



Company Profile

Privately owned for three decades, the Chemical Mine World Co group of companies has dedicated itself to the Oil and Chemical Industry. We have become the largest manufacturer of modified starch in the Middle East with 25,000 tons per year capacity in our three production facilities. Each production facility houses advanced manufacturing equipment ranging from compounding, blending to extrusion technology. Qualified technicians are dedicated to continuously produce and improve quality products to specification utilizing advanced process controls. In our R&D and Quality Control departments, lab technicians test and monitor incoming and outgoing materials per strict specifications. In our Drilling Fluids Lab additives are tested according to related API standards as well as customer specifications.

We are continuously striving to make consistently high quality products through stringent quality control testing, new computerized technologies and approved manufacturing procedures.

Recently we have been awarded multiple tenders by the National Iranian Oil Company (NIOC) and its subsidiaries with the latest tender of USD 120 million for supplying chemicals to 346 wells over four years.

Additional companies that we are currently supplying to are: MI, Halliburton, CNPC, SINOPEC China and other Gulf companies who sell our product under their own brand to Qatar, Iraq, Yemen, Oman and ARAMCO.

Our Commitment To Our Customers

- Manufacture quality products at competitive prices
- Assure consistent quality
- Deliver products at promised delivery dates
- Provide excellent customer service
- Provide superior technical support



Category Product

CHEMICAL MINE WORLD CO.



Product

Fluid Loss Reducers and Rheology Improvers	Drilling Starch Drilling Starch High Temperature Drilling Starch Polymer CMC LV CMC HV PAC LV PAC HV	Polymer K30-P Polymer K30-W K30-HT CMC LV CMC HV PAC LV PAC HV		
Foaming Agents Freshwater to Seawater FOMAL A Seawater to Saturated Salt Water FOMAL S				
Viscosifiers	XC Polymer XCD Polymer Bentonite	XC Polymer XCD Polymer Bentonite		
Emulsifiers, Corrosion Inhibitors, Lubricants	Drilling Mud Emulsifiers (DME) DME Corrosion Inhibitor Mud Lubricant H2S Scavenger Oxygen Scavenger	CI-750 ML-22 H2S Scavenger OXS-109		
Oil Based Muds	Primary Emulsifier Secondary Emulsifier Viscosifier Fluid Loss Controller	P.Emul 980 S.Emul 460 OBM-VIS 260 OBM-FLC 660A		
Lost Circulation Material (LCM)	Mica, Flakes C,M,F Walnut Shells C,M,F Oyster Shells C,M,F	Mica Walnut Shell Oyster Shell		
Specialty Chemicals	Natural Asphaltite Calcium Chloride Potassium Chloride Partially Hydrolized Polyacryamide A100	Gilsonite Calcium Chloride KCL		
Alkalinity Control	Sodium Hydroxide - NaOH Caustic Soda Hydrated Lime Sodium Carbonate - Na2 CO3 Soda Ash	Lime		
Weighting Agents	Barite Hematite CaCO3 Calcium Bromide Sodium Chloride	Barite Hematite Limestone Powder Calcium Bromide Salt		





Polymer K30-P

DESCRIPTION

Polymer K30-P is a premium biodegradable, non-frementing modified potato starch, used to provide filtration control and rheology stability in all types of water-based drilling fluids.

FEATURES

- Provides excellent fluid loss control
- Effective performance to bottom hole temperature of 230F
- Effective in a wide range of make-up waters, including high hardness and high salinity brines
- Works well in a wide range of pH
- Works well in KCL, NaCL, MgCl2, CaCl2 and other complex brines
- · Provides well bore stability through filtration control
- No additional biocide is required
- Meets and exceeds API 13-A,Sec. 11, and OCMA-DFCP 5 standard
- Pregelatinized for maximum effectiveness

RECOMMENDED TREATMENT

Depending on drilling conditions, between 2-6 lb/bbl.

TYPICAL PROPERTIES

Appearance Off-white, granular free flowing powder Solubility Soluble in fresh, saline to saturated water

Moisture Max 10%

pH (1% solution) 6.5 - 7.5

PACKAGING

Polymer K30-P is packed in 25 kg multi-wall paper bags with one moisture resistant layer.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respiratory, gloves, goggles and aprons. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place. Maximum 12 months.





