

Products Manual of Drilling & Completion Fluids

We are Manufacturer based in China,
produce from standard items to
customized categories mud chemicals



美联能源
MILLENNIUM ENERGY



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 **MILLENNIUM ENERGY**
Drilling Fluids & Chemicals



INTRODUCTION

By implementing innovation drive, we have promoted **35** registered drilling fluid additives in **8** categories. Our dedicated and highly skilled support team enables MECO to provide customized **drilling fluid services** and strive for the best in various fluids projects for customers worldwide.

Registration year :	2014
The manufacturer base :	Shandong Province, China
Investment :	2.5 million US dollars
R&D team :	Owned over 15 years of working experiences
Evaluation Labs:	Five
Workshop No :	Two powder plants; One liquid chemical plant
Manufacturing capability :	Solid (powder) in different categories totally 5000 tons per month; Liquid in different categories totally 1500ton per month
Quality Certificate:	ISO9001, ISO45001, API certificates



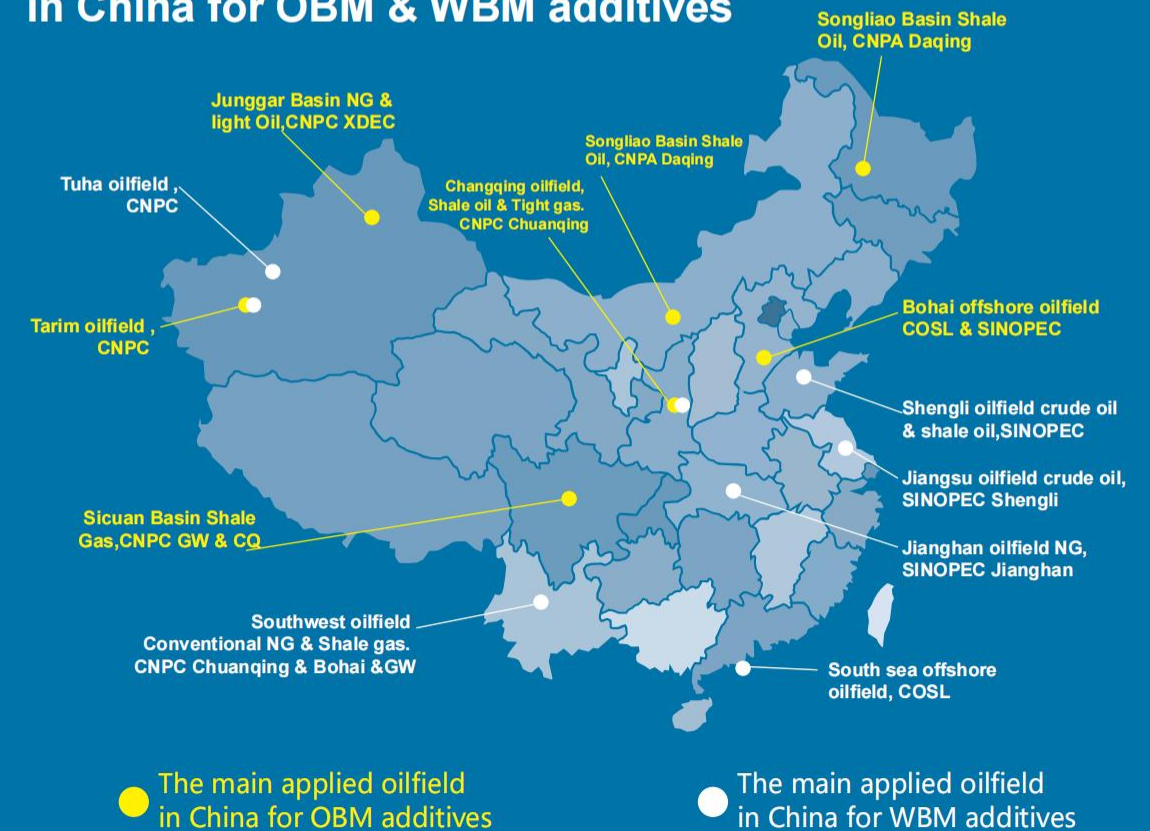
Our Sales achievement over Chinese Market

COSL : South drilling Co. & North drilling Co.

CNPC :
Greatwall (GW) drilling & Exploration
Chuanqing (CQ) drilling & Exploration
West drilling & Exploration
Bohai drilling & Exploration
Daqing drilling & Exploration
Tuha oilfield & Tarim oilfield

SINOPEC :
Shengli Oilfield Branch
Zhongyuan Oilfield Branch
Jiangnan Oilfield Branch
Jiangsu Oilfield Branch
Southeast Oilfield Branch
Northwest Oilfield Branch

The main applied oilfield in China for OBM & WBM additives



Section 1 Emulsifiers & Wetting Agents

Emulsifiers & Wetting Agents	Page No.	Trade Name	Product Description	Applications/Functions
	1	ME-Emul P	Primary emulsifier designed for shale gas drilling up to 350°F	Conventional organically clay OBM
	2	ME-Emul S	Secondary emulsifier designed for shale gas drilling up to 350°F	Conventional organically clay OBM
	3	ME-Emul One	One-drum Emulsifier designed for extreme HT up to 400°F	High performance OBM for application in extreme HPHT wells
	4	ME-Wet	Wetting agent designed for shale gas drilling up to 350°F	Wetting agent for OBM

Effectively promotes stability by reducing the interfacial tension between water and oil, creating invert emulsions and oil-wet solids

Section 2 Lubricants

Lubricants	Page No.	Trade Name	Product Description	Applications/Functions
	5	ME-Lube Ep	Extreme-pressure lubricant	Superior, non-fluorescent lubricant
	6	ME-Lube Pro	Professional lubricant	100% water dispersible high performance lubricant, temperatures stable up to 400°F
	7	ME-Lube Nat	Modified Graphite (Powder)	Improves water-based mud lubricity performance and has no effect on rheology and filtration performance

Reduces the fluid's coefficient of friction to minimize torque and drag

Section 3 Defoamers & Surfactants

Defoamers & Surfactants	Page No.	Trade Name	Product Description	Applications/Functions
	8	ME-Defoa	Silicone-fluid emulsion	Highly effective silicone defoamer, all-purpose for WBM
	9	ME-RPD	ROP Enhancer	ROP enhancer designed to improve the rate of penetration in water-based mud systems, especially in ERD and long horizontal wells

Controls foam and air entrainment while maintaining environmental acceptability, increases ROP and reduces the stickiness of fluids on sensitive cuttings

