HYDRAUL-EZ®

HORIZONTAL DIRECTIONAL DRILLING FLUID - NEW IMPROVED FORMULA

Certified to NSF/ANSI/CAN 60

DESCRIPTION

HYDRAUL-EZ is a high-yield, 230 bbl yield (minimum), 200 mesh sodium bentonite, with a special dry polymer additive. This new improved formula is designed to maintain borehole integrity in horizontally drilled boreholes. HYDRAUL-EZ is certified to NSF/ANSI/CAN Standard 60, Drinking Water Treatment Chemicals - Health Effects.

RECOMMENDED USE

HYDRAUL-EZ is specially designed for conditions encountered in angle and horizontal drilling. It can be used for all types of freshwater mud rotary drilling and as a jacking lubricant.

CHARACTERISTICS

- Concentrated for high yield
- Eliminates clay and shale swelling, bit balling, and sticking problems
- Forms a tight, thin filter cake in unstable formations
- Maintains borehole integrity in horizontal and vertically drilled holes
- Mixes quickly
- Requires less material due to low fluid loss properties

MIXING AND APPLICATION

Mixing ratios are based on the use of freshwater. Water purity will affect bentonite performance. For best results, make-up water should be pre-treated with SODA ASH to a pH of 8.5-9.5. HYDRAUL-EZ should be added slowly through a jet/hopper mixer.

BULK DENSITY

54 lbs/ft^3 (0.86 kg/L)

PACKAGING

~50 lbs (~22.7 kg) bags, 48 per pallet. All pallets are plastic-wrapped.

DRILLING FLUID -
HYDRAUL-EZ mixing ratio in pounds (kg) per 100 gallons (378.54 L) of water

Condition	Lbs (kg) of HYDRAUL-EZ	% Solids
Normal Conditions	15 - 25 lbs (6.80 - 11.33 kg)	1.8 - 2.9%
Sand and Gravel	25 - 35 lbs (11.33 - 15.87 kg)	2.9 - 4.0%
Fluid Loss Control	35 - 40 lbs (15.87 - 21.32 kg)	4.0 - 4.6%

SLURRY PROPERTIES - 2.4% SOLIDS

Property	Typical Value	Specification/Procedure
Viscosity FANN 600 rpm	30 - 44 cps	ACC TP-2005
Viscosity FANN 6 rpm	8 - 12 cps	ACC TP-2055
Viscosity FANN 3 rpm	7 - 10 cps	ACC TP-2055
Yield - 42 gal bbl of 15 cps slurry/ton	230 - 250	200 Min - ACC TP-2001
Marsh Funnel, seconds/quart	40 - 60 seconds	ACC TP-1014
Apparent Viscosity (AV)	15 - 22	ACC TP-2005
Plastic Viscosity (PV)	5 - 14	ACC TP-2005
Yield Point, lb/100 ft^2	14 - 22	ACC TP-2005
Filtrate, 30 minutes @ 100 psi, ml	13 - 18 ml	ACC TP-2003
Filter Cake, in	2/32 - 3/32	N/A
pH	9.0 - 10.0	Test Strip

GENERAL PROPERTIES

Property	Typical Value	Specification/Procedure
Moisture %	7.40%	ACC TP-2006
Free Swell	28 ml	ASTM D-5890
Plate Water Absorption	600.0 - 800.0%	ASTM E946-92
Specific Gravity	2.5 g/cc	Generally Recognized
Bulk Density Non-compacted	53 lbs/ft^3	ACC TP-1005
Bulk Density Compacted	72 lbs/ft^3	ACC TP-1005
Grit % (<75 micron)	2.0 - 4.0% w/w	4.0% Max - ACC TP-2004
Particle Sizing	70% Min passing #200 mesh sieve	ACC TP-1015
Montmorillonite Content	> 70%	X-Ray Diffraction
Cation Exchange Capacity	85 to 110 meq/100 grams	ACC TP-1016
Moisture Content by weight percent	5% to 13%	ACC TP-2006

North America: 847.851.1800 | 800.527.9948 | www.CETCO.com

UPDATED: AUGUST 2025

© 2025 CETCO. IMPORTANT: The information contained herein supersedes all previous printed versions, and is believed to be accurate and reliable. For the most up-to-date information, please visit www.CETCO.com. CETCO accepts no responsibility for the results obtained through application of this product. All products are sold on the understanding that the user is solely responsible for determining their suitability for the intended use and for proper use and disposal of the product. CETCO MAKES NO WARRANTY OF MERCHANTABILITY OR SUITABILITY FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH ANY SALE OF THE PRODUCTS DESCRIBED HEREIN. CETCO reserves the right to update information without notice.

CETCO
A MINERALS TECHNOLOGIES COMPANY

FORM: TDS_HYDRAUL-EZ - NEW IMPROVED FORMULA_AM_EN_202508