Polymer K30-W

DESCRIPTION

Polymer K30-W is a premium biodegradable, non-frementing modified wheat starch, used to provide filtration control and rheology stability in all types of water-based drilling fluids.

FEATURES

- Provides excellent fluid loss control
- Effective performance to bottom hole temperature of 230F
- Effective in a wide range of make-up waters, including high hardness and high salinity brines
- Works well in a wide range of pH
- Works well in KCL, NaCL, MgCl2, CaCl2 and other complex brines
- Provides well bore stability through filtration control
- No additional biocide is required
- Meets and exceeds API 13-A, Sec. 11, and OCMA-DFCP 5 standard
- Pregelatinized for maximum effectiveness

RECOMMENDED TREATMENT

Depending on drilling conditions, between 8-14 lb/bbl.

TYPICAL PROPERTIES

Appearance Off-white, granular free flowing powder Solubility Soluble in fresh, saline to saturated water

Moisture Max 10%

pH (1% solution) 6.5 - 7.5

PACKAGING

Polymer K30-W is packed in 25 kg multi-wall paper bags with one moisture resistant layer.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respiratory, gloves, goggles and aprons. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place. Maximum 12 months.



Polymer K30-HT

DESCRIPTION

Polymer K30-HT is a high temperature premium preserved drilling starch used to provide filtration control and rheology stability in all types of water-based drilling fluids.

FEATURES

- Provides excellent fluid loss control
- Designed to work at high temperatures up to 250F
- Effective in a wide range of make-up waters, including high hardness and high salinity brines
- Works well in a wide range of pH
- Works well in KCL, NaCL, MgCl2, CaCl2 and other complex brines
- Provides well bore stability through filtration control
- No additional biocide is required
- Meets and exceeds ADMA/ADCO standard

RECOMMENDED TREATMENT

Depending on drilling conditions, between 2-6 lb/bbl.

TYPICAL PROPERTIES

Appearance Off-white, granular free flowing powder Solubility Soluble in fresh, saline to saturated water Moisture Max 10%

pH (1% solution) 6.5 - 7.5

PACKAGING

Polymer K30-HT is packed in 25 kg multi-wall paper bags with one moisture resistant layer.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respiratory, gloves, goggles and aprons. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place. Maximum 12 months.





CMC-LV

DESCRIPTION

CMC-LV is technical grade low viscosity sodium carboxymethyl cellulose, used in oil drilling to adjust viscosity and filtration control. It is non-toxic and compatible with other mud additives. CMC-LV can control mud's fluid loss. It meets and exceeds OCMA-DFCP-2 and API Standard specifications.

TYPICAL PROPERTIES

Appearance Free flowing off-white powder NaCl, %(dry basis) 10.0% max Moisture Content 10% max. pH of 1% solution 6.5 – 8.5 Particle size 95% min. pass through 40 mesh

MUD PERFORMANCE PROPERTIES

Apparent Viscosity Distilled water

90 max

PACKING

Product is packed in 25kg net multi-layer paper bags with one moisture proof layer.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place. Maximum 12 months.

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CMC-HV

APPLICATION

CMC-HV is technical grade sodium carboxy methyl cellulose, used as filtration control agent and viscosifier in various types of water based muds ranging from fresh water to the salt water, particularly with higher mud weight and is non-toxic. CMC-HV can increase the rheology of the mud. It meets OCMA-DFCP 7 and API standards.

TYPICAL PROPERTIES

Appearance Free flowing off-white powder

NaCl, %(dry basis) 5.0% max.
Moisture Content 10% max.
pH of 1% solution 6.5 – 8.5

Particle size 95% min. pass through 40 mesh

MUD PERFORMANCE PROPERTIES

Solutions	CMC-HV		
	Sample weight in 350ml solution	600 rpm reading	
Distilled water	2.2 gr	>30	
4% NaCl	2.7 gr	>30	
Saturated NaCl	2.5 gr	>30	

Sample Fluid Loss (ml/30min) CMC-HV <10

PACKING

Product is packed in 25kg net multi-layer paper bags with one moisture proof layer. Each 40 bags stretch wrapped on wooden pallet.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron.

STORAGE

Product should be stored in a dry place. Maximum 12 months.