Section 4 Filtration Control Agents

Filtration Control Agents	Page No.	Trade Name	Product Description	Applications/Functions
	10	ME-Pacr	High viscosity polyanionic cellulose	Filtration control and viscosifier agent for WBM up to 300°F
	11	ME-Pacl	Low viscosity polyanionic cellulose	Filtration control for WBM with minimal viscosity increase up to 300°F
	12	ME-Star Plus	Special processed modified starch	Reduces filtration in reservoir sections up to 300°F
	13	ME-Poliseal	AAM-AMPS Copolymer	HPHT filtration control for WBM up to 400°F; white, free-flowing powder.
	14	ME-Nfshield	Nano-technology particles	Versatile product provides HT filtration control, improved fluid lubricity, strengthens the wellbore, and increases fracture breakdown pressure in sandstones and shales for both WBM and OBM up to 400°F. The D50 is only 200 nm
	15	ME-Whiteseal	Alternative to Sulphonated Asphalt	Environmentally friendly white powder product that functions as an alternative to sulphonated asphalt. Thermal stable up to 325°F
	16	ME-Blacklig 400	Organophilic leonardite	HPHT filtration control for OBM up to 400°F, an alternative to asphalt and gilsonite products
	17	ME-Blacktrol 400	Gilsonite for OBM Softening point: 365-420°F	HPHT filtration control for OBM up to 400°F
	18	ME-Blacksas Plus	Premium Sulphonated Asphalt	HPHT filtration control for both WBM and OBM up to 500°F. Shale stabilizer prevents shale hydration and sloughing, and decreases cuttings erosion
	19	ME-Blacktrol Mul	Emulsified Gilsonite, softening point: 250-420°F	HTHP filtration control for WBM, excellent dispersion. Softening point: 250-420°F
	20	ME-Blacksas	Economical Sulfonated Asphalt	HPHT filtration control for both WBM and OBM up to 400°F, low lubricity coefficient, prevents shale hydration and sloughing as well as decreases cutting erosion.
	21	ME-Blacknex	Resinated Lignite	HT fluid loss control and rheology stabilizer for all WBM up to 425°F with chlorides below 70,000 ppm and hardness not exceeding 3,000 ppm
	22	ME-Halad	Cross-linked polymer for OBM	Primary filtration control agent for HP OBM up to 350°F, alternative to amine lignite and gilsonite.
	23	ME-Nanolatex	HT Polymeric Filtration control additive for OBM	Polymeric product that can provide filtration control in diesel, mineral and synthetic-based drilling fluids above 450°F

Reduces the infiltration of the liquid phase of the drilling fluid

Section 5 Shale Inhibitors

Shale Inhibitors	Page No.	Trade Name	Product Description	Applications/Functions
	24	ME-Byshield	Polymer Nano Shale Inhibitor	Excellent shale inhibition performance, delays and reduce the transfer of drilling fluid pressure Stable AV and PV after heating, reduces rock surface filtrate wetting and inhibit shale hydration Improve the lubricity
25	ME-Glycl	High Cloud Polyalkylene Glycol	High cloud point glycol for borehole stability, ROP enhancement, lubricity and HTHP reduction in fresh water and high-salinity brines	

Enhances drillability while maintaining low toxicity for environmental acceptability

Section 6 Viscosifiers & Suspension Agents

Viscosifiers & Suspension Agents	Page No.	Trade Name	Product Description	Applications/Functions
	26	ME-Clayvis	Organophilic Bentonite	Impact viscosity and suspension properties to diesel-based drilling fluids, up to 350° F
27	ME-Clayvis Plus	Organophilic Bentonite Highly efficient	Viscosifier and Flow modifier for mineral OBM up to 400°F, easy to disperse with rapid yielding	
28	ME-Claysus	Suspension agent Organophilic amino-attapulgate	Suspends weighting materials and other solids with less increase in viscosity and Hectorite-based organoclays, stable excess of 400°F	
29	ME-MOD	Rheology modifier for OBM 100% active blend of fatty acids	Highly effective in improving the 3 rpm and 6 rpm readings of oil-based drilling viscosity	
30	ME-XC Plus	Premium quality, powdered xanthan gum	Biopolymer Viscosifier. Provides excellent suspension and shear-thinning properties and can be used up to 250°F	

Improves the hole-cleaning and solids-suspension capabilities of drilling fluids

Section 7 Thinners & Dispersants

Thinners and Dispersants	Page No.	Trade Name	Product Description	Applications/Functions
	31	ME-THMOTHIN	Sulfonated styrene-maleic anhydride copolymer	Top-level thinner with 1000-5000 molecular weight, stable above 500°F, applications in ultra-temp and ultra-deep wells
32	ME-Lignosulfonate	Lignosulfonate (Chromium Free)	Thinner (Dispersant) for WBM	
33	ME-Polithin	Anionic acrylic copolymer	Thiner, fluid stabilizer, inhibitor and fluid-loss-reducing agent for WBM, stable up to 400°F	
34	ME-Hydrothin	Silicon-fluorine copolymer viscosity reducer for WBM	Exceptional tolerance to high temperatures, divalent salts and calcium, stable up to 500°F	

Reduces rheological properties by dispersing active clays and drilled solids

Section 8 Biocides & Corrosion Inhibitors

Biocides & Corrosion Inhibitors	Page No.	Trade Name	Product Description	Applications/Functions
	35	ME-Hydrocide	Glutaraldehyde class biocide	High-performance biocide for water-based drilling fluids, completion fluids and packer fluids
36	ME-FILM	Film forming amine	Maintains high pH and provides high-temperature protection for monovalent and divalent brines	
37	ME-MDEA	MEA Triazine-Based High-Performance H ₂ S Scavenger	Rapid scavenging of hydrogen sulfide from low-viscosity fluids	

Control the growth of bacteria and fungi. Mitigate corrosion, neutralize hazardous acid gases, and prevent the formation of production-impairing scale

Section 1 Emulsifiers & Wetting Agents

Effectively promotes stability by reducing the interfacial tension between water and oil, creating invert emulsions and oil-wet solids.

ME-Emul P

Product Description

ME-Emul P emulsifier is a liquid blend of organic fatty acids that provides a stable water-in-oil emulsion, improved thermal stability, and enhanced HPHT filtration control. It serves as the primary emulsifier for mineral oil-based drilling fluid systems, especially in shale gas and tight oil blocks. It requires the addition of lime to produce a calcium soap in situ.

Applications / Functions

- Stabilizes brine-in-oil emulsions using calcium chloride or calcium bromide brine
- Improves the dispersion characteristics of particles in high-density fluids
- Promotes oil-wetting in invert emulsion systems
- Effectively disperses high-density particles in emulsions to alleviate settling

Advantages

- Effective at low concentrations
- Temperatures stable to > 350°F
- Compatible with other oil-based and synthetic mud additives and systems

Typical Properties

- Appearance: Dark liquid
- Flash point: >199°F
- Pour Point: < 14°F
- Specific gravity: 0.93

Recommended Treatment

- A typical range is 4-12 ppb
- For every pound of ME-Emul P that is added to the system, add 0.5 ppb of lime

ME-Emul S

Product Description

ME-Emul S Secondary Emulsifier is a liquid blend of modified tall oil derivatives. It is used in invert emulsion systems as a secondary emulsifier for diesel or mineral oil-based drilling fluid systems, especially in shale gas and tight oil blocks. It is designed to emulsify water into oil and to aid in oil-wetting of drill solids. When ME-Emul S is used in conjunction with ME-Emul P, high-temperature stable invert emulsions with low filtrate rates are achieved. ME-Emul S does not require the addition of lime.

