

Material No.	Category	Short Description	Long Description
1000021559	Chemicals	HYDRATED CALCIUM SULFATE - GYPSUM	ADDITIVE DRILLING FLUID; DRY, FREE FLOWING FINE WHITISH POWDER FORM, HYDRATED CALCIUM SULFATE, FOR USED AS A SOURCE OF CALCIUM IONS TO TREAT CARBONATE CONTAMINATION IN HIGH PH MUDS AND TO AVOID HOLE ENLARGEMENT WHEN ANHYDRITE IS DRILLED, 25 KG (55.1 LBS.) MULTI-WALLED PAPER VALVE/SPOUTTYPE) SACK, COMPLETELY SEALED. THE CONSTRUCTION OF THE MULTI-WALLED PAPER BAG SHALL BE AS FOLLOWS: 1ST PLY 75 LB. MIN. NATURAL KRAFT PAPER (INTERIOR PLY) 2ND PLY 75 LB. MIN. NATURAL KRAFT PAPER. 3RD PLY 80 LB. MIN. NATURAL KRAFT PAPER (EXTERIOR PLY) SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL., CALCIUM SULFATE (GYPSUM): USED AS A SOURCE OF CALCIUM IONS IN WATER-BASED MUD TO TREAT CARBONATE CONTAMINATION IN HIGH PH MUDS, AND TO AVOID WELLBORE ENLARGEMENT WHILE DRILLING ANHYDRIT FORMATION CHEMICAL AND PHYSICAL SPECIFICATIONS PURITY: 95% WT. MINIMUM CALCIUM SULFATE (CASO ₄ .½H ₂ O) OR (CASO ₄ .2H ₂ O) SPECIFIC GRAVITY: 2.3 MINIMUM PARTICLE SIZE: 100% PASS THROUGH 100 US MESH DRY SCREEN CALCIUM CARBONATE, CaCO ₃ : 1.5% WT. MAXIMUM CLAYS: 1.5% WT. MAXIMUM. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).#
1000022134	Chemicals	OIL SOLUBLE CORROSION INHIBITOR	DRILLING FLUID CORROSION INHIBITOR ADDITIVE DRILLING FLUID; LIQUID FORM, CORROSION INHIBITOR, FOR USED TO ALLEVIATE DRILLING FLUIDS CORROSION, LIQUID AMINE, 55 GAL (208 LITER) DRUM SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL., DRILLING FLUID CORROSION INHIBITOR: CATIONIC FILMING POLYAMINE OF A MODIFIED FATTY ACID SOLUBLE IN OIL AND DISPERSIBLE IN WATER USED TO ALLEVIATE DRILLING FLUIDS CORROSION. THE ADDITIVE COATS THE METAL SURFACE WITH A PASSIVATION LAYER TO HELP PROTECT IT FROM HYDROGEN SULFIDE, CARBON DIOXIDE, AND OXYGEN CORROSION. CHEMICAL AND PHYSICAL SPECIFICATIONS: DARK BROWN LIQUID OIL SOLUBLE AND WATER DISPERSIBLE SPECIFIC GRAVITY @ 68°F (20°C): 0.90 - 0.92 FLASH POINT (PMCC): >140°F (60°C) PH (1% SOLUTION IN DI WATER) AT 68°F (20°C): 6 - 8. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS FOR EVERY BATCH (COA) AND CERTIFICATE OF ORIGIN (COO). LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, EXPIRATION DATE, SAP NUMBER AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).
1000022135	Chemicals	AMINE CORROSION INHIBITOR	HIGH TEMPERATURE CORROSION INHIBITOR ADDITIVE DRILLING FLUID; LIQUID FORM, CORROSION INHIBITOR FOR HIGH TEMPERATURE, FOR ALLEVIATE FRESH, BRACKISH OR BRINE PACKER FLUIDS CORROSION, LIQUID AMINES AND AMIDE, 55 GAL (208 LITER) DRUM SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL., HIGH TEMPERATURE CORROSION INHIBITOR: A BLEND OF AMINES AND IMIDAZOLINE AMIDE, SOLUBLE IN OIL AND DISPERSIBLE IN WATER USED TO ALLEVIATE CORROSION IN FRESH, BRACKISH OR BRINE PACKER FLUID AT HIGH WELLBORE TEMPERATURES UP TO 400°F. IMIDAZOLINE ADSORPTION FORMS A CHEMICAL FILM ON IRON AND STEEL SURFACES AND DEVELOPS A PASSIVATION LAYER THAT PROVIDES CORROSION PROTECTION

			<p>IN SOUR H₂S, SWEET CO₂ AND OXYGEN CORROSION ENVIRONMENT ENCOUNTERED IN OIL AND GAS WELLS. CHEMICAL AND PHYSICAL SPECIFICATIONS: DARK AMBER LIQUID OIL SOLUBLE AND WATER DISPERSIBLE SPECIFIC GRAVITY @ 59°F (15°C): 0.8 - 0.9 FLASH POINT (PMCC): >136.4°F (58°C) DILUTED SOLUTION WITH DI WATER (3:1) AT 68°F (20°C): 6 - 7. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).</p>
1000022136	Chemicals	WATER SOLUBLE CORROSION INHIBITOR	<p>CORROSION INHIBITOR-MICROBIOSTAT ADDITIVE DRILLING FLUID; LIQUID FORM,CORROSION INHIBITOR AND BIOCIDE,FOR USED AS A PACKER FLUID CORROSION INHIBITOR,LIQUID AMINE WITH METHANOL MICROBIOSTAT,55 GAL (208 LITER) DRUM SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,CORROSION INHIBITOR-MICROBIOSTAT: A COMBINED LIQUID BIOCIDE AND CORROSION INHIBITOR, CATIONIC, WATER SOLUBLE, HETEROCYCLIC AMINE BLENDED WITH METHANOL MICROBIOSTAT TO CONTROL AEROBIC AND ANAEROBIC BACTERIA GROWTH. IT IS USED AS A PACKER FLUID CORROSION INHIBITOR TO CONTROL GENERAL CORROSION ATTACK ON CASING, TUBING AND DOWNHOLE TOOLS IN CONTACT WITH CLEAR AND VISCOSIFIED COMPLETION BRINES. CHEMICAL AND PHYSICAL SPECIFICATIONS: LIGHT (OR PALE) COLORED LIQUID WATER SOLUBLE SPECIFIC GRAVITY @ 68°F (20°C): 0.98 -1.07 PH (CONCENTRATED SOLUTION) @ 68°F (20°C): 4 - 6 SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).</p>
1000022138	Chemicals	LOW TOXICITY BASED OIL	<p>LOW TOXICITY BASED OIL ADDITIVE DRILLING FLUID; CLEAR LIQUID FORM,LOW TOXICITY,ODORLESS BASE OIL WITH VERY LOW AROMATIC CONTENT,FOR OIL-BASED DRILLING FLUIDS,LOW AROMATIC BASE OIL,BULK,SAES-A-103 PROTECTION OF THE MARINE ENVIRONMENT FROM 8 DECEMBER 2016, EPA 1654, ASTM D5292).,LOW TOXICITY BASE OIL: A LOW AROMATIC CLEAR ODORLESS LIQUID USED TO FORMULATE LOW TOXICITY OIL-BASED DRILLING AND COMPLETION FLUIDS. THIS BASE OIL MUST BE CHEMICALLY COMPATIBLE WITH THE WATER-EMULSIFYING AGENTS, ORGANOPHILIC CLAYS, ORGANOPHILIC LIGNITE AND CROSS-LINKED POLYMERS FILTRATION CONTROL AGENTS TO PRODUCE A STABLE INVERT EMULSION AND ALL OIL SYSTEMS WITH LOW FILTRATION RATES. CHEMICAL AND PHYSICAL SPECIFICATIONS: ODORLESS CLEAR LIQUID, FREE FROM SUSPENDED MATTER SPECIFIC GRAVITY @ 59°F (15°C): 0.70-0.79 (ASTM D1298) FLASH POINT: >185°F (85°C) (ASTM D 93) ANILINE POINT: >167°F (75°C) (ASTM D 611) TOTAL AROMATICS CONTENT: < 0.5% WT. (ASTM D 5292) POLYCYCLIC AROMATICS HYDROCARBONS CONTENT: < 0.1% WT BUT > 0.001% WT (EPA 1654 REV. A) OLEFINS CONTENT: NIL PPM BENZENE CONTENT: NIL PPM POLYNUCLEAR AROMATIC: NIL PPM MYSID SHRIMP NINETY-SIX HOUR BIOASSAY TEST LC50: > 100,000 PPM. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL</p>