PAC-LV

DESCRIPTION

PAC-LV is a low molecular weight, low viscosity polymer for water based drilling fluids, which can effectively reduce the filtration rate of many water based oil and gas drilling fluids and with low concentrations may also be used to reduce the rheology of flocculated and high solid fluids.

TYPICAL PROPERTIES

Appearance Free flowing off-white powder Degree of Substitution 0.90 min NaCl, %(dry basis) 4.0% max Moisture Content 8% max. pH of 1% solution 6.5 – 8.5 Retained on 500mm sieve 5.0% max

MUD PERFORMANCE PROPERTIES

Solutions	Sample weight in 350 ml Solution	600 rpm reading
Distilled water	/	/
4% NaCl	3.33 gr	< 45
Saturated NaCl	2.22 gr	<36

Fluid Loss (mL/30 min)

CMC-LV < 20

PACKING

Product is packed in 25kg net multi-layer paper bags with one moisture proof layer.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place.





PAC-HV

DESCRIPTION

PAC-HV is a high molecular weight, high viscosity polymer for water based drilling fluids, which can effectively reduce the filtration rate of many water based oil and gas drilling fluids and may also be used to increase and stabilize viscosity to improve hole cleaning and suspension properties in a wide variety of fluid environments.

TYPICAL PROPERTIES

Appearance Free flowing off-white powder

Degree of Substitution 0.90 min

NaCl content 4.0% max

Moisture Content 8% max. pH of 1% solution 6.5 - 8.5

Retained on 500mm sieve 5.0% max

MUD PERFORMANCE PROPERTIES

Solutions Sample weight in 350 ml Solution 600 rpm reading

Distilled water	0.80 gr	> 30
4% NaCl	1.33 gr	> 30
Saturated NaCl	1.00 gr	> 30

Fluid Loss (mL/30 min)

CMC-HV < 16

PACKING

Product is packed in 25kg net multi-layer paper bags with one moisture proof layer.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place.

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FOMAL-A

DESCRIPTION

FOMAL-A is a specially developed biodegradable foaming agent for use in oil and gas drilling in fresh water to seawater.

APPLICATION

FOMAL-A is used in stiff foam and mud misting operations. It is useful in drilling unstable formations, large diameter holes and in lost circulation conditions. In a wide range of varying drilling conditions, FOMAL-A produces high quality foam of the most desirable consistency (in bubble and uniformity) for efficient air-foam drilling. FOMAL-A also reduces sticking tendency of wet clays, thereby eliminating mud rings, wall packing and the like.

Resulting benefits are:

Improving the carrying capacity of air, reducing hydrostatic head, maximizing penetration, suppressing dust in dry air drilling, allowing special drilling techniques, permitting the recovery of larger and harder cuttings.

TREATMENT

0.5% -1% volumetric is recommended and FOMAL-A can be used with proper viscosifiers to make stiff foam and stable foam.

TYPICAL PROPERTIES

Composition SLES
Appearance clear to yellowish liquid
Active content 22% + 0.5%
Flash point 75 oC
Freezing point 4 oC
Density 1.03 - 1.05
Ionic charge slightly anionic
Solubility easily soluble in water
pH 7-8

PACKING

FOMAL-A is packed 200kg Net in 55gal. coated iron drums.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry place. Maximum 12 months.

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FOMAL-S

DESCRIPTION

FOMAL-S is a protein based special compound used as a foaming agent, effective in seawater and saturated salt water.

APPLICATION

FOMAL-S is used with KCL to drill unstable and shale formations. FOMAL -S is recommended when excessive water is encountered while drilling. It is also recommended for mist or stiff foam drilling operations to improve the hole cleaning capability of the air stream. This product is useful in drilling unstable formations, large diameter holes and in lost circulation conditions. For a wide range of varying drilling conditions FOMAL -S produces high quality foam. It also counteracts the sticking tendencies of wet clays, thereby eliminating mud rings and wall packing.

TYPICAL PROPERTIES

Composition Protein based special compound Appearance dark brown liquid Specific Gravity 1.1-1.2 pH 6-7.5 Pour Point <-100 C Solubility easily soluble in water Stability stable in salt water

PACKING

HAYFOAM-S is packed 200kg Net in 55gal. coated iron drums.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry place. Maximum 12 months.





