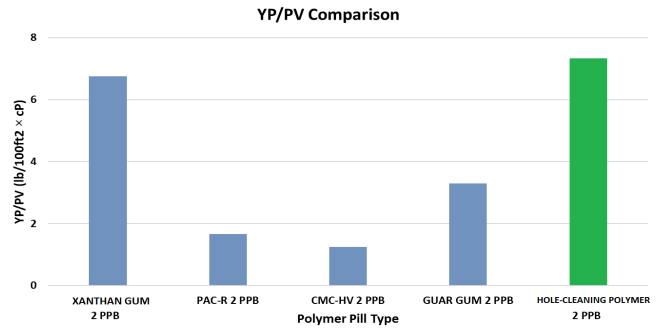
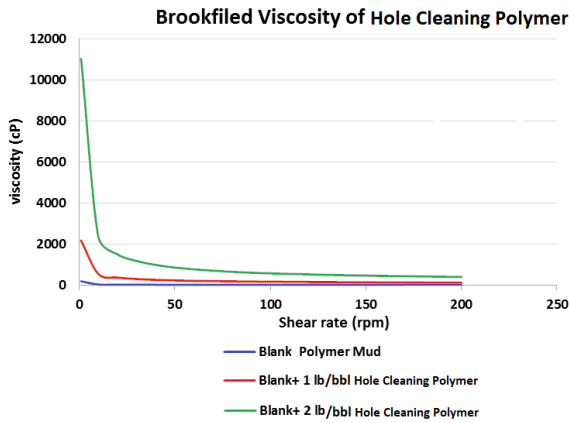
### Limitations

- Effective up to 250°F. In higher temperatures requires Oxygen-Scavenger in base fluid.
- Less effective in high-saline environments
- Require good shearing to fully-yield



### Typical Properties

|                  |                                 |
|------------------|---------------------------------|
| Appearance       | White to yellow granular powder |
| Specific Gravity | 1-1.5                           |
| pH (1% Solution) | 5.5-8                           |
| Bulk Density     | 750 - 800 kg/m <sup>3</sup>     |
| Solubility       | Soluble                         |



### Packaging

Hole-Cleaning Polymer is available in 25-KG SXS.