			<p>DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS FOR EVERY BATCH (COA) AND CERTIFICATE OF ORIGIN (COO). LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, EXPIRATION DATE, SAP NUMBER AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).</p>
1000022172	Chemicals	ORGANOPHILIC LIGNITE	<p>ORGANOPHILIC LIGNITE ADDITIVE DRILLING FLUID; POWDER ORGANOPHILIC LIGNITE FORM, LEONARDITE OR LIGNITE MINERAL, FOR FILTRATION CONTROL ADDITIVE FOR OBM, LEONARDITE OR OXIDIZED LIGNITE, 50 LBS. (22.7 KG). MULTI-WALLED BAG, VALVE/SPOUT TYPE COMPLETELY SEALED: 1ST PLY 75 LB. MIN. NATURAL KRAFT PAPER (INTERIOR PLY) 2ND PLY 75 LB. MIN. NATURAL KRAFT PAPER. 3RD PLY 80 LB. MIN. NATURAL KRAFT PAPER (EXTERIOR PLY) WET SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL., ORGANOPHILIC LIGNITE: LEONARDITE OR OXIDIZED LIGNITE PROCESSED TO BECOME OIL-DISPERSIBLE ORGANO-HUMATES, TO BE USED AS THE PRIMARY FILTRATION CONTROL ADDITIVE IN ANY OIL BASED DRILLING FLUID SYSTEMS, AND STABLE AT STATIC BOTTOM-HOLE TEMPERATURES UP TO 450°F (232°C). THE PRODUCT CONTAINS NO ASPHALT OR ASPHALT DERIVATIVES AND USED WITHOUT DETERMINATELY IMPACTING EMULSION STABILITY, SUSPENSION AND RHEOLOGICAL PROPERTIES. CHEMICAL AND PHYSICAL SPECIFICATIONS: DRY, GRAY TO BLACK POWDER. MOISTURE: 8% WT. MAXIMUM PASSING THROUGH 70 US MESH: 100% WT. INSOLUBLE IN WATER, DISPERSIBLE IN ORGANIC SOLVENTS IMPURITIES (SAND, LIME, GYPSUM, CLAY, ETC.): 2% WT. MAXIMUM SPECIFIC GRAVITY @ 68°F (20°C): 1.77 TO 1.80 NON-TOXIC, ENVIRONMENTALLY FRIENDLY MAINTAINS LOW FILTRATION RATES AND STABLE EMULSION. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).</p>
1000022173	Chemicals	SECONDARY EMULSIFIER	<p>SECONDARY EMULSIFIER FOR INVERTED EMULSION ADDITIVE DRILLING FLUID; LIQUID BLEND OF FATTY ACID, AMIDE AND METHANOL FORM, BLEND OF POLYAMINATED FATTY ACID & PARTIAL AMIDE OF POLYAMINE WITH METHANOL, FOR SECONDARY EMULSIFIER AND WETTING AGENT FOR INVERTED EMULSION DRILLING FLUIDS, FATTY ACID, AMIDE AND METHANOL, 55 GAL (208 LITER) DRUM SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL, API RECOMMENDED PRACTICE 13B-2 FIFTH EDITION, APRIL 2014, SECONDARY EMULSIFIER FOR INVERTED EMULSION: A STABLE POURABLE BLEND OF POLYAMINATED FATTY ACID AND PARTIAL AMIDE OF POLYAMINE WITH METHANOL. IT IS USED AS THE SECONDARY EMULSIFIER AND WETTING AGENT TO FORMULATE STABLE WATER-IN-OIL EMULSION (INVERTED EMULSION) DRILLING FLUIDS. THE PRODUCT IS NONTOXIC AND WILL NOT CONTAIN VEGETABLE OIL OR ASPHALTIC – TYPE MATERIAL, CHEMICAL AND PHYSICAL SPECIFICATIONS: NON-TOXIC, ENVIRONMENTALLY FRIENDLY SPECIFIC GRAVITY @ 77°F (25°C): 0.92 - 0.96 FLASH POINT (PMCC): >149°F (65°C) ACTIVE INGREDIENTS: FATTY ACID & AMINE DERIVATIVES: 70 WT. % MINIMUM ASPHALTIC-TYPE MATERIAL: NONE ACID NUMBER, MG KOH/G: 45 - 50. TOTAL AMINE, MG KOH/G: 8 – 10 SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS FOR EVERY BATCH</p>

			(COA) AND CERTIFICATE OF ORIGIN (COO). LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, EXPIRATION DATE, SAP NUMBER AND COUNTRY OF ORIGIN, THE ORIGINAL MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).
1000022174	Chemicals	ORGANOPHILIC CLAY - 400F	<p>ORGANOPHILIC CLAY</p> <p>ADDITIVE DRILLING FLUID; WHITE, DRY, FREE FLOWING POWDER, FREE OF LUMPS FORM,ORGANOPHILIC CLAY,FOR IMPARTS VISCOSITY AND SUSPENSION PROPERTIES TO ANY OBM,MODIFIED BENTONITE CLAY WITH QUATERNARIY AMINES,50 LBS. (22.7 KG). MULTI-WALLED BAG,VALVE /SPOUT TYPE COMPLETELY SEALED: 1STPLY 75 LB. MIN. NATURAL KRAFT PAPER (INTERIOR PLY) 2ND PLY 75 LB. MIN. NATURAL KRAFT PAPER. 3RDPLY 80 LB. MIN. NATURAL KRAFT PAPER (EXTERIOR PLY) WET SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,ORGANOPHILIC CLAY: OIL-BASED MUD COMPONENTS.IT IS MODIFIED BENTONITE (MONTMORILLONITE) CLAY WITH QUATERNARY AMINES USED TO IMPART VISCOSITY AND SUSPENSION PROPERTIES TO ANY OIL-BASED DRILLING AND COMPLETION FLUIDS. CHEMICAL AND PHYSICAL SPECIFICATIONS: DRY, OFF-WHITE TO TAN OR GRAY POWDER. MOISTURE: 5% WT. MAXIMUM PASSING THROUGH 70 US MESH (210 MICRONS): 100%WT. INSOLUBLE IN WATER, DISPERSIBLE IN ORGANIC SOLVENTS DECOMPOSITION TEMP: >200°F (93°C), NON-FLAMMABLE SPECIFIC GRAVITY @ 68°F (20°C): 1.57 TO 1.70 NON-TOXIC, ENVIRONMENTALLY FRIENDLY MAINTAIN LONG TERM SUSPENSION. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).</p>
1000022175	Chemicals	PRIMARY EMULSIFIER	<p>PRIMARY EMULSIFIER FOR INVERTED EMULSION</p> <p>ADDITIVE DRILLING FLUID; CLEAR FORM,BLEND OF OXIDIZED TALL OIL AND POLYAMINATED FATTY ACID,FOR PRIMARY EMULSIFIER FOR INVERTED EMULSION DRILLING FLUIDS,TALL OIL AND POLYAMINATED FATTY ACID,55 GAL (208 L) DRUM SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL,API RECOMMENDED PRACTICE 13B-2 FIFTH EDITION, APRIL 2014,PRIMARY EMULSIFIER FOR INVERTED EMULSION: IS A STABLE POURABLE BLEND OF OXIDIZED TALL OIL AND POLYAMINATED FATTY ACID. IT IS USED AS THE PRIMARY EMULSIFIER AND WETTING AGENT TO FORMULATE STABLE WATER OR BRINE-IN-OIL EMULSION (INVERTED EMULSION) DRILLING FLUIDS. THE PRODUCT IS NONTOXIC AND WILL NOT CONTAIN VEGETABLE OIL, OR ASPHALTIC-TYPE MATERIAL. CHEMICAL AND PHYSICAL SPECIFICATIONS NON-TOXIC, ENVIRONMENTALLY FRIENDLY SPECIFIC GRAVITY @ 77°F (25°C): 0.92 - 0.96 FLASH POINT (PMCC): >149°F (65°C) ACTIVE INGREDIENTS: OXIDIZED TALL OIL & FATTY ACID 70% WT. MINIMUM ASPHALTIC-TYPE MATERIAL: NONE ACID NUMBER, MG KOH/G: 80 – 85 SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS FOR EVERY BATCH (COA) AND CERTIFICATE OF ORIGIN (COO). LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, EXPIRATION DATE, SAP NUMBER AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).</p>
1000757581	Chemicals	H2S SCAVENGER, POWDER	<p>H2S SCAVENGER-ZINC-FREE IRON GLUCONATE</p> <p>ADMIXTURE DRILLING MUD; POWDER FORM,IRON GLUCONATE,FOR SCAVENGES</p>

HYDROGEN SULFIDE FROM DRILLING FLUIDS,IRON GLUCONATE,25 KG (55.1 LBS.) PAIL OR SEALED BAG, VALVE/SPOUT TYPE, COMPLETELY SEALED, MOISTURE AND WATERPROOF. THE CONSTRUCTION OF THE MULTI-WALLED PAPER BAG (CONTAINER) SHALL BE AS FOLLOWS: 1ST PLY 75 LB. MIN. NATURAL KRAFT PAPER (INTERIOR PLY) 2ND PLY 75 LB. MIN. NATURAL KRAFT PAPER 3RD PLY SEPARATE INNER BAG LINER, HIGH DENSITY ORIENTED AND CROSS-LAMINATED INNER POLYETHYLENE RESIN LINER (TUBULAR SHAPE) WITH A MINIMUM WALL THICKNESS OF 0.1 MM. 4TH PLY 80 LB. MIN. NATURAL KRAFT PAPER (EXTERIOR PLY). SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,H2S SCAVENGER-ZINC-FREE IRON GLUCONATE: A HIGHLY WATER SOLUBLE GRANULAR POWDER OF IRON GLUCONATE WITH NO HAZARDOUS SUBSTANCES AND USED TO SCAVENGE HYDROGEN SULFIDE FROM WATER-BASED AND OIL-BASED DRILLING FLUIDS. CHEMICAL AND PHYSICAL SPECIFICATIONS: PURITY (IRON GLUCONATE): >90%WT. APPEARANCE: LIGHT YELLOW-GREEN GRANULAR POWDER PH (1% DI WATER SOLUTION):4-5.5 SOLUBILITY: 100% SOLUBLE IN WATER ONE LB./BBL. OF PRODUCT REMOVES APPROXIMATELY 150-220 MG/LITER SULFIDES BULK DENSITY: 650-850 KG/M3 @ 68°F (20°C). SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).