Applications / Functions

- Stabilizes brine-in-oil emulsions using calcium chloride or calcium bromide brine
- Acts to oil-wet solids in invert emulsion systems
- Contributes to stable rheological properties

Advantages

- Easily blended into invert emulsion fluid systems
- Temperatures stable to > 350°F
- Fast-acting emulsification

Typical Properties

- Appearance: Amber liquid
- Flash point: >149°F
- Pour Point: < 14°F
- Specific gravity: 0.93

Recommended Treatment

- A typical range is 2-8 ppb



Section 1 Emulsifiers & Wetting Agents

Effectively promotes stability by reducing the interfacial tension between water and oil, creating invert emulsions and oil-wet solids.

ME-Emul One

Product Description

ME-Emul One one drum emulsifier is the only emulsifier in the fluids formulation, designed in the extreme temperature non-aqueous drilling fluid system. It is used alone to provide excellent emulsion stability, preferential wetting of solids by the continuous phase, filtration control and overall system stability. It requires the addition of lime to produce a calcium soap in-situ.

Applications / Functions

- Impacts oil-wetting characteristics and helps maintain HPHT filtrate in a water-free state

Advantages

- Stable at temperature above 400°F
- One-drum emulsifier, eliminating the need for separate primary and secondary emulsifiers
- Formulated to produce flatter gel strengths when compared against conventional emulsification packages
- Effective and thermally stable across a broad temperature range

Typical Properties

- Appearance: Transparent Amber Viscous Liquid
- Flash Point: 207°F
- Pour Point: 3°F
- Specific Gravity: 0.94

Recommended Treatment

- A typical range is 8-12 ppb. For every pound of ME-Emul One that is added to the system, add 0.5 ppb of lime
- For HPHT applications above 400°F and 16ppg, ME-Emul One concentrations of up to 25 ppb maybe required, and 1-3 ppb of ME-Wet may be required as supplementary wetting agent

ME-Wet

Product Description

ME-Wet wetting agent is superior oil wetting product to treat the fluid during a weight up or treat water-wet solids. It serves as primary wetting agent for diesel or mineral oil-based drilling fluid system specially applied in shale gas and tight oil blocks.

Applications / Functions

- Wet barite or other weighting materials and drilled solids with a synthetic-based fluid coating
- Increase the resistance of oil-based muds to water contamination
- Minimizes water-wetting during water-based drilling fluid displacement

Advantages

- Temperatures stable to >350°F
- Maintains pumpability of high-density slugs
- Thins and reduces gel strengths of water-contaminated synthetic-based fluids

Typical Properties

- Appearance: Transparent Amber Viscous Liquid
- Flash Point: 200°F
- pH (10% aqueous solution): 6.5
- Specific Gravity: 1.0

Recommended Treatment

- A typical range is 1-3 ppb



Section 2 Lubricants

Reduces the fluid's coefficient of friction to minimize torque and drag.

ME-Lube Ep

Product Description

ME-Lube Ep is a high-temperature, extreme-pressure lubricant for use in all water-based drilling fluids. ME-Lube Ep is effective for reducing torque, drag, and friction, preventing side-wall sticking, prolonging bit bearing life, and preventing corrosion. ME-Lube Ep reacts directly with metal surfaces by a chemisorption process, forming a continuous lubricating film on the BHA surface. This film forms a physical barrier that reduces metal-to-metal friction and pipe wear, and protects the metal surfaces against corrosion and hydrogen embrittlement. ME-Lube Ep contains no hydrocarbons and is not harmful to human health or the environment.

Applications / Functions

- Increases extreme-pressure lubricating properties of drilling fluids
- Reduces wear of metal parts
- Reduces torque problems in high angle, long horizontal and complicated drilling operations.

Advantages

- Effective in small concentrations
- Does not cause foaming
- Does not cause fluoresce and no impact to logging operation

Typical Properties

- Appearance: Light yellow liquid
- Specific gravity: 1.0-1.1
- Flash point: >338°F
- Extreme pressure: >850 N

Recommended Treatment

- A typical range is 0.5-2% v/v, but specific drilling conditions will dictate a suitable concentration

ME-Lube Pro

Product Description

ME-Lube Pro is a completely water-dispersible high-performance lubricant designed to reduce torque, drag, and the potential for differential sticking by decreasing the coefficient of friction in all types of water-based drilling fluids. It has a unique wettability characteristic that lowers the potential for BHA balling. ME-Lube Pro is made mainly from vegetable oil and its fatty acids. It contains no hydrocarbons and is not harmful to human health or the environment.

Applications / Functions

- Reduces torque and drag in high-angle and S-shaped wells
- Acts as a ROP (Rate of Penetration) enhancer
- Contains unique metal-wetting additives which reduce the tendency of soft, sticky shales to cause bit and BHA balling

Advantages

- Temperatures stable up to 400°F
- Effective, all-purpose lubricant for all WBM
- Does not cause foaming
- Does not cause fluoresce and no impact on logging operation

Typical Properties

- Appearance: Amber clear liquid
- Specific gravity: 0.95-1.00
- Flash point: 446°F
- pH (0.5% aqueous solution): 7-8

Recommended Treatment

- A typical range is 3% v/v, but specific drilling conditions will dictate a suitable concentration

Section 2 Lubricants

Reduces the fluid's coefficient of friction to minimize torque and drag.

ME-Lube Nat

Product Description

ME-Lube Nat is a high-efficiency lubricant made through a special process using natural graphite as the raw material, along with an appropriate coating agent and surfactant. Natur-Lube can be used in water-based drilling fluid to effectively reduce friction between the drill pipe and borehole wall, drill pipe and casing, and drill pipe and drilling fluid, without affecting the rheology and filtration performance of the drilling fluid. It is especially suitable for horizontal wells, extended-reach wells, side track drilling, and highly deviated wells.

Applications / Functions

- Improve water-based mud lubricity performance
- Reduce friction, torque and drag

Advantages

- Compatible with other additives
- Non-abrasive

Typical Properties

- Appearance: Black powder
- Specific gravity: 1.5 - 2.0
- Reduction rate of lubrication coefficient: > 50%

Recommended Treatment

- A typical range is 4-8 ppb, this value can be adjusted accordance with the torque and drag limitations of drilling operations

Section 3 Defoamers & Detergent

Controls foam and air entrainment while maintaining environmental acceptability,
Increases ROP and reduces the stickiness of fluids on sensitive cuttings

ME-Defoa

Product Description

ME-Defoa is a very effective defoamer containing organic silicone that can be used in drilling, workover, and completion fluids. It can also be used to reduce or remove foam in viscosity brine systems. ME-Defoa functions in a wide pH and salinity range and is effective in low concentrations over a pH range from 2.0 to 12.5.

