# OUR PRODUCT Brochure



CLEAR SOLUTIONS

Providing innovative drilling fluid technology for a sustainable future

## WE ARE CLEAR SOLUTIONS

### Established in 2003, Clear Solutions has become an industry leader in drilling fluid technologies.

The field proven and trusted Pure-Bore<sup>®</sup> product family provides customers with exceptional performance, environmental benefits and cost savings.

When deploying the latest chemical technology, having the personnel and experience at hand to advise and guide is critical to project success. At Clear Solutions we recognize this and have assembled a team of experts from numerous disciplines to ensure your project is successful first time. Good personnel are only one part of the equation and we make certain they are supported with the latest testing equipment and technology in our state-of-the-art laboratory facilities.

Our knowledge of drilling fluids products extends well beyond our current portfolio and our breadth of drilling experience means that whatever fluid challenge presents itself to a customer's operation, we are likely to have dealt with it previously and can advise on a potential solution. The exceptional customer focus of our sales team ensures that product technical advice and support are provided continuously before, during and after a customer's operation.





#### **OUR VISION**

Become the world's leading provider of innovative and performance-driven chemical solutions which the planet can trust – expediting the world's move to a carbon neutral society.



#### OUR MISSION

Use our experience to create and supply cuttingedge chemical/engineering solutions, which deliver commercial, technical and environmental benefits to the industries in which we operate. Building ethical relationships across the supply chain.



#### OUR VALUES

Our Earth. Our People. Our Customers. Our Suppliers. Striving for a sustainable future. Providing a rewarding environment for our outstanding team. Forging longlasting valuable relationships through ethical practices.

### **INTRODUCING PURE-BORE**<sup>®</sup>

**Pure-Bore**<sup>®</sup> is an environmentally friendly, non-damaging, next generation drilling fluid additive which can be used in a wide variety of drilling and completion applications.

When used in fresh water or a variety of brines, **Pure-Bore**<sup>®</sup> forms the basis of a high performance water based drilling fluid. The **Pure-Bore**<sup>®</sup> unique- chemistry provides a highly shear thinning fluid, with both fluid loss control and shale encapsulation. **Pure-Bore**<sup>®</sup> enhances drilling performance - significantly improving hole cleaning, ECD management and borehole stability, whilst optimising reservoir protection.

#### EFFICIENT

Easy to use, multi-functional product Superior clay and shale inhibition Outstanding rheology and fluid loss control

#### EFFECTIVE

Exceptional borehole stability Extremely effective hole cleaning Greatly enhanced rates of penetration

#### EXCELLENCE

Proven track record Record breaking performance Repeated, predictable and outstanding field results

#### ECO-FRIENDLY

Approved under Water Supply Regulations for use in public/drinking water installations

CEFAS and PLONOR registered

Environmentally friendly - non toxic and biodegradable

#### ECONOMIC

Minmises disposal costs

Impressive reservoir protection for enhanced reservoir production

Consistently saves our customers time and money



### THE DRILLING FLUID FOR A CLEANER ON OVON

At Clear Solutions we are proud to have achieved an industry first. A fully carbon neutral drilling fluid additive. With the help of our partners, we now ensure that for every bag of **Pure-Bore® Zero** sold, 100-kg of carbon will be removed from the atmosphere using a variety of sustainable forestry projects in the UK.

**Pure-Bore® Zero** has the same multifunctional capabilities clients have come to expect from a **Pure-Bore®** product.





Protects during drilling & minimises prmation damage

## **OUR PRODUCT PORTFOLIO**

PRODUCT	DESCRIPTION	PRIMARY FUNCTION	PACKAGE SIZE	
CLEAR SOLUTIONS PURE-BORE® SPECIALITY PRODUCTS				
PURE-BORE®	Environmentally Friendly High Performance Drilling Powder	Viscosifier, Fluid Loss Control Additive, Encapsulative	25kg box (5 x 5kg sachets) 25kg bag	
PURE-BORE <sup>®</sup> ZERO	Environmentally Friendly High Performance Drilling Powder	Viscosifier, Fluid Loss Control Additive, Encapsulative	25kg bag	
PURE-BORE® LIQUID	Environmentally Friendly High Performance Drilling Liquid	Viscosifier, Fluid Loss Control Additive, Encapsulative	20kg pail	
PURE-BORE <sup>®</sup> LV	Environmentally Friendly High Performance Low Viscosity Drilling Powder	Fluid Loss Control	25kg bag	
PURE-BORE <sup>®</sup> ULV	Environmentally Friendly High Performance Ultra Low Viscosity Drilling Powder	Fluid Loss Control	25kg bag	
PURE-BORE® PROTECT	Environmentally Friendly High Performance Fluid Loss Additive, specifically designed for Reservoir Drilling Fluid Systems	Fluid Loss Control	25kg bag	

