

QUAD POWER™ POLYMER DRILLING PRODUCTS

**SUPER CONCENTRATED. EASY TO USE.
ADD THE APPROPRIATE PRODUCT AND DRILL!**

POWER-BASE™



A highly concentrated, liquid, polymer emulsion that serves as the base for **QUAD POWER** polymer drilling products. Used by itself, **POWER-BASE** will produce a high viscosity solution in water which can fulfil the demands of most short bore length drilling applications. It is highly lubricating, clay inhibitive, and can help remove fine solids from the borehole.

- Clay inhibitive
- Highly lubricating
- Helps remove fine solids
- High viscosity solution

PACKAGING: -0.5 gallon (64 oz) container
Sold as individuals, 4 per case, or 48 cases per pallet.

POWER-CLAY™



A concentrated, non-hazardous, proprietary clay inhibitor that can either be used with bentonite fluids or can be added to other **QUAD POWER** polymer drilling products. **POWER-CLAY** is an ideal additive for HDD bores in reactive clay soils.

- Greatly reduces clay rings & bit balling
- Increases returns back to the surface
- Non-hazardous readily dispersible
- Reduces pullback pressures
- Will not significantly alter yield point filtrate

PACKAGING: 32 oz container
Sold as individuals, 6 per case, 48 cases per pallet.

POWER-TERGE™



A highly concentrated, liquid, surfactant/detergent that can either be used with bentonite fluids or can be added to other **QUAD POWER** polymer drilling products. Used with bentonite, **POWER-TERGE** will help prevent rod-sticking and seizing. When added to **POWER-BASE**, it can function to create an extremely high-performance slurry for clay drilling.

- Improves lubricity
- Prevents rod-sticking & seizing
- Enhances polymer performance
- High-performance results

PACKAGING: 8 oz container
Sold as individuals, 12 per case, or 84 cases per pallet.

POWER-SAND™



A highly concentrated, liquid polymer that can either serve as a stand-alone fluid or can be added to other **QUAD POWER** polymer drilling products. Used with **POWER-BASE** to increase solids suspension, **POWER-SAND** will produce a high viscosity solution designed to suspend sand, silt, and fine gravel.

- Increases solids suspension
- High viscosity solution
- Suspends sand, silt & fine gravel
- Stand-alone or additive

PACKAGING: -0.5 gallon (64 oz) container
Sold as individuals, 4 per case, or 48 cases per pallet.

QUAD POWER™ PRODUCT APPLICATION



NUMBER OF CONTAINERS/BAGS PER 500 GALLONS FRESHWATER

SOIL CONDITIONS	POWER-BASE™	POWER-TERGE™	POWER-CLAY™	POWER-SAND™
UNKNOWN	1	1		
SAND	1			2
SAND & GRAVEL	1	1		3-4
SAND & CLAY	1	1	0.5	2
CLAY	1	1-2	0.5	
STICKY CLAY	1-2	2	1	

TO BE USED FOR SMALL DIAMETER / SHORT BORES ONLY

***QUAD POWER** polymer drilling products or any polymer products alone, should never replace bentonite based drilling fluids for larger diameter, longer bore shots, or exceptionally challenging and high risk projects.



CLAY CUTTER™ PRO DRY CLAY INHIBITOR



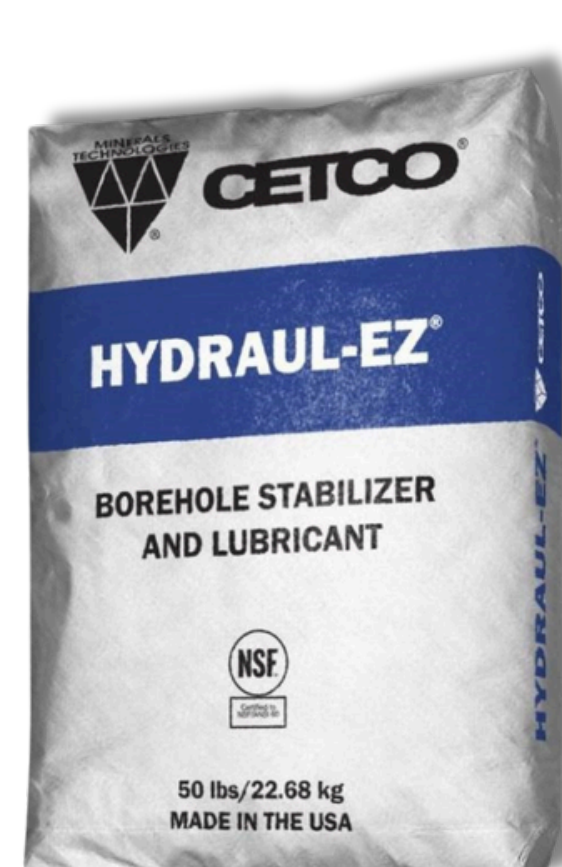
- Greatly reduces clay rings and bit balling
- Readily dispersible
- Non-hazardous
- Reduces torque
- Reduces pullback pressures
- Increases returns back to the surface
- Will not significantly alter yield point or filtrate

MIXING & APPLICATIONS

Add last for sticky and swelling clays use 0.5 to 2 lbs. per 1000 gallons (227 g to 0.9 kg per 3785 liters) depending on water sensitivity.

PACKAGING: -20 lbs (9 kg) pail
Sold as individuals or 48 per pallet.