Applications / Functions

- Used to eliminate foam from drilling, workover, and completion fluids
- Used in viscosity brine mud systems

Advantages

- Effective in a pH range of 2.0 to 12.5
- Non-toxicity product and environmentally acceptable
- Effective at small concentrations

Typical Properties

- Appearance: Clear liquid
- Specific gravity: 0.98

Recommended Treatment

- A typical treatment range is 0.05-0.2 ppb



Section 3 Defoamers & Detergent

Controls foam and air entrainment while maintaining environmental acceptability,
Increases ROP and reduces the stickiness of fluids on sensitive cuttings

ME-RPD

Product Description

ME-RPD is a liquid blend of surfactants, high-pressure and friction-reducing additives, and shale stabilizers designed to increase the Rate of Penetration (ROP) in the lateral sections of wells. ME-RPD can significantly enhance ROP by improving hole cleaning and preventing the formation of cuttings beds caused by agglomeration. Additionally, ME-RPD can reduce Equivalent Circulating Density (ECD) and pump pressure to enhance hole stability. This standout product has delivered extraordinary performance across thousands of wells in the industry.

Applications / Functions

- ROP Enhancer
- Widely used in ultra-deep, high-deviated, ERD and long horizontal wells

Advantages

- Promotes hole cleaning by coating the drilled solids and preventing them from sticking to each other
- Protects shale formations from hydration and destabilization
- Effectively reduce ECD
- Thermally stable to >500°F
- Compatible with divalent brines

Typical Properties

- Appearance: Blue Oily Liquid
- Specific gravity: 0.955
- Flash Point: >320°F

Recommended Treatment

- A typical treatment range is 3-6% by volume in water-based mud



Section 4 Filtration Control Agents

Reduces the infiltration of the liquid phase of the drilling fluid

ME-Pacr

Product Description

ME-Pacr filtration control additive is a high-viscosity Polyanionic Cellulose polymer. It is used in most water-based drilling fluids, including fresh water, seawater, and brine, up to 300°F. ME-Pacr can provide secondary viscosity and is effective at low concentrations. It is non-toxic and does not require a biocide. ME-Pacr creates an envelope around exposed shales and cuttings to encapsulate them, reducing dispersion and improving wellbore integrity. The encapsulation protects the shale from exposure to water.

Applications / Functions

- Controls filtration rates and provides supplementary viscosity
- Aids in the formation of a thin, resilient, low-permeability filter cake to minimize the potential for differential sticking and the invasion of filtrate and mud solids into permeable formations

Advantages

- Stable at temperatures up to 300°F
- No fermenting, no biocide needed
- Effective in fresh water, seawater, and brine fluids
- Functions in moderate to high pH range
- Encapsulates shale particles to inhibit swelling and dispersion
- Environmentally compatible

Typical Properties

- Appearance: White, free-flowing powder
- Specific gravity: 1.5-1.8
- pH (1% aqueous solution): 8

Recommended Treatment

- A typical treatment range is 0.5-2 ppb

Section 4 Filtration Control Agents

Reduces the infiltration of the liquid phase of the drilling fluid

ME-Pacl

Product Description

ME-Pacl filtration control additive is a high-quality Polyanionic Cellulose polymer. It is used in most water-based drilling fluids, including fresh water, seawater, and brine, up to 300°F. ME-Pacl has a minimal increase in rheology, is non-toxic, and does not require a biocide. ME-Pacl can also encapsulate solids to control the dispersion of active shale.

Applications / Functions

- Control filtration rates with minimal increase in rheology
- Aids in the formation of a tough, thin filter cake to minimize the potential for differential sticking

Advantages

- Temperatures stable up to 300°F
- No fermenting, no biocide needed
- Effective in fresh water, seawater and brine fluids
- Functions in all pH range
- Produces thin, slick, tough filter cake
- Inhibit hydratable, swelling shales
- Environmentally compatible

Typical Properties

- Appearance: Cream-colored, free-flowing powder
- Specific gravity: 1.5-1.8
- pH (1% aqueous solution): 7.75

Recommended Treatment

- A typical treatment range is 0.5-3 ppb

ME-Star Plus

Product Description

ME-Star Plus filtration control additive is a special processed modified starch used to reduce filtration in drilling, completion and workover fluids up to 300°F, particularly in reservoir sections. With adjustment of its molecular structure, it generates desired low shear rate viscosity (LSRV) in a fluid containing xanthan gum biopolymer. This unique polymer combination is synergistic and yields improved static suspension as well as highly pseudoplastic behavior under dynamic conditions. ME-Star Plus is non-toxic and does not require a biocide.

Applications / Functions

- Provides filtration control
- Minimizes damage to the productive formation

Advantages

- Stable at temperature up to 300°F
- Suitable for all water-based fluids, including freshwater, seawater, KCl, MgCl₂, NaCl, NaBr, CaBr₂, ZnBr₂
- Environmentally friendly product
- Acid Soluble
- Resists calcium contamination over a wide pH range

Typical Properties

- Cleans up readily following drilling, workover, or completion operations
- Appearance: White, free flowing powder
- Specific gravity: 1.5

Recommended Treatment

- A typical range is 3-9 ppb

Section 4 Filtration Control Agents

Reduces the infiltration of the liquid phase of the drilling fluid

ME-Poliseal

Product Description

ME-Poliseal polymer is a white, free-flowing synthetic polymer designed for high-temperature drilling environments. It serves as high-temperature filtration control and is a core product of ME water-based mud systems. It works well in any salinity. ME-Poliseal performs well above 400°F and demonstrates excellent thermal performance. Additional functions include inhibition of cuttings and shales and impacting viscosity.

Applications / Functions

- Effective HPHT filtration control agent, core product of ME HPHT water-based mud system
- Functions in fresh water, seawater, monovalent brine and formate mud
- Multifunctional, high temperature additive provides filtration control, inhibition and viscosity
- Inhibits hydratable and sloughing shale, maintain the integrity of cuttings

Advantages

- Stable at temperature above 400°F
- Improves drilling fluid suspension properties and mitigate barite sag issue under extreme HT environment
- Calcium tolerant to 5,000ppm

Typical Properties

- Appearance: White powder
- Specific gravity: 1.3

Recommended Treatment

- A typical range is 1-6 ppb

ME-Nfshield

Product Description

ME-Nfshield is a versatile product based on custom-engineered NANO-Tehnology to provide superior HT filtration control, improved fluids lubricity, strengthen wellbore and increase fracture breakdown pressure in sandstones and shales for WBM. ME-Nfshield can readily disperse into WBM to display with enhanced suspension stability. Nominal median particle size (D50) of ME-Nfshield is only 200nm. ME-Nfshield provide unique performance which cannot find in conventional additives.

Applications / Functions

- Superior HT filtration control, helps to form a thin and extreme low permeability filter cake
- Reduces metal-on-metal and metal-on-rock coefficient of friction
- Strengthens wellbore and increase fracture breakdown pressure in sandstones and shales

Advantages

- Stable at temperature above 400°F
- Effective at low concentrations
- Environmentally friendly, non-toxic, and non-hazardous
- Does not settle and does not impact basic mud properties

Typical Properties

- Appearance: Cream viscous liquid
- Specific gravity: 1.05-1.15
- D50: 200-500nm

Recommended Treatment

- A typical range is 4-12 ppb

Section 4 Filtration Control Agents

Reduces the infiltration of the liquid phase of the drilling fluid

ME-Whiteseal

Product Description

ME-Whiteseal is an environmentally friendly white powder product designed as an alternative to sulphonated asphalt. It is made from high fatty alcohol resin through a water melt synthesis process, making it partially soluble in water and partially soluble in oil. It can emulsify with water and clay to form flexible particles that block microfractures and pores in permeable formations.