Rapid			
PRODUCT	DESCRIPTION	PRIMARY FUNCTION	PACKAGE SIZE
CLEAR SOLUTIONS	SPECIALITY RAPID M	INING PRODUCTS	and the second
RAPID-GREASE	Readily Biodegradable Rod Grease	Lubricant	18kg pail
RAPID-LINSEED SOAP	Readily Biodegradable Lubricant for Inner Tubes	Lubricant	10kg & 17kg pail
RAPID-PAC LV	Highly Dispersive Low Viscosity Cellulose Fluid Loss Polymer for Water Based Drilling Fluids	Fluid Loss Control	5kg & 18kg pail
RAPID-PAC HV	Highly Dispersive High Viscosity Cellulose Fluid Loss Polymer for Water Based Drilling Fluids	Viscosity and Fluid Loss Control	5kg & 18kg pail
RAPID-CLAY STABILISER	PHPA Powder	Viscosifer and Clay Stabiliser	5kg & 25kg pail
RAPID-CLAY STABILISER LIQUID	Liquid PHPA	Viscosifer and Clay Stabiliser	25ltr drum
RAPID-HAMMER OIL	Vegetable Oil Based Rock Drill and Hammer Lubricant	Lubricant	1000ltr IBC, 205ltr & 25ltr can
RAPID-LUBE	High Performance Drilling Lubricant	Lubricant	1000ltr IBC, 205ltr & 25ltr can
RAPID-XAN VIS	Viscosifier and Suspension Agent	Viscosifier	5kg pail

PRODUCT	DESCRIPTION	PRIMARY FUNCTION	PACKAGE SIZE
VISCOSIFERS			
ANTISOL FL 30000	Polyanionic Cellulosic Polymer	Viscosifier	25kg sack
XANTHAN, XCD	Xanthan Gum	Viscosifier	25kg sack
CSI LIQUID XANTHAN	Liqufied Xanthan Gum	Viscosifier	50lb pail
BENTONITE API	OCMA Grade Bentonite	Viscosifier	25kg sack

#### FLUID LOSS ADDITIVES

ANTISOL FL 100	Polyanionic Cellulosic Polymer Low Viscosity	Fluid Loss Control	25kg sack
DRILLING STARCH	Methylated Starch	Fluid Loss Control	25kg sack
PAC-L	Polyanionic Cellulosic Polymer Low Viscosity	Fluid Loss Control	25kg sack
PAC-R	Polyanionic Cellulosic Polymer High Viscosity	Viscosifier	25kg sack



PRODUCT	DESCRIPTION	PRIMARY FUNCTION	PACKAGE SIZE
CLAY/SHALE STABIL	IZERS		
LIQUIMUD®	Liquid Clay/ Shale Encapsulator and Viscosifier (PHPA)	Encapsulative Inhibitor	25ltr drum
LIQUIMUD <sup>®</sup> PLUS	Ultra High Concentrated Liquid Clay/ Shale Encapsulator and Viscosifer (PHPA)	Encapsulative Inhibitor	25ltr drum
GLYCOLE MCP	Mid Cloudpoint Glycole	Inhibitor	1000ltr IBC
BIOCIDES			
GROTAN OX	Biocide	Preservative	10kg can
GROTAN WS	Biocide	Preservative	10kg can
DEFOAMERS			
DEFOAMER	Standard Foam Reducing Agent	Defoamer	25ltr drum
DEFOAMER	Silicon Defoamer	Silicon Defoamer	20kg pail
SPECIAL DEFOAMER	Tri-Isobutylphosphate	Defoamer	20kg pail

PRODUCT	DESCRIPTION	PRIMARY FUNCTION	PACKAGE SIZE
LOST CIRCULATION MATERIAL			
CALCIUM CARBONATE	Sized Marble (different sizes)	Weighting Agent	25kg sack
CLEAR STAB <sup>™</sup> ULI	Ultra Low Invasive Fluid Loss Agent	Well Bore Stabiliser	13kg sack
DRILL-SORB®	Superabsorber	Lost Circulaton Material	25kg pail
MICA	Lost Circulation Material	Lost Circulation Material	20kg sack
NUTPLUG	Walnut Hulls	Lost Circulation Material	25kg sack
FOAMING AGENTS			
CLEAR-FOAM XL <sup>™</sup>	Concentrated High Performance Drilling Foam	Drilling Foam	25ltr drum
CLEAR-FOAM <sup>™</sup>	High Performance Drilling Foam	Drilling Foam	25ltr drum
LUBRICANTS			
LUBRICANT	Different Lubricants	Available on request	