1000757582	Chemicals	ACID SOLUBLE FIBER	<p>ACID SOLUBLE SPUN MINERAL FIBER LOSS CIRCULATION MATERIAL ADDITIVE DRILLING FLUID; FIBER AND POWDER FORM,SPUN MINERAL FIBER,FOR COMBATING LOST CIRCULATION BY PLUGGING VUGULAR AND FRACTURED FORMATIONS DURING DRILLING AND WORKOVER OPERATIONS,SPUN CRYSTALLINE SILICA MINERAL FIBER OR POWDER,30 LB. (13.61KG) SEALED BAG, THE CONSTRUCTION OF THE MULTI-WALLED PAPER BAG SHALL BE AS FOLLOWS: 1ST PLY 30 LB. MIN. NATURAL KRAFT PAPER (INTERIOR PLY) 2ND PLY 30 LB. MIN. NATURAL KRAFT PAPER 3RD PLY SEPARATE INNER BAG LINER, HIGH DENSITY ORIENTED AND CROSS-LAMINATED INNER POLYETHYLENE RESIN LINER (TUBULAR SHAPE) WITH A MINIMUM WALL THICKNESS OF 0.1 MM. 4TH PLY 30 LB. MIN. NATURAL KRAFT PAPER. 5TH PLY 30 LB. MIN. NATURAL KRAFT PAPER WET STRENGTH (EXTERIOR PLY) THE BAG MUST BE VALVE/SPOUT TYPE, COMPLETELY SEALED, MOISTURE AND WATERPROOF. SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL,ACID SOLUBLE SPUN MINERAL FIBER LOST CIRCULATION MATERIAL: A SPECIALLY PROCESSED EXTRUSION OF SPUN CRYSTALLINE SILICA MINERAL FIBER AND POWDER, USED FOR COMBATING LOST CIRCULATION BY PLUGGING VUGULAR AND FRACTURED SUBSURFACE FORMATIONS DURING DRILLING OR WORKOVER OPERATIONS. THE PRODUCT IS 100% INORGANIC, NON-FERMENTING, NON-CORROSIVE, NON-TOXIC, CONTAINS NO ASBESTOS, AND TEMPERATURE STABLE. IT IS COMPATIBLE WITH OIL-BASED AND WATER-BASED FLUID SYSTEMS. CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: WHITE TO GRAY COLOR, ODORLESS INORGANIC AND NON-FERMENTING INSOLUBLE IN WATER, SOLUBILITY IN 15% HCL: 95% MINIMUM PH (1% AQUEOUS SOLUTION): 7-8 BULK DENSITY @ 68°F (20°C): 12-26 LBS./GALLON. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN,</p>
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1000758661	Chemicals	LC-LUBE Fine, 165 MICRON	<p>MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).</p> <p>LC-LUBE FINE-BAKER HUGHES RESILIENT GRAPHITE ADDITIVE DRILLING FLUID; SOLID GRAY TO BLACK SIZED PARTICULATE FORM,GRAPHITE FINE,RESILIENT GRAPHITE,50 LBS. (22.7 KG) BAG THE CONSTRUCTION OF THE MULTI-WALLED PAPER BAG SHALL BE AS FOLLOWS: 1ST PLY 75 LB. MIN. NATURAL KRAFT PAPER (INTERIOR PLY). 2ND PLY 75 LB. MIN. NATURAL KRAFT PAPER. 3RD PLY 80 LB. MIN. NATURAL KRAFT PAPER (EXTERIOR PLY),LC-LUBE FINE-BAKER HUGHES RESILIENT GRAPHITE: GRAY TO BLACK, SIZED RESILIENT GRAPHITE PARTICLES USED FOR WELLBORE STRENGTHENING BY BRIDGING AND PLUGGING THE ROCK PORES TO STOP FLUID LOSSES AND PREVENT STUCK PIPE. IT IS CHEMICALLY INERT, THERMALLY STABLE AND CAN BE USED IN OIL-BASED OR WATER-BASE DRILLING FLUIDS AS A MECHANICAL LUBRICANT FOR REDUCING TORQUE AND DRAG. ANY OTHER ASSOCIATED ELEMENTS MUST NOT BE HARMFUL TO PERSONNEL AND/OR ADVERSELY AFFECT FLUID PROPERTIES. CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: GRAY TO BLACK ODORLESS POWDER, MELTING POINT: >2000°C (>3632°F), SPECIFIC GRAVITY @ 68°F (20°C): 1.75-1.8, SOLUBILITY: INSOLUBLE IN WATER & ACID, PARTICLE SIZE: D90: 300 MICRON D50: 165 MICRON D10: 75 MICRON RESILIENCY: GREATER THAN 80% AT 10,000 PSI. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS)</p>
1000758663	Chemicals	MAX-SHIELD	<p>MAXSHIELD-BAKER HUGHES PERFORMAX SYSTEM ADMIXTURE DRILLING MUD; MILKY, WHITE LIQUID FORM,LATEX & PARTICULATES,FOR PREVENT LOS CIRCULATION, STUCK PIPE AND MECHANICAL LUBRICANT,STYRENE BUTADIENE LATEX AND PARTICULATE,55 GAL (208 LITER) DRUM SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL,MAX-SHIELD BAKER HUGHES PERFORMAX SYSTEM: WHITE LIQUID CONSIST OF MICRONIZED STYRENE BUTADIENE LATEX, 60% WT. AND SIZED PARTICLES USED AS A SEALING POLYMER IN PERFORMAX WATER-BASED DRILLING FLUID SYSTEM TO PREVENT LOST CIRCULATION. THE PRODUCT ALSO ACTS AS A MECHANICAL LUBRICANT TO REDUCE TORQUE AND DRAG. ITS DEFORMABLE SIZED PARTICLES EFFECTIVELY STRENGTHEN FRACTURED AND POROUS FORMATIONS WHEN PACKED TOGETHER UNDER COMPRESSION. THE CREATED FILTER CAKE ACTS AS A SEMI-PERMEABLE MEMBRANE, IMPROVE WELLBORE STABILITY AND REDUCE PORE PRESSURE TRANSMISSION, WHICH HELPS PREVENT STUCK PIPE WHEN DRILLING DEPLETED ZONES. THE PRODUCT IS CHEMICALLY INERT AND COMPATIBLE WITH ALL OTHER DRILLING FLUID ADDITIVES. ALL OTHER ASSOCIATED ELEMENTS MUST NOT BE HARMFUL TO PERSONNEL AND/OR ADVERSELY AFFECT FLUID PROPERTIES. CHEMICAL AND PHYSICAL SPECIFICATIONS APPEARANCE: MILKY, WHITE LIQUID WITH MILD ODOR LIQUID PH: 6 - 9 SPECIFIC GRAVITY @ 68°F (20°C): 1.05 FREEZING POINT: 32°F (0°C) PARTICLE SIZE BEFORE AGING: 1 MICRON OR LESS. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS)</p>