Applications / Functions

- Functions as an alternative to sulphonated asphalt
- Improves mudcake quality
- Acts as a shale stabilizer
- Prevents formation collapse
- Significantly increases lubricity

Advantages

- Thermal stable up to 325°F
- Controlled water and oil solubility to effect best chemical and physical performance
- Non-fluorescent and does not interfere with geological logging
- Readily disperses in water and oil fluids
- Environmentally friendly

Typical Properties

- Appearance: White to light yellow powder
- pH: 7 - 10

Recommended Treatment

- A typical range is 2-6 ppb

ME-Blacklig 400

Product Description

ME-Blacklig 400 is an organophilic lignite designed to reduce HPHT filtration of all oil-based mud and synthetic-based mud at temperatures up to 400°F. ME-Blacklig 400 can act synergistically with the primary and secondary emulsifiers in conventional Invert Emulsion fluid systems to enhance the overall emulsion and thermal stability of the fluid system. ME-Blacklig 400 is particularly effective in extreme HPHT wells.

Applications / Functions

- Effective filtration control alternative to asphalt and gilsonite products
- Promote stability of invert emulsion fluids

Advantages

- Increases thermal stability of drilling fluids at temperatures up to 400°F
- Effective in all oil and invert emulsion systems
- Disperse easily when added through a hopper
- Compatible with other additives

Typical Properties

- Appearance: Black, free flowing powder
- Bulk Density (compacted): 860 kg/m³
- Bulk Density (uncompacted): 700 kg/m³
- Specific gravity: 1.8

Recommended Treatment

- The concentration depends on the desired degree of filtration control and bottom hole temperature (BHT)
- A typical range is 2-6 ppb if BHT < 300°F and 6-20 ppb if BHT > 300°F
- A pilot test is recommended prior to field use

Section 4 Filtration Control Agents

Reduces the infiltration of the liquid phase of the drilling fluid

ME-Blacktrol 400

Product Description

ME-Blacktrol 400 Gilsonite is a naturally occurring asphalt used for high-temperature, high-pressure filtration in all oil-based and synthetic-based muds. It is designed for applications where the bottom hole static temperature (BHST) is below 400°F. ME-Blacktrol 400 can extrude into formation microfractures to form a sealing/plugging mechanism, stabilizing shale and preventing sloughing. It also increases viscosity, particularly at lower temperatures, due to its partial solubility. When used in the field, monitor solids control equipment for several circulations after the initial addition to ensure the product is not being discarded.

Applications / Functions

- Reduce API and HPHT fluid loss in all oil-based mud
- Stabilize shales and prevent sloughing
- Enhance emulsion and thermal stability

Advantages

- Wide range of applications with BHST above 400°F
- Effective in stabilizing brittle shales and reducing washout in interbedded sand sequences
- Provides optimum sealing and filter cake deposition
- Non-fluorescent

Typical Properties

- Appearance: Black powder
- Softening point: 365-420°F
- Specific gravity: 1.06

Recommended Treatment

- A typical range is 2-10 ppb.
- Pilot testing is advised to determine the necessary treatment to achieve desired results and to observe changes in mud properties

ME-Blacksas Plus

Product Description

ME-Blacksas Plus is a sulfonated asphalt that is partially soluble in water and oil. It can be used in both water-based and oil-based fluids, where it functions as a shale stabilizer, cuttings dispersion inhibitor, and contributes to high-temperature fluid loss control. It is stable against many drilling fluid contaminants, operates across a broad pH range, and is suitable for use up to 500°F. ME-Blacksas Plus helps form a thin yet tough filter cake, and the small particles can effectively plug micro-fractures. This star product has delivered extraordinary performance since the 1980s.

Applications / Functions

- Reduces HPHT fluid loss in both water-based and oil-based mud
- Stabilizes shales and prevents sloughing

Advantages

- Thermally stable up to 500°F
- Controlled water and oil solubility to achieve optimal chemical and physical performance
- Reacts with shales to prevent sloughing and swelling
- Significantly increases lubricity
- Readily disperses in water and oil fluids
- Extremely temperature stable – does not have the softening point typically associated with naturally occurring asphalt
- Minimal and easily distinguishable fluorescence

Typical Properties

- Appearance: Black powder
- Specific gravity: 0.98

Recommended Treatment

- A typical range is 2-6 ppb

Section 4 Filtration Control Agents

Reduces the infiltration of the liquid phase of the drilling fluid

ME-Blacktrol Mul

Product Description

ME-Blacktrol Mul is a specially modified, naturally occurring asphalt derivative used to reduce filtration in most water-based muds. The surface of the particle is positively charged through a special process to ensure that the colloidal particles are fully dispersed and uniformly distributed, with no delamination or freezing issues. Its softening point is designed for a wide range of temperature applications. ME-Blacktrol Mul can extrude into formation microfractures to form a filming/sealing/plugging mechanism that stabilizes shale and prevents sloughing. The high-performance properties of this product include preventing sloughing, enhancing lubricity, controlling HPHT fluid loss, and providing high dispersion with true softening.

Applications / Functions

- Prevents sloughing, enhances lubricity, and controls HPHT fluid loss
- Suitable for a wide range of temperatures
- Highly dispersed and truly softened product

Advantages

- Thermally stable above 400°F
- Quickly forms temporary blocking as a sealing agent to maintain the reservoir's original conditions
- Helps form a thin and tough filter cake
- No influence on mud properties
- Compatible with other additives

Typical Properties

- Appearance: Dark brown to black, free-flowing powder
- Softening point: 250-420°F
- Specific gravity: 0.98

Recommended Treatment

- A typical range is 4-12 ppb

ME-Blacksas

Product Description

ME-Blacksas is a sulfonated asphalt used in both water-based and oil-based fluids. It helps form a thin, tough filter cake where small hydrophobic particles effectively bridge micro-fractures. This action prevents shale hydration and sloughing while reducing cutting erosion. ME-Blacksas is stable against many drilling fluid contaminants, operates across a broad pH range, and is suitable for use at temperatures above 400°F.