XC-POLYMER

DESCRIPTION

XC-Polymer (Xanthan gum biopolymer) is a premium grade viscosifier for oilfield drilling, workover and completion fluids. It is a high molecular weight polysaccharide produced by fermentation of carbohydrate with Xanthomonas Campestris and shows shear thinning properties.

APPLICATION

XC-Polymer solutions display exceptional shear thinning properties and good suspension characteristics even in the absence of inorganic colloids. This allows for high penetration rates, hole cleaning and pay zone protection. The product is particularly suggested for the preparation of polymers mud system. XC-polymer shows good temperature stability up to 300oF.

TYPICAL PROPERTIES

Appearance Cream colored powder pH (1% solution) 6.0 – 8.0 Rheology (1 lb/bbl seawater) Yield point 30 Min. Loss on drying max. 13% Particle Size 100% through 28mesh At least 95% through 42mesh

TREATMENT

XC-Polymer should be added through the hopper at rate of about 15-20 min/sack at dosage of 0.5-2.0 ppb $(1.5 - 6 \text{ kg/m}^3)$.

PACKING

Product is packed in 25kg net multiply paper bags with one moisture proof layer.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. For more information, please refer to the MSDS.

STORAGE

Product should be stored in dry place. Maximum 12 months.





XCD-POLYMER

DESCRIPTION

XCD-Polymer (Xanthan gum biopolymer) is a premium grade DISPERSIBLE viscosifier for oilfield drilling, work-over and completion fluids. It is a high molecular weight polysaccharide produced by fermentation of carbohydrate with Xanthomonas Campestris and shows shear thinning properties.

APPLICATION

XCD-Polymer solutions display exceptional shear thinning properties and good suspension characteristics even in the absence of inorganic colloids. This allows for high penetration rates, hole cleaning and pay zone protection. The product is particularly suggested for the preparation of polymers mud system. XCD-Polymer shows good temperature stability up to 300oF.

TYPICAL PROPERTIES

Appearance Yellowish colored powder pH (1% solution) 6.0 – 8.0 Rheology (1 lb/bbl seawater) Yield point 30 Min. Loss on drying max. 13% Particle Size 100% through 28mesh

TREATMENT

XCD-Polymer should be added through the hopper at rate of about 5-10 min/sack at dosage of 0.5-2.0 ppb $(1.5 - 6 \text{ kg/m}^3)$.

PACKING

Product is packed in 25 kg net multiply paper bags with one moisture proof layer.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. For more information, please refer to the MSDS.

STORAGE

Product should be stored in dry place. Maximum 12 months.





Bentonite

DESCRIPTION

Bentonite of OCMA (API 13A Sec.6)

TYPICAL PROPERTIES

• Viscometer dial reading at 600 rpm

• Yield Point/Plastic viscosity ratio

• Filtrate Volume

• Residue greater than 75 Micrometers

• Moisture Content

30 min.

6 max.

16.0 max

2.5 % max.

13 % max.

PACKING

Bentonite is packed in 1000 kgs jumbo bags.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron.

STORAGE

Product should be stored in a dry place. Maximum 12 months.

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DME

DESCRIPTION

DME Oil-in-Water drilling mud emulsifier is a concentrate designed to emulsify diesel or crude oil in fresh water, sea water or saturated salt/mud systems. DME is a blend of non-ionic surfactants.

APPLICATION

DME is recommended as an Oil-in-Water emulsifier for the following uses:

- High Temperature Emulsion Stability
- Viscosity Control
- Corrosion Inhibitor
- Fast Penetration Rates
- Fluid Loss Control
- Suspending Ability

DME oil-in water emulsifier does not require specialized equipment for mixing. Available make-up water and chemical free low viscosity oils such as diesel or mineral oils are preferred components. Initially 45 to 50 litres of DME to one cubic meter of oil is required. Additional emulsifier is added to the mud system as required.

TYPICAL PROPERTIES

Specific Gravity @ 150C 1.02 ± 0.05 Flash Point > 300 C pH, 5% aqueous dispersion > 8Solubility Water

PACKING

DME is packed in 55 gallon steel drums.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





CI 750

DESCRIPTION

CI 750 is a Corrosion Inhibitor that protects drill pipe and equipment against hydrogen sulphide, carbon dioxide or oxygen types of corrosion. CI 750 is a filming amine formulated with other organic compound.