1000775557	Chemicals	STEEL SEAL 50	<p>STEELSEAL 50 RESILIENT GRAPHITE-HALLIBURTON ADDITIVE DRILLING FLUID; POWDER FORM,GRAPHITE,FOR USED FOR WELLBORE STRENGTHENING,NON-MAGNETIC CARBON-BASED MATERIAL,50 LB. (22.7-KG) BAG THE CONSTRUCTION OF THE MULTI-WALLED PAPER BAG SHALL BE AS FOLLOWS: 1ST PLY - 75 LB. MIN. NATURAL KRAFT PAPER (INTERIOR PLY).2ND PLY - 75 LB. MIN. NATURAL KRAFT PAPER. 3RD PLY - 80 LB. MIN. NATURAL KRAFT PAPER (EXTERIOR PLY) SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,STEELSEAL 50 RESILIENT GRAPHITE-HALLIBURTON: BLACK ANGULAR POWDER OF PURE, NON-MAGNETIC CARBON-BASED MATERIAL. IT IS USED FOR WELLBORE STRENGTHENING BY BRIDGING AND PLUGGING ROCK PORES TO AVOID FLUID LOSSES AND PREVENT STUCK PIPE. THE RESILIENT, ANGULAR PARTICULATE IS DESIGNED TO COMPRESS AND "MOLD" ITSELF INTO THE FRACTURE WITH THE INCREASE IN DOWNHOLE PRESSURES AND "REBOUNDS" AS THE DOWNHOLE PRESSURE FLUCTUATES THUS CONTINUE TO ISOLATE THE FRACTURE TIP UNDER CHANGING DIFFERENTIAL PRESSURES. IT IS EFFECTIVE IN AQUEOUS AND NON-AQUEOUS BASED FLUIDS AND IMPARTS LUBRICITY FOR WATER BASED FLUIDS. THIS PRODUCT SHOULD NOT BE USED AS CONVENTIONAL LCM TREATMENTS. CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: DARK GRAY, ODORLESS POWDER COMPOSITION (CARBONS): 99%WT. MINIMUM INSOLUBLE IN WATER HEAVY METALS IRON <10 PPM, NICKEL < 5 PPM, ANTIMONY < 0.05 PPM SPECIFIC GRAVITY @ 77°F (25°C): 1.88 RESILIENCY: 80 - 95% AT 10,000 PSI PARTICLE SIZE DISTRIBUTIONS (SIEVE ANALYSIS): MEDIAN PARTICLE SIZE: 48 - 55 MICRONS. THE PRODUCT DOESN'T ADVERSELY AFFECT THE RHEOLOGICAL PROPERTIES IN CONCENTRATIONS AS HIGH AS 100 LBS/BBL. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS)</p>
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1000827162	Chemicals	LIGNITE	<p>LIGNITE-FILTRATION CONTROL AGENT ADDITIVE DRILLING FLUID; POWDER FORM,LIGNITE,FOR USED FOR FILTRATION AND RHEOLOGY CONTROL OF WATER-BASED MUD,BLACK POWDER NATURALLY OCCURRING LIGNITE,50 LBS. (22.7 KG) BAG. SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,LIGNITE FILTRATION CONTROL AGENT: BLACK POWDER NATURALLY OCCURRING LIGNITE USED FOR FILTRATION AND RHEOLOGY CONTROL OF WATER-BASED DRILLING FLUIDS. IT FUNCTIONS WELL IN HIGH PH ENVIRONMENTS AND IS TOLERANT OF COMMON MUD CONTAMINANTS SUCH AS CALCIUM UP TO 1000 PPM. IT IS SUITABLE FOR USE IN LIME AND GYPSUM MUD SYSTEMS AT TEMPERATURES EXCEEDING 400°F (204°C). OTHER ASSOCIATED ELEMENTS MUST NOT BE HARMFUL TO PERSONNEL AND/OR ADVERSELY AFFECT FLUID PROPERTIES. CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: BLACK POWDER SOLUBILITY: REQUIRES AN ALKALINE WATER TO SOLUBILIZE. PH 9.0 OR ABOVE SPECIFIC GRAVITY @ 68°F (20°C): 1.6 - 1.8 BULK DENSITY @ 20°C: 40 - 52 LBS/FT3 CRYSTALLINE SILICA, QUARTZ (SIO2): 5%WT. MAXIMUM SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY</p>
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			DATA SHEET (MSDS).
1000845182	Chemicals	H2S SCAVENGER, LIQUID	<p>ADDITIVE DRILLING FLUID; LIQUID FORM,NITROGEN,FOR ADMIXTURE HYDROGEN SULFIDE SCAVENGER FOR USE IN WATER-BASE MUD AND INVERT EMULSION OIL-BASE MUD. NITROGEN-BASED ORGANIC LIQUID COMPOUND. READILY AVAILABLE FOR APPLICATION AND CAN BE USED IN COLD AND WARM TEMPERATURES.,A NITROGEN-BASED, NON-ZINC COMPOUND,DRUM,APPEARANCE: AMBER LIQUID. S PH: 9 - 11.5 SOLUBILITY IN WATER: SOLUBL FLASH POINT (METHOD): >212F POUR POINT: < - 4 F,CONTAINER MUST BE PROPERLY LABELED WITH, VENDOR'S NAME, MANUFACTURER'S NAME, LOCATION, PRODUCTION DATE AND BATCH NUMBER. SAUDI ARAMCO WILL CARRY OUT PROPER SAMPLING AND TESTING AS NEEDED. PRODUCT MANUFACTURER AND OR SUPPLIER REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO). THE ORIGINAL MANUFACTURER, PRODUCT NAME, BATCH NUMBER, DATE OF PRODUCTION OF MATERIAL, EXPIRATION DATE AND COUNTRY OF ORIGIN BE PRINTED ON THE CONTAINER OR DRUM, WHETHER IT IS IBC TOTE, BIG BAGS AND/OR PAPER BAGS.#</p>
1000845427	Chemicals	THINNER MODIFIED TANNIN - DRILL THIN	<p>ADDITIVE DRILLING FLUID; BROWN COLORED POWDER FORM,MODIFIED TANNIN COMPOUND,FOR USED AS MUD CONDITIONER PROVIDING RHEOLOGY CONTROL IN WATER BASE FLUIDS WITH MAXIMUM DEFLOCCULATING AND SHEAR STRENGTH REDUCTION AT LOW CONCENTRATIONS.,25 LB MULTIWALL PAPER BAGS,APPEARANCE: BROWN COLORED POWD,CONTAINER MUST BE PROPERLY LABELED WITH, VENDOR'S NAME, MANUFACTURER'S NAME, LOCATION, PRODUCTION DATE AND BATCH NUMBER. SAUDI ARAMCO WILL CARRY OUT PROPER SAMPLING AND TESTING AS NEEDED. PRODUCT MANUFACTURER AND OR SUPPLIER REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO). THE ORIGINAL MANUFACTURER, PRODUCT NAME, BATCH NUMBER, DATE OF PRODUCTION OF MATERIAL, EXPIRATION DATE AND COUNTRY OF ORIGIN BE PRINTED ON THE CONTAINER OR DRUM, WHETHER IT IS IBC TOTE, BIG BAGS AND/OR PAPER BAGS.#</p>
1000847072	Chemicals	HTHP FLUID LOSS SYNTHETIC POLYMER	<p>HHTP FILTRATION CONTROL AGENT ADDITIVE DRILLING FLUID; WHITE POWDER FORM,SYNTHETIC POLYMER,FOR CONTROLS HHTP FLUID LOSS IN FRESH, SALTY, OR HARD BRINE FLUIDS. IT INHIBITS SHALE AND STABILIZING FLUID RHEOLOGY. IT CONTROLS WATER LOSS IN ALL ENVIRONMENTS AND REDUCES DIFFERENTIAL STICKING TENDENCIES.,50 LB MULTIWALL PAPER BAG,APPEARANCE : WHITE COLOURED PO,CONTAINER MUST BE PROPERLY LABELED WITH, VENDOR'S NAME, MANUFACTURER'S NAME, LOCATION, PRODUCTION DATE AND BATCH NUMBER. SAUDI ARAMCO WILL CARRY OUT PROPER SAMPLING AND TESTING AS NEEDED. PRODUCT MANUFACTURER AND OR SUPPLIER REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO). THE ORIGINAL MANUFACTURER, PRODUCT NAME, BATCH NUMBER, DATE OF PRODUCTION OF MATERIAL, EXPIRATION DATE AND COUNTRY OF ORIGIN BE PRINTED ON THE CONTAINER OR DRUM, WHETHER IT IS IBC TOTE, BIG BAGS AND/OR PAPER BAGS.</p>
1000857139	Chemicals	LUBRICANT - RADIAGREEN EME SALT	<p>EXTREME ESTER-BASED ENVIRONMENTAL FRIENDLY LUBRICANT FOR WBM ADDITIVE DRILLING FLUID; LIQUID FORM,BLEND OF FATTY AMIDES ACID AND ESTERS, OR POLYOL ESTER OF FATTY ACIDS,FOR USED IN SOLIDS -FREE DRILL- IN FLUID MUD AND MONOVALENT BRINE TO REDUCE TORQUE AND DRAG IN HIGHLY TORTUOUS OR EXTENDED REACH WELLS.,BLEND OF POYMERIZED FATTY AMIDES, ACIDS AND ESTERS OR,55 GAL (208 LITER) DRUM SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,EXTREME ESTER-BASED FRIENDLY LUBRICANT: COMBUSTIBLE AMBER LIQUID BLEND OF POLYMERIZED FATTY AMIDE, ACID AND ESTER, OR POLYOL ESTER OF FATTY ACID USED IN SOLIDS-FREE DRILL-IN FLUIDS OR MONOVALENT BRINES TO REDUCE TORQUE AND DRAG IN HIGHLY TORTUOUS OR EXTENDED REACH WELLS. IT IS NON-DAMAGING TO PRODUCING ZONES, NON-TOXIC, ENVIRONMENTALLY FRIENDLY AND HELPS PREVENT BIT BALLING AND DIFFERENTIAL STICKING. THE PRODUCT</p>