Applications / Functions

- Reduce HPHT fluid loss in both water-based and oil-based mud
- Stabilize shales and prevent sloughing

Advantages

- Stable at temperatures above 400°F
- Reduces shale sloughing
- Significantly increases lubricity
- Readily disperses in water and oil fluids
- Minimal and easily distinguishable fluorescence
- Helps to form a thin, tough filter cake

Typical Properties

- Appearance: Dark brown to black, free flowing powder
- Specific gravity: 0.98

Recommended Treatment

- A typical range is 2-8 ppb

Section 4 Filtration Control Agents

Reduces the infiltration of the liquid phase of the drilling fluid

ME-Blacknex

Product Description

ME-Blacknex resin lignite is a filtration control agent and rheological stabilizing additive for all water-based drilling fluids with chlorides below 70,000 ppm and hardness not exceeding 3,000 ppm. ME-Blacknex should be used at a pH greater than 10.0 to ensure solubility. ME-Blacknex will not increase viscosity but will stabilize the fluids at increased bottom hole conditions while controlling HPHT filtration rates. ME-Blacknex is useful for assisting in controlling shale stability and hole washout.

Applications / Functions

- Effective HPHT filtration control agent in nearly all water-based fluids
- Replaces basic filtration polymers that lose their ability to control HPHT filtration rates at elevated bottom hole temperatures

Advantages

- Stable at temperatures above 425°F
- Does not increase viscosity
- Solubilizes readily in alkaline fluids
- Enhance hole stability

Typical Properties

- Appearance: Dark brown powder
- Specific gravity: 1.35
- pH (5% aqueous solution): 8.8-9.2

Recommended Treatment

- A typical range is 2-8 ppb
- ME-Blacknex is recommend to be pre-solubilized in a caustic solution and added to the active system as a liquid

ME-Halad

Product Description

ME-Halad filtration control additive is a polymeric product that can provide filtration control in diesel, mineral and synthetic-based drilling fluids up to 350°F. ME-Halad is the primary filtration control agent for clay-free high performance OBM. ME-Halad is white free-flowing powder which is compatible with other commonly used materials in non-aqueous fluids.

Applications / Functions

- Reduces HPHT fluid loss in all oil-based mud
- Improves rheological properties

Advantages

- Stable at temperature up to 350°F
- Effective HPHT filtrate reducer in concentration as low as 1-4 ppb
- May be used in conjunction with other fluids loss additive such as amine lignite and gilsonite
- Easily mixed with rapid results
- Allows formulation of deep-water fluids with excellent low temperature tolerance

Typical Properties

- Appearance: White free-flowing powder
- Specific gravity: 1.03

Recommended Treatment

- Add 1-4 ppb for HPHT control

Section 4 Filtration Control Agents

Reduces the infiltration of the liquid phase of the drilling fluid

ME-Nanolatex

Product Description

ME-Nanolatex filtration control additive is a polymeric product that can provide filtration control in diesel, mineral and synthetic-based drilling fluids above 450°F. ME-Nanolatex is the primary filtration control agent for clay-free high performance OBM. ME-Nanolatex is white free-flowing powder which is compatible with other commonly used materials in non-aqueous fluids.

Applications / Functions

- Reduces HPHT fluid loss in all oil-based mud
- Improves rheological properties

Advantages

- Stable at temperature above 450°F
- Effective HPHT filtrate reducer in concentration as low as 1-4 ppb
- Can be used in conjunction with other fluids loss additive such as amine lignite and gilsonite
- Easily mixed with rapid results
- Allows formulation of deep-water fluids with excellent low temperature tolerance

Typical Properties

- Appearance: White free-flowing powder
- Specific gravity: 1.03

Recommended Treatment

- Add 1-4 ppb for HPHT filtration up to 350°F
- Add 4-6 ppb for HPHT filtration greater than 350°F

Section 5 Shale Inhibitors

Enhances drillability while maintaining low toxicity for environmental acceptability

ME-Byshield

Product Description

ME-Byshield is a surfactant-treated polymer nano emulsion with hydrophobicity and high reactivity. It helps to increase the contact angle of the shale surface and reduce the free energy of the shale surface.

Applications / Functions

- Excellent shale inhibition performance, delay and reduce the transfer of drilling fluid pressure.
- Stable AV & PV after heating, reduce rock surface filtrate wetting and inhibit shale hydration.
- Improve the lubricity

Advantages

- Increases the contact angle of the shale surface, unlike other inhibitors such as Ethylene Glycol Amine

Typical Properties

- Appearance: Milky white liquid
- Specific gravity: 1.05

Recommended Treatment

- A typical range is 1% of weight

Section 5 Shale Inhibitors

Enhances drillability while maintaining low toxicity for environmental acceptability

ME-Glycl

Product Description

ME-Glycl is a high-cloud-point, water-soluble glycol ether designed for high-salinity water-based drilling fluids. It provides improved wellbore stability, lubricity, high-temperature filtration control, and reduced bit balling. The "cloud point" is the temperature at which polyglycol additives change from being soluble (at low temperatures) to being insoluble (at high temperatures). The cloud point can be reduced by increasing salinity or increasing the concentration of polyglycol. ME-Glycl reduces the swelling of reactive clays by chemical interaction at the clay surface (below the cloud point) and by inhibiting filtrate invasion into the clay particles (above the cloud point). The cloud point of the mud system containing ME-Glycl can be varied by altering the salinity as required.

ME-Glycl is typically used in high-salinity systems with up to 150,000 ppm chloride because of its relatively high cloud point.

Applications / Functions

- Improves wellbore stability and shale inhibition
- Enhances lubricity
- Reduces bit balling potential

Advantages

- Compatible with most water-based drilling fluids
- Tolerant to contaminants
- Low toxicity

Typical Properties

- Appearance: Dark Brown Liquid
- Specific gravity: 1.1; pH: 7-8
- Cloud Point: >200°F, 3% in 15% NaCl

Recommended Treatment

- A typical treatment range is 2-6% v/v

Section 6 Viscosifiers & Suspension Agents

Improves the hole-cleaning and solids-suspension capabilities of drilling fluids

ME-Clayvis

Product Description

ME-Clayvis viscosifier is an economical organophilic clay used to impart viscosity and suspension properties to diesel-based drilling fluids. ME-Clayvis viscosifier can improve carrying capacity, gel strength, and suspension of weight material. It also assists in improving filter-cake quality and filtration control. Additionally, it can be used in specialty fluids such as casing pack, packer fluids, lost circulation pills, and spotting fluids where viscosity is required. ME-Clayvis viscosifier is stable at temperatures up to 350°F. This viscosifier employs the composition most widely used over the years in diesel-based muds in a cost-effective form.

Applications / Functions

- Cost-effectively builds viscosity and yield points for all oil-based fluids
- Suspends weighting materials and other solids
- Improves cuttings carrying capacity and hole cleaning
- Improves filter-cake quality for reduced fluid loss
- Increases emulsion stability

Advantages

- Temperatures stable up to 350°F
- Especially effective when mixing new fluids in low-shear, low temperature situations such as in mud plant

Typical Properties

- Appearance: Light tan, free flowing powder
- Specific gravity: 1.7

Recommended Treatment

- Add 2-10 ppb in diesel-based drilling fluids slowly through the mixing hopper

Section 6 Viscosifiers & Suspension Agents

Improves the hole-cleaning and solids-suspension capabilities of drilling fluids

ME-Clayvis Plus

Product Description

ME-Clayvis Plus viscosifier is an easy-to-disperse, rapid-yielding, economical organophilic clay used to impart viscosity and suspension properties to mineral oil-based drilling fluids. ME-Clayvis Plus' unique composition delivers a dry process gellant that requires less time and shear to build full rheology in drilling fluids and yields at low field temperatures. ME-Clayvis Plus viscosifier is also significantly more efficient than conventional organoclay viscosifiers in oil-based mud systems. It can also be used in specialty fluids such as casing pack, packer fluids, lost circulation pills, and spotting fluids where viscosity is required. ME-Clayvis Plus viscosifier is stable at temperatures up to 400°F.