APPLICATION

Identify the type of corrosion attack and the rate of attack with drill pipe corrosion coupons or visual analysis of the drill pipe. Drill pipe in the hole should be filmed initially by adding 210 litres of CI 750 / oil solvent mixture at the pump suction. Mixture ratios are normally 1 to 6 to 1 to 13 CI 750/solvent. Periodic maintenance treating is required and performed by batching 9 to 15 litres of CI 750 / solvent at the pump suction every 2 to 4 hours. Corrosion rates should be observed tot optimise the inhibitor program. Treating rate may be varied in direct relation to drill pipe inspections and drill pipe corrosion coupon results.

TYPICAL PROPERTIES

Specific Gravity 0.87 ± 0.05 Flash Point $>29^{\circ}$ C Pour Point $<-15^{\circ}$ C Solubility Oil

PACKING

Product is packed in 175 kg drums.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place.





Mud Lubricant

DESCRIPTION

Mud Lubricant is a liquid blend of lubricants designed for water based drilling fluids. ML-22 will reduce friction under extreme pressures and temperatures between bearing surfaces during drilling operations. ML-22 is a high blend of high molecular weight surfactants in suitable carrier.

APPLICATION

Mud Lubricant is recommended for:

- Reduction of rotational torque and pipe drag
- Reduction of differential-pressure sticking
- Spotting to free stuck pipe

Mud Lubricant is generally added to a mud system when rotational torque becomes a problem. Quantities of Mud Lubricant required will be dependent on the solids content of the mud. To relieve less sever drag without treating the entire mud system, batch treat a 200 litre volume at the pump suction and spot the lubricant around the pipe in open hole to the bottom of last casing. The same application method applies to freeing stuck pipe, however the Mud Lubricant slug must be preweighed to the same density as the drilling fluid prior to treatment

TYPICAL PROPERTIES

Specific Gravity 0.87 ± 0.05 Flash Point >30°C Solubility Gasoil

PACKING

Product is packed in 180 kg drums.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place.





H2S Scavenger

DESCRIPTION

H2S Scavenger is a basic Zinc Carbonate for control and removal of soluble sulphides which become incorporated in water based drilling fluids from formation of hydrogen sulphite gas.

TYPICAL PROPERTIES

Appearance White Powder

PACKING

H2S Scavenger is packed in 25 kg multiplayer paper bags.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.

OXS-109

CHEMICAL MINE WORLD CO.



DESCRIPTION

OXS-109 is a water-soluble concentrated liquid oxygen scavenger recommended for use in waters and drilling fluids where oxygen is causing corrosion problems. It is a catalysed ammonium bisulphite.

APPLICATION

OXS-109 is recommended for the following applications:

- · Produced water and disposal systems
- · Hydro tested fluids
- As an additive to packer fluids
- Fresh or co-mingled water-flood systems
- In conjunction with mechanical aeration equipment

OXS-109 will react at ambient temperatures with dissolved oxygen present in water or brine at a rate of 8mg/L OXS-109 to 1 mg/L dissolved oxygen. OXS-109 is corrosive in its concentrated form and should be handled with plastic, plastic lined, or stainless steel chemical injection equipment.

OXS-109 is completely soluble in fresh or saturated brine water. OXS-109 treatments are recommended as a supplement to mechanical or preventative measures used to reduce oxygen contamination

TYPICAL PROPERTIES

Specific Gravity 1.35 – 1.40 Pour Point <-10oC Pour Point > 100o C

PACKING

OXS-109 is packed in 250kg drums.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





P.EMUL 980

DESCRIPTION

P.EMUL 980 is a Primary Emulsifier. It is a oil soluble emulsifier used for stabilizing emulsions of oil and water. It effectively increases the suspension properties of the oil mud. P.EMUL 980 is used where protection of the producing formation is a priority and exhibits oil wetting properties to provide to provide lubricating qualities to the drilling program.

APPLICATION

P.EMUL 980 is used in low concentrations for the formation of emulsions in oil mud systems.

TYPICAL PROPERTIES

AppearanceDark LiquidSpecific Gravity 0.95 ± 0.05 Flash Point $100^{\circ}F$ Pour Point $35^{\circ}F$

PACKING

Product is packed in 200 litre drums.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place.