			<p>IS COMPATIBLE WITH SEAWATER AND MONOVALENT BRINE-BASED DRILLING FLUIDS. OTHER ASSOCIATED ELEMENTS MUST NOT BE HARMFUL TO PERSONNEL AND/OR ADVERSELY AFFECT FLUID PROPERTIES. CHEMICAL AND PHYSICAL SPECIFICATIONS:#APPEARANCE: YELLOW TO DARK AMBER. SWEET AND MILD ODOR SOLUBILITY IN WATER: INSOLUBLE IN WATER SPECIFIC GRAVITY AT THE RANGE BETWEEN 68°F (20°C): 0.95 – 1.05 FLASH POINT (PMCC): >212°F (100°C) IT WILL NOT GREASE OR PHASE OUT SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS.PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS FOR EVERY BATCH (COA) AND CERTIFICATE OF ORIGIN (COO). LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, EXPIRATION DATE, SAP NUMBER AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).#</p>
1000875823	Chemicals	KLA-STOP	<p>KLA-STOP SHALE INHIBITOR MI-SWACO ADDITIVE DRILLING FLUID; LIQUID FORM,POLYAMINE,FOR USED FOR SUPPRESSING CLAY SWELLING AND SHALE INHIBITION,POLYAMINE,55 GAL (208 LITER) DRUM SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL,- 120 KLA-STOP SHALE INHIBITOR M-I SWACO: LIQUID POLYAMINE USED FOR SUPPRESSING CLAY SWELLING AND SHALE INHIBITION IN POLYMER-BASED DRILLING AND DRILL-IN FLUIDS. IT PREVENTS WATER UPTAKE BY CLAYS, AND MAINTAINS CUTTINGS INTEGRITY. (KLA-SHIELD SYSTEM CONSISTS OF DRILZONE, IDCAP D, KLA-STOP AND POROSEAL). CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: CLEAR COLORLESS LIQUID SPECIFIC GRAVITY@ 68°F (20°C): 1.03 - 1.075 PH (5%IN DI WATER): 9.2 - 10.2 FLASH POINT (PMCC) : > 200°F (93°C) VISCOSITY CP @ 75°F (24°C) SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS.PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS FOR EVERY BATCH (COA) AND CERTIFICATE OF ORIGIN (COO).LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, EXPIRATION DATE, SAP NUMBER AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).</p>
1000888050	Chemicals	THERMASET Glass Filler	<p>KLA-STOP SHALE INHIBITOR MI-SWACO ADDITIVE DRILLING FLUID; LIQUID FORM,POLYAMINE,FOR USED FOR SUPPRESSING CLAY SWELLING AND SHALE INHIBITION,POLYAMINE,55 GAL (208 LITER) DRUM SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL,- 120 KLA-STOP SHALE INHIBITOR M-I SWACO: LIQUID POLYAMINE USED FOR SUPPRESSING CLAY SWELLING AND SHALE INHIBITION IN POLYMER-BASED DRILLING AND DRILL-IN FLUIDS. IT PREVENTS WATER UPTAKE BY CLAYS, AND MAINTAINS CUTTINGS INTEGRITY. (KLA-SHIELD SYSTEM CONSISTS OF DRILZONE, IDCAP D, KLA-STOP AND POROSEAL). CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: CLEAR COLORLESS LIQUID SPECIFIC GRAVITY@ 68°F (20°C): 1.03 - 1.075 PH (5%IN DI WATER): 9.2 - 10.2 FLASH POINT (PMCC) : > 200°F (93°C) VISCOSITY CP @ 75°F (24°C) SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS.PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS FOR EVERY BATCH (COA) AND CERTIFICATE OF ORIGIN (COO).LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, EXPIRATION DATE, SAP NUMBER AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).</p>
1000970719	Chemicals	ADDITIVE DRILLING FLUID, SOLID,	ADDITIVE DRILLING FLUID; SOLID FORM,FLUID LOSS CONTROL

		FLUID	POLYMER.,FLUID LOSS CONTROL POLYMER,25 KG BAG,ECOTROL RD IS ONE OF THE COMPONENTS OF RHELIANT OBM SYSTEM BY MI-SWACO, REFER TO OTHER SAP : (SUREMUL, SUREWET, VG-PLUS, VERSAGEL HT, ONETROL HT, RHETHIK, MUL XT, BENTONE 42, VG SUPREME). IT IS A FILTRATION CONTROL AGENT FOR USE IN INVERT OIL EMULSION DRILLING FLUID SYSTEMS TO PROVIDE HTHP FLUID LOSS.THE ORIGINAL MANUFACTURER, PRODUCT NAME, BATCH NUMBER, DATE OF PRODUCTION OF MATERIAL, EXPIRATION DATE AND COUNTRY OF ORIGIN BE PRINTED ON THE CONTAINER OR DRUM, WHETHER IT IS IBC TOTE, BIG BAGS AND/OR PAPER BAGS. PRODUCT MANUFACTURER AND OR SUPPLIER REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGINAL (COO)SAUDI ARAMCO'S PERSONNEL WILL CARRY OUT PROPER SAMPLING AND TESTING AS NEEDED.PHYSICAL PROPERTIES:APPEARANCE: WHITE , FREE-FLOWING POWDER, SPECIFIC GRAVITY: 1.03, SOLUBILITY IN WATER: NOT SOLUBLE.4 YEARS UNDER SHADED AREA.
1001043564	Chemicals	Filtration Control	OBM LIQUID FILTRATION CONTROL ADDITIVE DRILLING FLUID; LIQUID FORM,BLEND,FOR LIQUID FLUID LOSS REDUCER FOR OIL BASED MUDS,OBM LIQUID FILTRATION CONTROL,55 GAL DRUM. SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL,ASTM D93 FOR PMCC,LIQUID FLUID LOSS CONTROL ADDITIVE FOR OIL BASED DRILLING FLUIDS. EFFECTIVE IN ALL TYPES OF BASE OILS INCLUDING DIESEL, SYNTHETIC AND MINERAL OILS. IT IS DESIGNED TO PROVIDE HIGH-TEMPERATURE, HIGH-PRESSURE (HTHP) FILTRATION CONTROL AS AN ALTERNATIVE TO ORGANOPHILIC LIGNITE, SULFONATED ASPHALT, AND GILSONITE. THE CHEMICAL SHOULD NOT CAUSE ADVERSE EFFECT ON THE MUD PROPERTIES INCLUDING THE ELECTRICAL STABILITY. IT SHOULD BE STABLE AND EFFECTIVE AT HIGH TEMPERATURES UP TO 350 DEGF. CHEMICAL AND PHYSICAL SPECIFICATIONS: SPECIFIC GRAVITY @ 68 DEGF (20 DEGC): 0.95-1.1 FLASH POINT (PMCC): > 158 DEGF (70 DEGC). SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS FOR EVERY BATCH (COA) AND CERTIFICATE OF ORIGIN (COO). LABEL: PRODUCT NAME, BATCH NUMBER, PRODUCTION DATE, EXPIRATION DATE, SAP NUMBER AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS).
6000004047	Chemicals	Isolation packer expandable	PACKER; MECHANICAL, SWELLABLE, ISOLATION PACKERS
6000016483	Chemicals	MUD SYSTEM	SUSPENSION SUB-SEA MUDLINE; HANGERS, RUNNING AND RETRIEVING, AND TIEBACK TOOLS TYPE,API 6A AND 17D,FOR OIL AND EXPLORATION WELLS API MONOGRAMMED OR NON-MONOGRAMMED NACE MR0175 LOW ALLOY STEEL OR INCONEL MATERIAL
6000003721	Drilling Equipment	Mudline Suspension system with suspension caps	SUSPENSION SUB-SEA MUDLINE; HANGERS, RUNNING AND RETRIEVING, AND TIEBACK TOOLS TYPE,API 6A AND 17D,FOR OIL AND EXPLORATION WELLS API MONOGRAMMED OR NON-MONOGRAMMED NACE MR0175 LOW ALLOY STEEL OR INCONEL MATERIAL
6000003789	Drilling Equipment	VALVE: BACKPRESSURE; & TWCV; WLHD	VALVE BACKPRESSURE WELLHEAD; FOR HS2, CO2, AMINE,UNS-N07718 BODY,HH TRIM,ALL SIZES HANGER,API 6A,45-SAMSS-005 AND NACE MR0175,FOR BOTH PBV AND TWCV PRESSURE RATING 3M-15M PR-2 (QUALIFIED TO APPENDIX F TO 300F) TR-U (275F) MONOGRAMMED TO API 6A LATEST EDITION
6000003815	Drilling Equipment	API coupling OCTG	COUPLING OCTG; STEEL,FORGED SEAMLESS,45-SAMSS-006,API-5CT API-5B,GR J-55, K-55, L-80, L80-13CR, S-95, P-110,SIZE 2-3/8 IN - 18-5/8 IN,4.7 LB/FT - 115 LB/FT WT
6000004043	Drilling Equipment	Single ICD Installation	CEMENTER; MULTI STAGE INFLATABLE AND MECHANICAL PACKER FOR CEMENTING (DV)
6000004089	Drilling Equipment	Open Hole Expandable latch anchor whipstock	WHIPSTOCK; RETRIEVABLE TYPE,DRILLING OPERATIONS