Applications / Functions

- Builds viscosity and yield points for all oil-based fluids at low temperatures
- Conditions mud before storage or transportation
- Increases suspending properties of packer fluids
- Prepares spotting fluids to free stuck pipe

Advantages

- Temperature stable up to 400°F
- Disperses easily in less time with less shear
- Yields at temperatures as low as 35°F, where conventional organoclay can be ineffective
- Cost-effectively builds viscosity and yield points

Typical Properties

- Appearance: Light tan, free flowing powder
- Specific gravity: 1.7

Recommended Treatment

- Add 2-10 ppb in mineral oil-based drilling fluids slowly through the mixing hopper

ME-Claysus

Product Description

ME-Claysus suspension agent is an organophilic amino-attapulgite designed to control the settling of solids in oil-based drilling fluids. Its unique rheological structure suspends weighting materials and other solids with less increase in viscosity and gel strength compared to conventional bentonite or hectorite-based organoclays. This allows for the formulation of low viscosity muds with undiminished penetration rates and effective cuttings removal. ME-Claysus suspension agent can be used alone or in conjunction with conventional organoclays. The solids suspension capacity of a fluid already thickened with an organoclay can be increased by the addition of ME-Claysus, without substantially increasing the system's viscosity.

Applications / Functions

- Conditioning mud before storage and transportation
- Controls settling in diesel without the use of other additives
- Reduces syneresis or separation of oil from fluids stored without agitation

Advantages

- Stable at bottom hole temperatures exceeding 400°F
- Reduces top separation of oil
- Maintains suspension over a wide range of water contents and temperatures
- Increases the suspension of solids in fluids thickened with organoclay
- Disperses readily in oils

Typical Properties

- Appearance: Light tan, free flowing powder; Specific gravity: 2.0

Recommended Treatment

- A typical treatment range is 1-5 ppb. Pilot tests are recommended to optimize performance prior to use.

Section 6 Viscosifiers & Suspension Agents

Improves the hole-cleaning and solids-suspension capabilities of drilling fluids

ME-MOD

Product Description

ME-MOD is a 100% active blend of fatty acids used to increase low-end rheology while providing suspension and hole-cleaning capacities in invert emulsion drilling fluids. It is highly effective in improving the 3 rpm and 6 rpm readings of oil-based drilling fluids without increasing plastic viscosity. ME-MOD is especially useful in extended-reach, horizontal, and highly deviated wells. It is effective across a wide range of oil-to-water ratios and is stable at temperatures above 400°F.

Applications / Functions

- Increases low-shear rate rheology in oil-based drilling fluids without increasing plastic viscosity
- Especially used in extended-reach, horizontal, and highly deviated wells to reduce barite sag
- Provides secondary emulsification in oil-based fluids

Advantages

- Stable at temperatures above 400°F
- Enhances 3 rpm and 6 rpm readings of oil-based drilling fluids without increasing plastic viscosity
- Reduces the need for organoclay, optimizing rheological profile and hole-cleaning capacity
- Effective at low concentrations
- Usable in all oil-based drilling fluids

Typical Properties

- Appearance: Dark brown viscous liquid
- Specific gravity: 0.95

Recommended Treatment

- A typical treatment range is 0.5-2 ppb
- A pilot test is recommended to determine the actual treatment required to achieve the desired results

ME-XC Plus

Product Description

ME-XC Plus viscosifier is a premium-quality, powdered xanthan gum suitable for use in most waters, regardless of salinity or hardness. It is a dispersible, non-clarified, high-molecular-weight biopolymer. ME-XC Plus provides excellent suspension and shear-thinning properties and can be used at temperatures up to 250°F. As ME-XC Plus is subject to bacterial degradation, it is recommended to use biocides to prevent fermentation. At mud pH values above 10.0, ME-XC Plus becomes more sensitive to soluble calcium and may precipitate out of solution; however, it can still be used in most waters regardless of salinity.

Applications / Functions

- Viscosifies fresh water and brine-based fluids used for drilling, milling, underreaming, and gravel packing operations
- Suspends bridging agents and weighting materials in fresh water and brine systems

Advantages

- Highly effective viscosifier with minimal treatment producing significant results
- Shear-thinning rheological profile for improved hydraulics
- Provides excellent suspension without the need for clays
- Minimizes the potential for formation damage
- Stable up to 250°F

Typical Properties

- Appearance: Yellow to white powder; Specific gravity: 1.6

Recommended Treatment

- A typical range is 0.1-2 ppb.
- ME-XC Plus can be mixed directly into the system through the hopper at a rate of 20-25 minutes per sack.
- Maximum shear ensures quick hydration and avoids lumping and formation of "fish eyes"

Section 7 Thinners and Dispersants

Reduces rheological properties by dispersing active clays and drilled solids

ME-THMOTHIN

Product Description

ME-THMOTHIN is a sulfonated styrene-maleic anhydride copolymer based (SSMA), low molecular weight, top-level thinner used in most water-based drilling fluids at extreme temperature conditions. ME-THMOTHIN is actually enhanced by the unusually high temperature encountered when drilling deep wells, and has been used successfully at BHT in excess of 500°F. ME-THMOTHIN is effective over a broad pH range and in the presence of contaminants such as carbon dioxide, cement, lime or salt.

Applications / Functions

- Deflocculates water-based systems at extreme downhole temperatures
- Helps minimize thermal flocculation
- Stabilizes the rheological and filtration properties of WBM at extreme temperature conditions

Advantages

- Temperatures stable up to 500°F
- Compatible with other drilling additives
- Effective over a broad pH range
- Effectively treat contaminants from carbon dioxide, cement, lime or salt
- Environmentally acceptable

Typical Properties

- Appearance: Amber Liquid
- Specific Gravity: 1.00
- pH: 12

Recommended Treatment

- The addition of 1- 3 ppb of ME-THMOTHIN will normally stabilize the rheological characteristic of fluids exposed to extreme downhole temperatures

ME-Lignosulfonate

Product Description

ME-Lignosulfonate is a thinner for drilling mud and fluid loss control agent. Excellent thinning performance and filtration control capacity, the mud performance of fresh water is better than salt water mud.

Applications / Functions

- Stable in high temperature, stable electrolytes, naturally non-poisonous
- Completely compatible with other admixture agent, etc.