S.EMUL 460

DESCRIPTION

S.EMUL 460 is a Secondary Emulsifier. It is a soluble emulsifier / oil wetting compound for use in drilling fluids. HTSE 40 is effective in water with high sodium and calcium salt concentrations.

APPLICATION

S.EMUL 460 is used in oil muds with various densities. It is also used in low colloid oil muds with fast penetrating drilling procedures. HT SE 460 successfully stabilizes conventional oil muds.

TYPICAL PROPERTIES

Appearance Dark Liquid Specific Gravity 0.94 ± 0.05 Flash Point 100° F Pour Point 35° F

PACKING

Product is packed in 200 litre drums.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. For more information, please refer to the MSDS.

STORAGE

Product should be stored in a dry place.





OBM-VIS-260

DESCRIPTION

OBM-VIS-260 is a oil mud viscosifier designed to be used as a viscosifier and fluid loss reducing agent for oil based muds. It is compatible for all oil based mud formulations and is high temperature stable with minimum shear.

APPLICATION

OBM-VIS-260 is applied at a rate of 1-4 lbs per barrel. Less OBM-VIS-260 is required when muds are weighted higher with barite and hematite. Additives are not required to initiate the clay reaction.

TYPICAL PROPERTIES

Specific Gravity 2.3 ± 0.5 Appearance Tan Powder Moisture Content < 4%

PACKING

OBM-VIS is packed in 25kg bags.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





OBM-FLC-660A

DESCRIPTION

OBM-FLC 660A is a free flowing product pre-treated for easy dispersion and resistance to contaminates including diesel oil. OBM-FLC is a solid organic material.

APPLICATION

OBM-FLC-660A is used to control sloughing shales by plugging microfractures and providing reduced filtrate invasion and improved mechanical stability.

- Stabilizes troublesome shales
- Provide near gauge hole
- Reduced torque and drag
- Helps seal depleted sands
- Reduces HT/HP filtration loss
- Resistant to mud contaminants
- Does not interfere with log interpretations
- Long shelf life

TYPICAL PROPERTIES

Specific Gravity 1.10 ± 0.05 Fluorescence NIL Sulphur Content Low

RECOMMENDED USES

FLC-660A can be used with all types of invert emulsion mud. OBM-FLC-660A should be added slowly through the mud hopper at 20-25 min per bag.

Shale Stabilization - 4-6 ppb Borehole Lubrication - 2-4 ppb HT/HP Filtration Rate - 2-8 ppb

PACKING

OBM-FLC-660A is packed in multi-wall plastic bags, net 25kg.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





MICA, Flakes C,M,F

DESCRIPTION

MICA from ore is selected and carefully sized in Fine, Medium and Coarse grades. As a Lost Circulation Material very thin and flexible flakes of MICA is sufficiently strong to withstand deformation due to differential pressure and is compatible with oil and water based drilling fluids

TYPICAL PROPERTIES (M)

Residue on mesh 4 0.0%Residue on mesh 10 $80 \pm 5\%$ Residue on mesh 40 98%

Insoluble in 15% HCL 3% max

PACKING

Walnut Shell is packed in 25 kg PP/PE Bags

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





Walnut Shell

DESCRIPTION

It is a specially selected Loss Circulation Material nut shell. Available grade are (F), (M),(C) grades. All grades are carefully sized to provide maximum sealing effectiveness compatible with water and oil based drilling muds.

TYPICAL PROPERTIES (M)

Residue on mesh 4 0.0%Residue on mesh 10 $80 \pm 5\%$ Residue on mesh 40 98%

Insoluble in 15% HCL 3% max

PACKING

Walnut Shell is packed in 25 kg PP/PE Bags

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.

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Oyster Shell

DESCRIPTION

Thin and wide oyster shells are selected and sized in (F) (M) and (C) grades, 100% Calcium Carbonate; material of shell are soluble in 15% hydrochloric acid (HCL)

TYPICAL PROPERTIES (M)

Residue on mesh 4 0.0%Residue on mesh 10 $80 \pm 5\%$ Residue on mesh 40 98%

Insoluble in 15% HCL 3% max

PACKING

Oyster Shell is packed in 25 kg PP/PE Bags

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.