6000010715	Drilling Equipment	Tracer Subs system (3-1/2" & 4-1/2")	PACKER; EQUALIZER, SAND SCREENS, ACCESSORIES, VARIOUS
6000010721	Drilling Equipment	Expandable Pipe System	UNIT; EXPANDABLE CASING & ACCESSORIES
6000013251	Drilling Equipment	coflexip flexible choke and kill lines	LINE; CHOCK AND KILL TYPE
6000015784	Drilling Equipment	Multilateral system	LATERAL; LATERALS AND ACCESSORIES EQUIPMENT
6000000774	Electrical	TRAY; CABLE, FIBERGLASS	TRAY; CABLE TYPE,FIBERGLASS,NEMA FG-1,S-P-104 SEC. 9
6000000841	Electrical	CIRCUIT BREAKER; AIR; 480 V; LOW VOLTAGE	CIRCUIT BREAKER AIR; 480 V,LOW VOLTAGE POWER TYPE,40 DEG C AMBIENT,FOR INDOOR,16-SAMSS-502
6000000957	Electrical	CABLE;ELECTRICAL, CP, OFFSHORE ANODE	CABLE ELECTRICAL; ORED HODIC PROTECTION OFFSHORE TYPE,17-SAMSS-017,ARMORED
6000001011	Electrical	POWER SUPPLY;ELECTRICAL;SOLAR,CP	POWER SUPPLY ELECTRICAL; HODIC PROTECTION POWER PLY ELECTRICAL SOLAR POWER TYPE,17-SAMSS-012
6000015902	Electrical	UNIT; MOBILE SUBSTATION	UNIT; MOBILE SUBSTATION TYPE,TMSS-01,35-TMSS-1 TMSS-10,46-TMSS-6 TMSS-1,31-TMSS-2 TMSS-2,32-TMSS-3 51-TMSS-1,37-TMSS-1 TMSS-03,11-SDMS-03 54-TMSS-1,MOBILE SUBSTATION AS PER ATTACHED TECHNICAL SPECIFICATION, BASED ON SEC STANDARDS.#SCOPE INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: ENGINEERING, DESIGN, MANUFACTURING, ASSEMBLING, FACTORY TESTING, DELIVERY TO KSA, MINISTRY OF TRANSPORT APPROVAL, DOCUMENTATION,#SPARE PARTS CATALOGUE, SUPPLY OF CRITICAL SPARE PARTS FOR COMMISSIONING, SITE PRE-COMMISSIONING.#
6000016594	Electrical	CAPACITOR BANK	UNIT; SHUNT CAPACITOR TYPE,43-TMSS-01,SAES-P-116,POWER FACTOR CORRECTION CAPACITOR BANK 4.16KV THROUGH 380KV
6000016802	Electrical	ANODE; MMO GRID, WITHOUT LEAD; CP	UNIT; SHUNT CAPACITOR TYPE,43-TMSS-01,SAES-P-116,POWER FACTOR CORRECTION CAPACITOR BANK 4.16KV THROUGH 380KV
6000017041	Electrical	SWITCHGEAR; GAS INSULATED, 33 & 34.5 KV	SWITCHGEAR; SF6 GAS INSULATED TYPE,13.8 AND 34.5KV,SDMS-09,S-P-116,SF6 GAS INSULATED METAL CLAD 13.8 AND 34.5KV SWITCHGEARS, MAXIMUM RATING IS 2500A
6000017060	Electrical	UNIT; MAIN RING, 13.8 KV	UNIT; RING MAIN TYPE,32-SDMS-01,NON-EXTENSIBLE SF6 INSULATED RING MAIN UNIT, 13.8 KV.
6000001582	Instrumentation and IT	CONTROLLER; ELECTRONIC;COMPRESSOR	CONTROLLER; COMPRESSOR INCLUDING SURGE CONTROL TYPE,SPECIALIZED CONTROL SYSTEMS
6000002689	Instrumentation and IT	CALIBRATION GAS CYLINDER FOR GAS MONITOR	CYLINDER; CALIBRATION GAS TYPE,SIZE ANY,ANY,FOR COMBUSTIBLE & TOXIC GAS MONITORS ONLY
6000002725	Instrumentation and IT	ESD; ELECTRONIC; SOLID STATE	RELAY PROTECTION SOLID STATE; EMERGENCY SHUTDOWN SYSTEM ACTION,34-SAMSS-621,SOLID STATE ELECTRONICS BASED USED TO SAFELY SHUTDOWN A PROCESS IN CASE OF PROCESS DEVIATING TO HAZARDOUS OPERATING CONDITIONS.#
6000002732	Instrumentation and IT	MONITOR; FLAME MONITORING SYSTEM	MONITOR; IGNITERS AND BURNERS USED E MONITORING SYSTEM D IN FIRED EQUIPMENT. TYPE,34-SAMSS-617
6000002786	Instrumentation and IT	MONITOR; GAS; HYDROGEN SULFIDE;	MONITOR GAS; HYDROGEN SULFIDE,34-SAMSS-514
6000002822	Instrumentation and IT	GAUGE; RADAR; TANK GAUGING;	GAUGE; RADAR TYPE,34-SAMSS-319,TANK GAUGING EQUIPMENT FOR INVENTORY TANK USE ONLY.
6000002856	Instrumentation and IT	VALVE; AUTOMATIC RECIRCULATION;	VALVE; AUTOMATIC RECIRCULATION TYPE,34-SAMSS-711
6000007390	Instrumentation and IT	GUIDED WAVE RADAR LEVEL TRANSMITTERS	TRANSMITTER LIQUID LEVEL; GUIDED WAVE RADAR (GWR) TYPE,GUIDED WAVE RADAR (GWR) LEVEL TRANSMITTERS
6000009917	Instrumentation and IT	CUSTODY SYSTEM, TRUCK LOADING, POS DISP	SYSTEM:METERING; CUSTODY TRANSFER METERING TYPE,34-SAMSS-167,TRUCK LOADING, POS DISP, TRUCK LOADING, PD METER, TRUCK LOADING, CORIOLIS METER
6000009918	Instrumentation and IT	CUSTODY SYS TRUCK UNLOADING, POS DISP	SYSTEM:METERING; CUSTODY TRANSFER METERING TYPE,34-SAMSS-168,TRUCK UNLOADING, POS DISP
6000010782	Instrumentation and IT	CONTROLLER; SMART VALVE POSITION TYPE	CONTROLLER; SMART VALVE POSITION TYPE,34-SAMSS-634,FOR USE WITH EMERGENCY SHUTDOWN VALVES.
6000012803	Instrumentation and IT	VALVE, RELIEF; SURGE PILOT OPERATED	VALVE RELIEF; SIZE ANY,ANY END CONN,ANY SUPPLY,ANY,SAES-J-605,SURGE, PILOT OPERATED TYPE , FACTORY TESTING IS REQUIRED FOR COMPLEX RATE-OF-RISE OR MODULATING VALVES.
6000014614	Instrumentation and IT	CUSTODY TANK GAUGING	GAUGE TANK LEVEL; RADAR CUSTODY TRANSFER