Advantages

- Anti-high temperature 300°F, can cooperate with other admixture agent
- Good emulsifying effect in mud
- Free-Chrome thinner may be added into drilling fluids either in the form of solution or powder. PH:10.0~10.5

Typical Properties

- Appearance: Yellow powder
- Specific gravity: 1.10-1.25; pH: 4-8
- Solid Content: 85%

Recommended Treatment

- A typical range is fresh water mud 1.0%(W/V), salt water mud 2.0%(W/V)



Section 7 Thinners and Dispersants

Reduces rheological properties by dispersing active clays and drilled solids

ME-Polithin

Product Description

ME-Polithin is an acrylic-based, low molecular weight polymer-type thinner used in most water-based drilling fluids up to 400°F. It is an effective thinner and deflocculant with exceptional tolerance to high temperatures, divalent cations, pH fluctuations, and salinity. ME-Polithin can replace traditional thinners in most applications, outperforming those products in both performance and cost-effectiveness. It is used to maintain rheological stability in the presence of electrolyte contamination from salt, gypsum, and cement. Additionally, it helps prevent high-temperature mud gelation.

Applications / Functions

- Deflocculates most water-based systems
- Helps minimize thermal flocculation.
- Reduces shear strength development

Advantages

- Temperatures stable up to 400°F
- Readily soluble in water and can be added directly to agitated mud pits
- Excellent performance at low concentrations
- Effective in the presence of salt and divalent ions
- Not pH dependent
- Environmentally acceptable

Typical Properties

- Appearance: Colorless to yellow, viscous liquid
- Specific gravity: 1.10-1.25; pH: 4-8
- Boiling Point: 180-212°F; Solid Content: 45%

Recommended Treatment

- A typical range is 1-4 ppb, but specific drilling conditions will dictate the suitable concentration

ME-Hydrothin

Product Description

ME-Hydrothin is a silicon-fluorine copolymer viscosity reducer designed for water-based drilling fluids in deep and ultra-deep wells. It serves as an effective thinner or deflocculant with exceptional tolerance to high temperatures and divalent cations. ME-Hydrothin helps maintain rheological stability in the presence of electrolyte contamination from salt, gypsum, and cement. It also aids in preventing high-temperature mud gelation. Under complex drilling conditions such as ultra-high temperatures and high mud weights, ME-Hydrothin effectively inhibits shale hydration, improves filter cake quality, and maintains long-term stability of drilling fluid performance, contributing to safe and efficient drilling.

Applications / Functions

- Deflocculates most water-based systems, applicable in deep and ultra-deep wells
- Helps minimize thermal flocculation
- Reduces shear strength development

Advantages

- Thermal stable up to 500°F
- Liquid product can be added directly to agitated mud pits
- Effective in the presence of salt and divalent ions
- Environmental-friendly product

Typical Properties

- Appearance: Dark viscous liquid
- pH: 11-12
- Viscosity reduction rate: More than 80%

Recommended Treatment

- A typical range is 1-2% (v/v), but specific drilling conditions will dictate the suitable concentration

Section 8 Biocides & Corrosion Inhibitors

Control the growth of bacteria and fungi. Mitigate corrosion, neutralize hazardous acid gases, and prevent the formation of production-impairing scale

ME-Hydrocide

Product Description

ME-Hydrocide biocide is a glutaraldehyde-based product used to control bacteria in water-based drilling fluids, completion/workover fluids, and packer fluids. It is cost-effective and ideal for drilling fluids containing starch, cellulosic products, and other organic materials susceptible to bacterial degradation. ME-Hydrocide is effective at small concentrations and compatible with all brine types.

Applications / Functions

- Controls bacteria in water-based drilling fluids
- Suitable for use in completion, workover, and packer fluids
- Can be used for wastewater treatment

Advantages

- Completely soluble in water
- Effective in small concentrations

Typical Properties

- Appearance: Transparent liquid
- pH: 3.1-4.5
- Specific gravity: 1.06

Recommended Treatment

- The normal treatment range of ME-Hydrocide is around 0.4 ppb in most fluids

Note : ME-Hydrocide is incompatible with H₂S scavengers and oxygen scavengers



ME-FILM

Product Description

ME-FILM corrosion inhibitor is a filming-amine type corrosion inhibitor that is watersoluble and effective for use in solids free brines and packer fluids. It can use in both monovalent and divalent brines. ME-FILM corrosion inhibitor is effective up to 400°F in monovalent brines and up to 300°F in divalent brines

Applications / Functions

- Used in solids-free brines
- Used in packer fluids

Advantages

- Temperature stable up to 400°F in monovalent brines and up to 300°F in divalent brines
- Convenient and easy to use
- Effective at low concentrations
- Cost effective product

Typical Properties

- Appearance: Dark liquid
- Flash point: 92°F
- Specific gravity: 1.0
- pH (aqueous solution): 10.5

Recommended Treatment

- Typical concentrations range from 0.5%-1% by volume



Section 8 Biocides & Corrosion Inhibitors

Control the growth of bacteria and fungi. Mitigate corrosion, neutralize hazardous acid gases, and prevent the formation of production-impairing scale

ME-MDEA

Product Description

ME-MDEA scavenger is a low molecular weight MEA Triazine developed for the rapid scavenging of hydrogen sulphide (H₂S) in liquid, multiphase, and gas applications. ME-MDEA can be injected into the reaction phase as far upstream in the process as possible to allow the maximum period for reaction to occur. The typical dose regime depends upon the hydrogen sulphide concentration and the time allowed for the chemical to scavenge.

Applications / Functions

- Used to remove sulfides caused by the intrusion of the liquid
- Water-based drilling fluids and completion fluids

Advantages

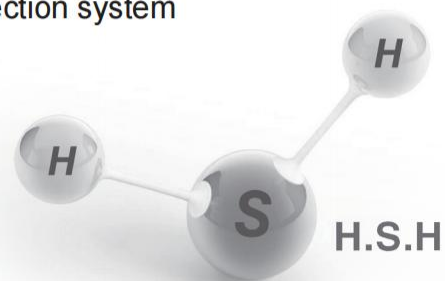
- Effectively sulfur removal agent
- Environment friendly
- Effective at low concentrations

Typical Properties

- Appearance: Clear colorless to yellowish liquid
- Specific gravity: 1.1

Recommended Treatment

- Typical dose rates of 10 to 20 ppm of ME-MDEA are required per 1 ppm of H₂S depends on temperature and injection system



R&D Capabilities

Our company boasts a 10,000 sq. ft. Testing and R&D Facility.

The laboratories are also equipped with Pilot Plants for each of the products manufactured by us. From product design and development to performance testing, from incoming inspection to in-process and final inspection is done following the detailed QC program.

Quality is aimed at exceeding customer expectations, and what better way to evaluate it than by the customers themselves? Contrary to most companies, we encourage our customers to visit us and, in fact, test their products either in front of them or by training them to test our products.

Specialized Testing is available for :

1. HPHT Fluid Rheology
2. Permeability Plugging Test
3. Linear Swell Meter Testing

4. Capillary Suction Time
5. Shale Recovery and Shale Erosion Tests
6. Slake Durability

7. Lubricity Test
8. Particle Size Distribution
9. The Dynamic High Angle Setting Test





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