GILSONITE

CHEMICAL MINE WORLD CO.



APPLICATION

Gilsonite is a solid, granular hydrocarbon with specific gravity of 1.07. It is very effective in cementing, due to its excellent bridging properties, which prevents lost circulation in permeable zones, natural and induced fractures and caverns.

Its low density limits excessive hydrostatic pressure on weak formations. Compatible with all API cements and most current additives. It is chemically inert. Provides low-density slurries without addition of large volumes of water. It does not appreciably change thickening time or compressive strength development. Gilsonite provides excellent scouring properties for removing drilling mud from wellbore during placement. Gilsonite can be effective performance to bottom hole temperatures of 300oF (149oC)

TREATMENT

Gilsonite can be used in concentrations of 1 to 25 lbs./sack (10 to 260 kg/ tones of cement).

TYPICAL PROPERTIES

Appearance Dark brown powder
Specific gravity 1.04 – 1.07
Dispersibility Completely dispersible in water
Solubility Iinsoluble in water
Melting point 200–215oC (392–419oF)
Fineness 20 mesh screen, residue < 0.1%
60 mesh screen, residue < 5%
80 mesh screen, residue < 8%
120 mesh screen, residue < 50%
Moisture max. 0.2%

PACKING

In 25 kg propylene bags.

STORAGE

Product should be stored dry place. Max. 12 months.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.





CALCIUM CHLORIDE

DESCRIPTION

Calcium Chloride (CaCl2) salt is used in completion and workover fluid in two purity grades.

APPLICATION

Calcium Chloride (CaCl2) is a very soluble salt, which can increase the density of fresh water to 83 PCF (SG 1.39) it is usually added to fresh water to provide a solid free brine fluid at a specific density. It can be utilized to adjust the activity of water phase in invert emulsion mud's.

TYPICAL PROPERTIES

Appearance: White to grey flakes for min. 77% purity grade

White powder for min. 94% purity grade

Hygroscopic: yes Water Insoluble: max. 0.2%

PACKING

Calcium Chloride (CaCl2) is packed in 25 kg PE bags.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Calcium Chloride causes irritation and is harmful if swallowed, avoid contact with eyes, skin and clothing. Wash thoroughly after handling. In case of contact wash with plenty of water and call a physician. Please refer to the MSDS for more details.

STORAGE

In cool dry place, with un-harmed packing. Maxium 6 months.





DESCRIPTION

KCL is a drilling grade Potassium Chloride used as a shale stabilizer.

TYPICAL PROPERTIES

Moisture max 0.2%
Chloride in KCL Basis min 97.5%
Insoluble Materials max 0.5%
-2 Basis max 0.01 %
Sulphate in SO4
Carbonates Zero
pH, 5% solution 6.5 – 7.5
Heavy Metals in Mg++ & Ca++ Basis max 0.2%
Sodium in Na+ Basis max 1.5%
Iron (Fe++) Zero

PACKING

KCL is packed in PP/PE 25 kg Bags.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.

A100

CHEMICAL MINE WORLD CO.



DESCRIPTION

A100 (Partially Hydrolized Polyacrylamide) is used as a shale stabilizer and rheology aid in water based drilling fluids, usually with KCL.

TYPICAL PROPERTIES

Appearance White free flowing powder Molecular weight 10 million min. Hydrolysed Degree 25 – 35% Moisture 15 % max. 600rpm reading 25 – 35 Sea Water dissolution rate 55 minutes max. Monomer 1000 ppm max Particle Size min 95% passing 20 mesh

PACKING

A100 is packed in 25 kg bags or 1 Ton Big Bags.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





Caustic Soda

DESCRIPTION

Caustic Soda (Sodium Hydroxide-NaOH) is a technical grade, flake product used for increasing pH of Water based muds, for swelling and dispersion of Bentonite and reducing corrosion

TYPICAL PROPERTIES

NaOH min 96% (wt) NaCL max 150 ppm

PACKING

Caustic Soda is packed in 25 kg PP/PE bags.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.

Lim

CHEMICAL MINE WORLD CO.



DESCRIPTION

Lime is used as a pH controller in water based drilling fluids.