		SYSTEM, RADAR	TYPE,34-SAMSS-321,SAES-Y-301,RADAR TANK GAUGING SYSTEMS FOR CUSTODY TRANSFER
6000000943	Others	ANODE;BACKFILL CARBON MATERIAL,ICCP,CP	ANODE; S CINED CARBON BACKFILL HODIC PROTECTION TYPE,FOR IMPRESSED CURRENT
6000001310	Others	HYDRANT FIRE; 5 IN INTEGRATED NOZZLE X 2-1/2 IN NPT (2 EA) MAIN	HYDRANT FIRE; 5 IN INTEGRATED NOZZLE X 2-1/2 IN NPT (2 EA) MAIN VLV,6 IN INLET,PR 200 PSI WP,STYLE 3-WAY WET BARREL TYPE,HEAD DUCTILE IRON, DUMMY NUT BRONZE, STEM BRONZE,FBE POLYESTER OUTSIDE AND WET EPOXY INSIDE IN ACCORDANCE WITH 09-SAMSS-089, SAES-H-101, SAES-H-002, APCS-104 ELECTROLESS COATED FLAT FACE ANSI WITH 8 HOLES,09-SAMS-089,UL FM,AWWA AND NFPA,COMMERCIAL UNIT, HYDRANT WRENCH, STORZ AND CAST BRASS CAPS WITH VENT HOLES WITH ZINC PLATED STEEL CHAIN. MUST#FLOW/SUPPLY A FIRE VEHICLE WITH GREATER THAN 5,000 GPM. USED IN COMMUNITY, OFFICE,#TANK FARMS, AND NON-PROCESS AREAS. TESTED AND APPROVED BY FRPD/ESG. IF WET BARREL#HYDRANT IS USED IN PROCESS RELATED AREAS OR AREAS PRONE TO EXPLOSIONS, IT MUST BE#INSTALLED WITH FRPD APPROVED BREAK CHECK VALVE (9COM6000012960).WITH OR WITHOUT FIRE#MONITOR/VALVE/STAND ATTACHMENT.SEE 9COM:6000001314 FOR MONITOR DETAILS. UL, FM,#AWWA AND NFPA 24 CONTACT FRPD RSA FOR DETAILS.
6000011727	Others	DETECTOR FIRE PROTECTION; VERY EARLY WARNING ASPIRED SMOKE	DETECTOR FIRE PROTECTION; VERY EARLY WARNING ASPIRED SMOKE DETECTION SYSTEM TYPE,UL/FM LISTED/APPROVED,COMPLY W,CONSISTING OF HIGH SENSITIVITY AIR ASPIRATED SMOKE DETECTION EQUIPMENT. MUST BE UL/FM#LISTED/APPROVED AND COMPLY WITH NFPA, CONTACT FRPD RSA FOR DETAILS.
6000017250	Others	SUPPRESSOR; FIRE PROTECTION, WET CHEMICAL SYSTEM FOR COMMERCIAL	SUPPRESSOR; FIRE PROTECTION, WET CHEMICAL SYSTEM FOR COMMERCIAL COOKING EQUIPMENT TYPE,UL 300 LISTED,FIRE EXTINGUISHING SYSTEMS FOR,ALL COMPONENTS INCLUDING AGENT CYLINDERS, INSTRUMENTATION, FUSIBLE LINKS, INITIATING DEVICES, WET CHEMICAL, EXPPELLANT GAS, PENUMATIC RELEASE, ACTIVATION MECHANISM, CONTROL EQUIPMENT FOR POWER/GAS, COVERS, CONTROL PANELS.
6000003831	Pipe & OCTG	COLLAR: DRILL; STANDARD	DRILL; SPIRAL/ SLICK TYPE,SIZE 3-1/8" - 11" OD,31 FEET LG LG,AISI 4145 H MODIFIED,API-7-1
6000003855	Pipe & OCTG	CASING: OCTG; API GR; SAW	CASING OCTG; STEEL,SAW,45-SAMSS-006,API-5L,SIZE 26 IN. AND LARGER
6000003877	Pipe & OCTG	TUBING: OCTG; API GR; SEAMLESS	TUBING OCTG; STEEL,SEAMLESS,API-5C2,API-5B 45-SAMSS-006
6000007293	Pipe & OCTG	COUPLING: OCTG; HIGH NICKEL	COUPLING OCTG; HIGH NICKEL ALLOY STAINLESS STEEL,SEAMLESS,API-5CT,ISO-13680 45-SAMSS-006,GR UNS N08020 OR EQUIVALENT,PREMIUM THREAD END CONN,COLLAPSE TEST PER API WITH ONE SAMPLE TESTED PER 200 JOINTS OF MOTHER TUBE
6000007303	Pipe & OCTG	CASING: OCTG; HIGH NICKEL; SEAMLESS	CASING OCTG; HIGH NICKEL ALLOY STAINLESS STEEL,SEAMLESS,API-5CT,ISO-13680 45-SAMSS-006,GR UNS N08028 OR EQUIVALENT,PREMIUM THREAD END CONN,AA. COLLAPSE TEST PER API WITH AB. ONE SAMPLE TESTED PER 200 JOINTS
6000007305	Pipe & OCTG	CROSSOVER: OCTG; HIGH NICKEL	CROSSOVER; OCTG, HIGH NICKEL ALLOY STAINLESS STEEL,SEAMLESS TYPE,PREMIUM THREAD TERMINAL,API-5CT,ISO-13680 45-SAMSS-006,COLLAPSE TEST PER API WITH ONE SAMPLE TESTED PER 200 JOINTS OF MOTHER TUBE, GR UNS N08020 OR EQUIVALENT
6000007307	Pipe & OCTG	PUP JOINT: CASING OCSG; HIGH NICKEL	PUP JOINT OCTG; HIGH NICKEL ALLOY STAINLESS STEEL,SEAMLESS,API-5CT,ISO-13680 45-SAMSS-006,GR UNS N08028 OR EQUIVALENT,PREMIUM THREAD END CONN,COLLAPSE TEST PER API WITH ONE SAMPLE TESTED PER 200 JOINTS OF MOTHER TUBE
6000009160	Pipe & OCTG	PIPE: METALLIC, CLAD PIPE	PIPE METALLIC; CARBON STEEL,CLAD WITH CORROSION RESISTANT ALLOY,01-SAMSS-048,API 5LD
6000014017	Pipe & OCTG	PIPE: METALLIC, WELD OVERLAYED PIPE	PIPE METALLIC; CARBON STEEL,OVERLAYED WITH CORROSION RESISTANT ALLOY,01-SAMSS-048, API 5LD
6000000722	Rotating Equipment	COUPLING: VARIABLE SPEED, HYDRAULIC	COUPLING SHAFT; 13-SAMSS-001,API 613,HYDRAULIC OR PERMANENT MAGNET, VARIABLE OR ADJUSTABLE SPEED, WITH OR WITHOUT GEAR, WHEN GEARED ROTORS USED SHALL COMPLY WITH 13-SAMSS-001 AND API-613.
6000001356	Rotating Equipment	FOAM; OOKFIELD VISCOMETER	FOAM; OOKFIELD VISCOMETER SPINDLE FOR HYDROCARBON GALONS TOTS

		SPINDLE FOR HYDROCARBON GALONS TOTS	FOR MTBE BLENDS K MG/L COD OF 375K,PH 7-8.5 TEMP FOR STORING IS 49 C. BE COMPATIBLE WITH FUEL IS GASOLINE 15% BLEND AFF 1%X3% MCO DEGRADABLE WITH A BOD OF MATERIALS, VENTIONAL OR POLAR FIRES ERIORATION AND SLEDGING FOR EFIGHTING MTBE 15% BLEND M M & TOTE MEET OR EXCEED M CHEMICAL CHANGES,COLORING M SHALL PASS SAUDI D TESTING PROTOCOL. L TEMPERATURE (35C) T FIRE LATEST UFACTURER#S PRODUCT BATCH# TING NFPA11 T NOT CONTAIN (PFOS)&DERIVA FORMANCE FOR 10 YEARS. ASSIUM BICARBONATE (PKP). MIXED TEMPERATURE (36C) DDUCTION DATES SUPPLIED LF LIFE ABOVE 10 YEARS. ULD BE 2 DEG C AND MAXIMUM CIFIC GRAVITY < 1.03, PLIER MUST PROVIDE WARRANTY T AMBIENT TEMP. IS 37.5 C TED THROUGH AN APPROVED LAB TING CERT. EVIDENCE QC MINIMUM STORING AMB. TEMP. 162 AND FM APPROVED 162 LATEST EDITION BLE TEMPERATURE 2 TO 49 C WITH FRESH OR SEA WATER COSITY < 2800 CPS RANTY FOR FOAM SEPARATION H EACH BATCH WITH A TYPE
6000002338	Rotating Equipment	COMPRESSOR; DRY-SCREW, FOR AIR SERVICE	COMPRESSOR; DRY-SCREW TYPE,31-SAMSS-002,FOR AIR SERVICE
6000002367	Rotating Equipment	PUMP; CENTRIFUGAL; CANNED MOTOR;	PUMP CENTRIFUGAL; CANNED MOTOR TYPE,ASME B73.3M / ISO15783
6000002417	Rotating Equipment	FILTER; ELEMENT; COMBUSTION GAS TURBINE;	FILTER ELEMENT; FOR COMBUSTION GAS TURBINE,32-SAMSS-008,AIR INLET, FINAL STAGE
6000002452	Rotating Equipment	Mixer; Process; Propeller; Geared; Belt	MIXER; PROCESS TYPE,MFR STANDARDS,PROPELLER, GEARED, BELT OR DIRECT DRIVE
6000002453	Rotating Equipment	Mixer; Side Entry; 32-Samss-017; Geared;	MIXER; SIDE ENTRY TYPE,32-SAMSS-017,GEARED, ELECTRIC DRIVEN
6000008842	Rotating Equipment	PUMP, CENTRIFUGAL, HORIZONTAL, MOLTEN SU	PUMP CENTRIFUGAL; HORIZONTAL TYPE,MFR STD DESIGN +SAES-G-005,MOLTEN SULFHUR
6000010365	Rotating Equipment	PUMP: MULTIPHASE, ROTARY, API 676	PUMP; MULTIPHASE, ROTARY, SCREW OR PROGRESSIVE TYPE,API 676
6000014422	Rotating Equipment	MONITOR; FIREFIGHTING, REMOTE CONTROL TYPE,ELECTRICALLY OPERATED	MONITOR; FIREFIGHTING, REMOTE CONTROL TYPE,ELECTRICALLY OPERATED SUPPLY,SAES-B-060,AUTOMATIC OSCILLATING FIRE MONITOR SYSTEM WHICH INCLUDE NOZZLES, MONITORS, ELECTRIC MOTORS, CONTROLS AND SPARES, MUST BE UL/FM LISTED/APPROVED FOR MARINE AND HARSH ENVIRONMENT AND SALINE WATER APPLICATION, FIRE MONITOR OPERATING SYSTEM MUST BE CAPABLE OF PROVIDING ALL OPERATING FUNCTIONS IN SAES-B-060
6000015090	Rotating Equipment	TURBINE: WIND, FOR POWER GENERATOR	TURBINE; WIND TYPE,IEC 61400,FOR POWER GENERATOR
6000016462	Rotating Equipment	ENGINE; ENGINE, GAS OR DUEL FUEL INDUSTRIAL TYPE	ENGINE; ENGINE, GAS OR DUEL FUEL INDUSTRIAL TYPE
6000016780	Rotating Equipment	EJECTOR; PROCESS GAS	EJECTOR; GAS OR LIQUID,NACE MR-0175/ISO-15156,EJECTOR PACKAGE FOR PROCESS GAS COMPRESSION. NOT FOR STEAM-VACUUM SERVICES.
6000017070	Rotating Equipment	COMPRESSOR PROCESS; INTEGRAL OR HIGH-SPEED SEPARABLE RECIPROCATING COMPRESSOR TYPE,ISO 13631,FOR PROCESS GAS APPLICATIONS	COMPRESSOR PROCESS; INTEGRAL OR HIGH-SPEED SEPARABLE RECIPROCATING COMPRESSOR TYPE,ISO 13631,FOR PROCESS GAS APPLICATIONS
6000000254	Static Equipment	VALVE; BALL; SCRAPER LAUNCHING; STEEL	VALVE BALL; ANSI CL 150 AND UP SUPPLY,FLANGED OR BUTTWELD END CONN,STEEL BODY,STYLE SCRAPER LAUNCHING,SOFT SEATED SEAT,04-SAMSS-051,04-SAMSS-035 04-SAMSS-048,WITH OR WITHOUT ACTUATOR
6000000265	Static Equipment	VALVE;CHECK;NPS 14 AND ABOVE;NON-FERROUS	VALVE CHECK; SIZE NPS 14 AND ABOVE,ANY RATING SUPPLY,NON-FERROUS(BRASS/BRONZE) BODY,DUAL PLATE,WAFER END CONN,04-SAMSS-035,04-SAMSS-048
6000000280	Static Equipment	VALVE; CHOKE; NEEDLE; 2 INCH AND UP; API	VALVE CHOKE; NEEDLE AND SEAT TYPE,UPTO 3 INCH MAXIMUM ORIFICE BODY,PR 2000 THRU 5000 PSI SUPPLY,FLANGED HUBBED OR BUTTWELD END CONN,MR API 6A,STEEL BODY,04-SAMSS-055,ISO 10423, WITH OR WITHOUT ACTUATOR
6000000290	Static Equipment	VALVE; GATE; THRU	VALVE GATE THRU CONDUIT; SIZE NPS 2 AND UP,ASME CL 150 AND UP