HYDRAUL-EZ® HORIZONTAL DIRECTIONAL DRILLING FLUID



- High-yield, 230 bbl yield (minimum)
- Eliminates clay & shale swelling, bit balling, & sticking
- Forms a tight, thin filter cake in unstable formations
- Mixes quickly
- Maintains borehole integrity

Mixing ratios in lbs (kg) per 100 gallons (1 m3) of water

Condition	Lbs of HYDRAUL-EZ	% Solids
Normal Conditions	15 - 25 lbs (18 - 28 kg)	1.8 - 2.9%
Sand and Gravel	25 - 35 lbs (28 - 42 kg)	2.9 - 4.0%
Fluid loss Control	35 - 40 lbs (40 - 47 kg)	4.0 - 4.6%

PACKAGING: -50 lbs (22.7 kg) bags
Sold as individuals or 48 per pallet.

INSTA-VIS™ DRY DRY DRILLING FLUID POLYMER



- Disperses easily in freshwater
- Inhibits sticky clay and shale swelling
- High lubricity reduces torque
- Maintains borehole integrity
- Works in HYDRAUL-EZ slurries
- Works well with DRILL-TERGE and other CETCO additives

MIXING & APPLICATIONS

Add 2 to 8.5 pounds per 1,000 gallons of water and mix for 15 minutes to hydrate

Water Quality

Maintain pH between 7-10. If below this range add 0.5 to 1 pound of SODA ASH per 100 gallons of make-up water.

PACKAGING: -14 lbs (6.3 kg) pail
Sold as individuals or 60 per pallet.

INSTA-VIS LOW VISCOSITY DRY DRILLING FLUID POLYMER



- Quick mixing and rapid yield in freshwater
- Stabilizes the borehole
- Reduces torque and pullback pressures
- Compatible with drilling fluids recycling equipment
- Eliminates clay and shale swelling, bit balling, and sticking problems

MIXING & APPLICATIONS

Add 0.25 to 1 lb per 100 gallons (113 g to 0.45 kg per 380 liters) to stabilize reactive clay formations.

NON-CLAY FRESHWATER SYSTEM

Add 0.5 to 2 lbs per 100 gallons (227 g to 0.9 kg per 380 liters) to stabilize clay formations, increase returns to surface, and reduce torque, drag, and bit balling.

PACKAGING: -36 lbs (16.4 kg) pail
Sold as individuals or 36 per pallet.

INSTA-VIS PLUS LIQUID DRILLING FLUID POLYMER



- Eliminates clay and shale swelling, bit balling, and sticking
- High lubricity reduces torque
- Quick mixing and rapid yield in freshwater
- Works in HYDRAUL-EZ slurries

MIXING & APPLICATIONS

Adjust pH to above 7.0 to maximize product performance. Mix bentonite first, then add INSTA-VIS PLUS Slowly. To breakdown INSTA-VIS PLUS, add 0.5 lb (0.25 kg) of sodium hypochlorite (bleach) per 100 gallons (380 liters) of drilling fluid.

INSTA-VIS PLUS MIXING RATIOS

Added to freshwater	1/2 to 1 quart/100 gallons (0.25 to 0.5 liter per 380 liters) freshwater
Added to bentonite system	1/2 quart/100 gallons (0.25 liter per 380 liters) drilling fluid

PACKAGING: -36 lbs (16.4 kg) pail
Sold as individuals or 36 per pallet.

SUSPEND-IT™ SUSPENSION ENHANCER



- Easily dispersed in drilling fluids
- Enhances gel strength with little increase of viscosity
- Performs well in fresh and saltwater
- Strengthens filter cake and improves bore stability

MIXING & APPLICATIONS

Add 0.5 to 1 pound per 100 gallons (0.25 to 0.5 kg per 380 liters) of SUSPEND-IT to existing drilling fluid. Dosage scoop included is equivalent to 1/2 lb.

PACKAGING: -20 lbs (9 kg) pail
Sold as individuals or 48 per pallet.

DRILL-TERGE™ DRILLING DETERGENT / WETTING AGENT



- Reduces torque and drag
- Promotes settling of clays at the reserve pit/tank
- Assists in keeping the drill bit clean and prevents bit balling
- Designed to work in fresh or saltwater

MIXING & APPLICATIONS

Add 0.5 - 0.75 quarts (0.5 - 0.75 liters) of DRILL-TERGE per 100 gallons (per 380 L) of existing bentonite drilling fluid.

PACKAGING: -40 lbs (18.2 kg) pail
Sold as individuals or 48 per pallet.

SODA ASH SODIUM CARBONATE



- Easy to mix and use
- Economical method to increase pH
- Maximizes yield of drilling fluid

Typical Properties

Physical Appearance	White Powder
pH (1 % solution)	11.4
Specific gravity	2.51
Solubility	51 g/100 ml at 86 °F (30 °C)

MIXING & APPLICATIONS

Add SODA ASH until pH of 8.5-9.5 is obtained. Suggested ratio is 0.33 to 0.5 lb per 100 gallons (0.25 kg to 0.5 kg per 380 liters) water.

PACKAGING: -50 lbs (22.7 kg) Bags
Sold as individuals or 49 per pallet.

REL-PAC® XTRA-LOW DRY POLYANIONIC CELLULOSIC POLYMER



- Controls filtration rates and helps form a thin flexible wall cake
- For use in fresh and saltwater systems
- Highly dispersible
- Only moderate viscosity increase for increased flow
- Stabilizes many types of drilled formations

MIXING & APPLICATIONS

Mix at high shear through a venturi hopper to avoid fish eyes, clumping, and to avoid waste. Add 0.5-1.5 lbs (0.25 to 1.0 kg) of REL-PAC XTRA-LOW per 100 gallons (380 liters) of existing bentonite drilling fluid for hole stabilization. Dosage scoop included is equivalent to 1/2 lb.

PACKAGING: -25 lbs (11.3 kg) Pail
Sold as individuals or 36 per pallet.