TYPICAL PROPERTIES

Ca (OH)2 93% MgO 0.2% R2O3 0.6% CaCO3 2.5% Insoluble in Acid 1.0% L.O.I. 24.5% Moisture 0.7 ± 0.2%

PARTICLE SIZE

Residue on 100 mesh Sieve $0.7\% \pm 0.2\%$ Residue on 200 mesh Sieve $3\% \pm 1\%$

PACKING

Lime is packed in PP/PE 25 kg Bags.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.

Soda Ash

CHEMICAL MINE WORLD CO.



DESCRIPTION

Soda Ash (Sodium Carbonate- Na2 CO3) is used for precipitation of soluble calcium ion (as calcium carbonate) in water based low pH muds.

TYPICAL PROPERTIES

Sodium Carbonate > 99.0%
Chlorides in terms of NaCL < 0.8 %
Iron in erms of Fe2O3 < 0.008 %
Solubility in water < 0.1 %
Moisture max 0.3%
Bulk Density (light ash) min 0.6 gr/cm3
Bulk Density (dense ash) min 1.05 gr/cm3

PACKING

Soda Ash is packed in PP/PE 25 kg or 50 kg Bags.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





DESCRIPTION

Barite is used as a weighting agent for well drilling

TYPICAL PROPERTIES

Density min 4.20 g/cm³
Water Soluble alkaline earth metals as calcium max 250 mg/kg
Residue greater than 75 Micrometer max 3% (wt)
Particles less than 6 micometers in
Equivalent spherical diameter max 30% (wt)
BaSO4 min 83 %

PACKING

Barite is packed in 25 kg Bags or Big Bags

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





Hematite

DESCRIPTION

Hematite or Ferric Oxide (Fe2O3) is a weighting material for water and oil based muds.

TYPICAL PROPERTIES

Density min 4.7 gr/ml
Wet Screen Analysis
Residue on 200 mesh max 3% (wt)
Residue on 325 mesh 5-15% (wt)
Water Soluble Solids max 0.1%
Soluble alkaline earth metals as calcium max 50 ppm
Magnetic Attraction max 5% (wt)

PACKING

Hematite is packed in 25 kg paper bags.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





Limestone Powder

DESCRIPTION

Limestone Powder (CaCO3) is used as a weight material in water and oil based muds. It is soluble in HCL.

TYPICAL PROPERTIES

Density 2.7 gr/ml Acid insoluble max 2% Pass through 100 mesh 100% Pass through 200 mesh min 90% Pass through 325 mesh min 80 ± 5%

PACKING

Hematite is packed in 25 kg PP/PE bags.

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.





CALCIUM BROMIDE

DESCRIPTION

Calcium Bromide (CaBr2) with 14.2 ppg density is used as a completion and workover fluid.

APPLICATION

Because of its high density Calcium Bromide 14.2 fluid is used extensively as a completion, workover and packer fluid in oil field applications. It is compatible with other calcium salts and can be easily mixed with Calcium Chloride.

TYPICAL PROPERTIES

Product: Calcium Bromide Solution

Active Content: Min 52%

Appearance: Colourless and transparent Liquid Specific Gravity (21oC): Min 1.70 g/ml (14.2 lb/gal)

Crystallization Temp: -7 oC

pH: 7-8

Flash Point: None

PACKING

Calcium Bromide (CaBr2) is packed in 55 gal. plastic drums, net weight 340kg.

SAFETY INFORMATION

Utilize normal precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Wash Thoroughly after handling. In case of contact wash with plenty of water and call a physician. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry place.





Salt

DESCRIPTION

Salt (Sodium Chloride) is used for preparation of saturated salt water.

TYPICAL PROPERTIES

Acidity or Alkalinity 0.4 ml of 0.02N NaOJH Barium Not detectable Calcium and Magnesium 0.19% Heavy Metals 0.0005% Insoluble matter 0.27% Iodine or Bromide Not existing Iron Less than 0.0002% Potassium 0.4% Sulfate 0.1% NaCL 96.15%

PACKING

Sodium Chloride is packed in 25 kg PP/PE Bags

SAFETY INFORMATION

Utilize appropriate precautions for employee protection when handling chemical products. Utilize appropriate respirator, gloves, goggles and apron. Please refer to the MSDS for more details.

STORAGE

Product should be stored in a dry well ventilated place.