		CONDUIT;EXPANDING GATE	SUPPLY,FLANGED OR BUTTWELD END CONN,STYLE EXPANDING GATE,STEEL BODY,04-SAMSS-050,WITH OR WITHOUT ACTUATOR
6000000308	Static Equipment	VALVE; PLUG; LUBRICATED	VALVE PLUG; LUBRICATED TYPE,SIZE ANY SIZE,ANY PRESSURE RATING SUPPLY,STEEL BODY,04-SAMSS-035,04-SAMSS-048 04-SAMSS-053,04-SAMSS-055 ASME B16.34,API 599 ISO 10423,WITH OR WITHOUT ACTUATOR,ASME CLASS 150 AND UP, API 2000 TRHU 5000.
6000000313	Static Equipment	VALVE: CHOKE; API 6A, 10000 PSI	VALVE CHOKE; NEEDLE AND SEAT TYPE,UPTO 2 INCH MAXIMUM ORIFICE BODY,PR 10000 PSI SUPPLY,HUBBED, FLANGED OR BUTTWELD END CONN,MR API 6A,STEEL BODY,04-SAMSS-055,ISO 10423,WITH OR WITHOUT ACTUATOR
6000000315	Static Equipment	VALVE; CHOKE; AUTOMATIC PLUG-AND-CAGE; H	VALVE CHOKE; PLUG-AND-CAGE SINGLE STAGE TRIM TYPE,UPTO 6 INCH MAXIMUM ORIFICE BODY,PR 10,000 PSI,FLANGED HUBBED OR BUTTWELD END CONN,STEEL BODY,04-SAMSS-055,ISO 10423,WITH OR WITHOUT ACTUATOR
6000001821	Static Equipment	AIR HANDLING UNIT; AHU; CHILLED WATER OR	AIR HANDLING UNIT; AHU TYPE,CHILLED WATER OR DIRECT EXPANSION,ONSHORE ALL SIZES AND OFFSHORE LESS THAN 10 TONS COOLING,MANUFACTURER STANDARD
6000001822	Static Equipment	AIR CONDITIONING UNIT; SELF CONTAINED; O	AIR CONDITIONING UNIT; SELF CONTAINED TYPE,(PACKAGED UNIT) CERTIFIED TO AHRI 340 AND UL 1995 STD
6000001823	Static Equipment	AIR CONDITIONING UNIT; PACKAGED UNIT TRA	AIR CONDITIONING UNIT; PACKAGED UNIT TRAILERIZED TYPE,AIR COOLED,R-22 OR R-134A,MANUFACTURER STANDARD
6000001826	Static Equipment	A/C Unit,mini-split,DE below 5.5 Tons	AIR CONDITIONING UNIT; AIR CONDITIONING UNIT SPLIT TYPE, LESS THAN 5.5 TON COOLING TONNAGE, DIRECT EXPANSION TYPE,AHRI 210/240,UL-1995
6000001838	Static Equipment	CONTROLLER; PROGRAMMABLE LOGIC; ENERGY M	CONTROLLER PROGRAMMABLE LOGIC; SAES-K-011,UL-916 ASHRAE 135,ENERGY MANAGEMENT SYSTEM: BUILDING
6000001862	Static Equipment	A/C UNIT;SPLIT;DIRECT EXP,5.5 TO 63 TONS	AIR CONDITIONING UNIT; AIR CONDITIONING UNIT SPLIT UNIT DIRECT EXPANSION TYPE,SIZES 5.5 TO 63 COOLING TONNAGE COOLING,AHRI 340/360,UL1995,EER VALUE SHALL BE IN ACCORDANCE WITH THE EER TABLE IN SAES-K-001.
6000002397	Static Equipment	BRICK; REFRACTORY	BRICK REFRACTORY; BRICK REFRACTORY
6000002399	Static Equipment	CEMENT; REFRACTORY; SAES-N-100; INSULATI	CEMENT; REFRACTORY TYPE,SAES-N-100,INSULATING
6000002475	Static Equipment	BLOWER; SOOT; 32-SAMSS-029	BLOWER; SOOT TYPE,32-SAMSS-029
6000002879	Static Equipment	SKID; DRYER, INSTRUMENT AIR & COMPRESSED	SKID; DRYER TYPE,32-SAMSS-038,INSTURMENT AIR & COMPRESSED GAS, PRESSURE VESSELS AND MAIN COMPONENTS TO BE SOURCED FROM APPROVED VENDORS PER THE APPLICABLE 9COMS AND SAMSS.
6000009264	Static Equipment	JOINT, METAL TO METAL SEAL	COUPLING PIPE; METAL TO METAL (POSITIVE OR NEGATIVE) SEAL MECHANICAL TERMINAL,IN NPS,OY STEEL,MM (IN),PSI SUPPLY, M,GED MLESS UGHT,E URAL FINISH,ASME,ASME,(IN) (IN),ITIVE OR NEGATIVE ITIVE OR NEGATIVE JOINT; METAL TO METAL SEAL MECHANICAL TYPE,CS/ SS/ALLOY STEEL,(IN) (IN),ITIVE OR NEGATIVE ITIVE OR NEGATIVE
6000011206	Static Equipment	SKID; FILTRATION SYSTEM	SKID; 32-SAMSS-038,FILTRATION SYSTEM
6000011701	Static Equipment	SKID; SEPARATION; TWO/THREE PHASE	SKID; SEPARATION TWO/THREE PHASE, GRAVITY TYPE,32-SAMSS-004,02-SAMSS-005 02-SAMSS-011,04-SAMSS-035 04-SAMSS-048,01-SAMSS-016 SAES-L-105,SAES-L-132 SAES-L-133,SAES-J-001 SAES-L-150,NACE-MR 0175
6000014491	Static Equipment	VALVE; NPS 2 TO 20, COMPOSITE MATERIAL	VALVE; BUTTERFLY, BALL OR CHECK TYPE,SIZE NPS 2 THRU 20,ASME CLASS 150 & 300 SUPPLY,FLANGED END CONN,COMPOSITE (NON-METALLIC) BODY
6000014971	Static Equipment	COUPLER:LPG LOADING,INCLUDE VAPOR	COUPLER; LPG LOADING TYPE,SIZE ALL SIZES,HARD PIPE TERMINAL,INCLUDE VAPOR AND BREAKAWAY COUPLERS,CONTACT CSD FOR DETAILS
6000015600	Static Equipment	VAPOR RECOVERY UNIT (VRU)	UNIT; VAPOR RECOVERY UNIT TYPE,32-SAMSS-004,32-SAMSS-019 API-672,API-681 ASME B73.1 OR ISO 2858,ISO SAES-G-005,SAES-K-101 ASHRAE 90.1 EER,VAPOR RECOVERY UNITS (VRU) IS A PROCESS UNIT/MODULE THAT RECOVERS VOLATILE ORGANIC COMPOUNDS, VOCs, OR VENT GASES SUCH AS METHANE, ETHANE, PROPANE AND CARBON DIOXIDE TO AVOID VENTING TO ATMOSPHERE OR FLARE. IT IS USED TO RECOVER

VAPORS THAT RESULT FROM LOADING OF PETROLEUM AND PETROCHEMICAL PRODUCTS AND TRANSFER OF EVAPORATIVE HYDROCARBONS SUCH AS GASOLINE, NAPHTHA, AROMATICS, FUEL AND ALCOHOL

6000016518

Static Equipment

Spool; Pipe

SPOOL PIPE; ENGINEERING & DESIGN PIPE SPOOL TYPE,ALL SIZES NPS,FLANGED TERMINAL,METALLIC, CARBON STEEL, LTCS, S.S., 01-SAMSS-010 & NACE MR 0175/ISO 15156 COMPLIANT,ALL,HYDROCARBON,WATER AND STEAM SERVICE, USING GAS OR LIQUID AS MOTIVE FORCE.,ANSI B31.3,NACE MR 0175