PRODUCT	DESCRIPTION	PRIMARY FUNCTION	PACKAGE SIZE
DRY SALTS			
КСІ	Potassium Chloride	Inhibitor, Weighting Agent	25kg sack
NaCl	Sodium Chlroide	Weighting Agent	1000kg big bag & 25kg sack
SODIUM FORMATE	Sodium Formate	Weighting Agent	25kg sack
POTASSIUM FORMATE	Potassium Formate	Inhibitor, Weighting Agent	25kg sack
WEIGHTING AGENTS	i		
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BARITE	BaSO4 , Barium Sulfate	Weighting Agent	25kg sack or big bag
CALCIUM CARBONATE	Sized Marble (different sizes)	Weighting Agent	25kg sack
MISCELLANEOUS			
CITRIC ACID	Granular Citric Acid	pH Reducer	25kg pail
DRILL-THIN	Phosphate Free Dispersant	Thinner	25ltr drum
SODA ASH	Sodium Carbonate	pH Buffer	25kg pail
SODIUM BICARBONATE	Sodium Hydrogene Carbonate	pH Buffer	25kg sack
SUGAR	Cement Retarder	Cement Retarder	1kg paper bag
DRILL-SORB® RAPID	Superabsorber very fine	Drilling Fluid Solidifer	20kg sack

### **RAPID PRODUCTS**



Clear Solutions has built a solid reputation over the years for reliable products that perform in tough environments.

We have expanded our offering to now include a wide range of value for money, high performance industrial drilling products. Our RAPID products have been specifically developed in line with our Vision, Mission & Values.

Clear Solutions RAPID product line has been developed to serve the Water Well, Construction, HDD and Mining drilling markets.

#### RAPID-CLAY STABILISER LIQUID

Rapid-Clay Stabiliser Liquid is a clay and shale stabiliser that has inhibiting properties when drilling reactive clay formations in water-based drilling fluids. Rapid-Clay Stabiliser Liquid develops high viscosity, lubricity and encapsulation even at low dosages. Rapid-Clay Stabiliser Liquid can be used in low concentrations as a coagulant.

#### RAPID-CLAY STABILISER

Rapid-Clay Stabiliser is a clay and shale stabiliser that provides encapsulation and inhibition when drilling reactive clay formations in water-based drilling fluids. In addition, this product offers high viscosity and a lubricating effect even at low dosages.



#### RAPID-GREASE

Rapid-Grease is a highly biodegradable, high-performance lubricant for use as thread grease on drill rod and core tube threads. It causes a significant reduction in friction when drilling and therefore reliably prevents premature wear of the thread in core drilling, HDD and vertical drilling applications. Rapid-Grease has excellent adhesive properties that provide exceptional film strength, lubrication and corrosion protection.

#### RAPID-PAC HV

Rapid-PAC HV is a high-quality, nonfermenting and highly viscous polyanionic cellulose, which is used as a polymer to adjust viscosity and reduce filtration in water-based drilling fluids. Rapid-PAC HV controls water loss into the formation, provides viscosity and promotes wellbore stability in water sensitive formations.

#### RAPID-HAMMER OIL

Rapid-Hammer Oil is a biodegradable hammer oil based on vegetable oil, that increases the life of Hammer drill drives and other underground tools compared to other lubricants on the market. This product offers excellent lubricity, as well as cleaning and prevents malfunctions caused by deposits inside the tools and drives.

#### RAPID-PAC LV

Rapid-PAC LV is a high-quality, nonfermenting and low-viscosity polyanionic cellulose that serves as a filtration-reducing polymer in water-based drilling fluids. Rapid-PAC LV controls water loss into the formation without significantly increasing viscosity, thereby improving wellbore stability in water-sensitive formations.



#### **RAPID-LUBE**

Rapid-Lube is an additional additive that, as a lubricant, makes a significant contribution to reducing friction. Rapid-Lube reduces the torque and frictional resistance on the drill bit and the drill pipe, thus minimizing wear. This product can be used on the surface as well as in mining operations.

#### RAPID-LINSEED SOAP

Rapid-Linseed Soap is a highly effective lubricant for use in core barrels, which makes it much easier to remove core samples from the inner tube. It is nontoxic, biodegradable and has no negative impact on drill cores.

#### **RAPID-XAN VIS**

Rapid-Xan Vis is a high performance, shear thinning xanthan gum. It provides a shear thinning viscosity and helps improve hole cleaning by improving low-end rheology in water-based drilling fluids.







### We provide solutions.

Get in touch to discuss your requirements.

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