Material number	Long Description	Commodity	To Be Sourced In:
1000021558	CALCIUM HYDROXIDE (HYDRATED LIME) ADDITIVE DRILLING FLUID; DRY, FREE FLOWING FINE POWDER FORM, CALCIUM HYDROXIDE, CA(OH)2, FOR TO CONTROL PH, BICARBONATE, AND H2S CONTAMINATION. LIME IS ALSO A PRIMARY COMPONENT OF INVERT EMULSION MUDS, CALCIUM HYDROXIDE (HYDRATED LIME), 25 KG (55.1 LBS.) MULTI WALLED PAPER BAG WITH INNER POLYETHYLENE SEALED LINER. SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL., ADDITIVE DRILLING FLUID DRY, FREE FLOWING FINE POWDER FORM, CALCIUM HYDROXIDE, CA(OH)2, FOR TO CONTROL PH, BICARBONATE, AND H2S CONTAMINATION. LIME IS ALSO A PRIMARY COMPONENT OF INVERT EMULSION MUDS, CALCIUM HYDROXIDE (HYDRATED LIME), 25 KG (55.1 LBS.) MULTI WALLED PAPER BAG WITH INNER POLYETHYLENE SEALED LINER. SHIPMENT OF PRODUCTS MUST CONFIRM TO SAUDI ARAMCO EXPORT PACKING MANUAL., CALCIUM HYDROXIDE CA(OH) HYDRATED LIME - TECHNICAL GRADE USED TO INCREASE T PH AND TO PROVIDE CALCIUM IONS IN DRILLING AND COMPLETION FLUIDS TO MAINTAIN A BASIC PH. IT IS AN ESSENTIAL ADDITIVE AS A MEANS OF ADJUSTING THE ALKALINITY WHEN BICARBONATE/CARBONATE AN H2S CONTAMINATIONS EXIST IN ADDITION, LIME IS USE FOR MAINTAINING THE ALKALINITY OF OIL-BASED DRILLING FLUIDS TO ACTIVATE THE FATTY ACID BASED EMULSIFIERS AND OFFERS A DEGREE OF CORROSION PROTECTION. CHEMICAL AND PHYSICAL SPECIFICATIONS WHITE POWDER CALCIUM HYDROXIDE CA(OH)2: 90% WT. MINIMUM MOISTURE: 19WT. MAXIMUM PASS THROUGH 75 #M SIEVE (WET SCREEN): 97%. 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 CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATION. PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WITH THE MATERIAL	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
1000022178	ADMIXTURE, DRILLING MUD: INVERTED EMULSION MUD COMPONENTS, TO FREE STUCK PIPES (EMULSIFIER), SPECIAL BLEND OF LIQUID, ADDITIVE DRILLING FLUID; LIQUID FORM, SURFACTANT, FOR IT IS USED IN A PILL TO DEHYDRATE AND PENETRATES THE WALLCAKE, OIL WETS AND LUIBRICATS THE STRING TO REDUCE THE FORCE REQUIERD TO FREE STUCK PIPE., SURFACTANTS AND CONCENTRATED EMULSIFIERS AND LUBRICANTS, 55 GAL (208 LITER) DRUM SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL., STUCK PIPE SPOTTING FLUI A LIQUID BLEND OF LUBRICANTS, VISCOSIFIERS OIL WETTING SURFACTANTS CONCENTRATED EMULSIFIERS AND LUBRICANTS. SPOTTING AND SOAKING A PILL OF TH MIXTURE AROUND THE STUCK PIPE, DEHYDRATES AND PENETRATES THE WALLCAKE, OIL WETS AND LUBRICATES THE DRILLSTRING TO REDUC THE FORCE REQUIRED TO FR STUCK PIPE. CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: DARK BROWN VISCOUS LIQUID. FLASH POINT (PMCC): > 84 F (28.9 C)SPECIFIC GRAVITY 68 F (20 C):0.90 û 0.98 SAUDI ARAMCO RESERVES TH RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSU COMPLIANCE WITH THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE O ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. LABEL: PRODUCT NAME, BAT NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAM AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHE (MSDS). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT. (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY). PALLET, PLASTIC TYPE, HEAVY-DUTY SIZE (W X L X H), 120 X 120 X 15 CM, DOUBLE-DECK, 4- WAY ENTRY, RACKABLE/STACKABLE, ANTI-SLIP, CHEMICAL AND WEATHER RESISTANT, HYGIENIC AND SHALL BE CERTIFIED (BY A SAUDI ARAMCO RECOGNIZED INDEPENDENT MATERIALS TESTING	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
1000182387	AGENCY) FOR MINIMUM STATIC LOAD CAPACITY AS PER ISO 8611, MS 8314-05 PALLET PACKING SPECIFICATION. CHEMICAL; GR TECHNICAL,2-(2 AMINOETHOXY) ETHANOL,FOR ACID INHIBITOR TO REMOVE CO2 & H2S FROM NATURAL GAS (SWEETENING PROCESS),LIQUID FORM,BULK DELIVERY, IMPORT 18927 L (5000 US GAL),2-(2AMINOETHOXY) ETHANOL,DIGLYCOLAMINE "DGA",MISCIBLE WITH	Drilling & Chemicals	Western Europe, Eastern Europe and
1000182780	WATER & ALCOHOLS, 1.0572 RELATIVE DENSITY AT 20/20 DEG C ANTIFREEZE; MONO ETHYLENE GLYCOL (MEG) TYPE,SPECIFIC GRAVITY 20/20 C 1.115-1.116, DISTILLATIO RANGE 196.0-199.0 DEG C 760 MM HG, WATER (W/W) 0.05% MAX, IRON (PPM W/W 0.1 MAX, ACIDITY WT AS ACETIC ACID 0.001% MAX TECHNICAL, LIQUID, BULK DELIVERY AT SITE, ARAMCO LABORATORY ANALYSIS IS REQUIRED REQUIRES SAUDI ARAMCO HAZCOM LABEL IN M 1000644200 (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY)	Drilling & Chemicals	Africa Western Europe, Eastern Europe and Africa
1000185026	OXYGEN SCAVENGER - SODIUM SULFITE ADDITIVE DRILLING FLUID; WHITE POWDER. FORM, FOR REMOVING SOLUBLE OXYGEN FROM WATER-BASED DRILLING FLUIDS AND MONOVALENT BRINES, SODIUM SULFITE, 60 KG (132 LB) PLASTIC RIMMED FIBER OR METAL DRUM WITH POLYETHYLENE LINER, SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL, OXYGEN SCAVENGER - SODIU SULFITE: ANHYDROUS SODIU SULFITE (NA2SO3) COMMERCIAL GRADE. USED F REMOVING SOLUBLE OXYGEN FROM WATER-BASED DRILLIN FLUIDS AND MONOVALENT BRINES. IT REACTS WITH DISSOLVED OXYGEN TO REDU OXYGEN CORROSION TO FORM SULFATE (SO4-2). THIS REACTION REQUIRES A COBA CATALYST IN THIS CHEMICA SOLUBLE OXYGEN REMOVAL USING SMALL AMOUNTS OF THIS PRODUCT REDUCES THE THERMAL DEGRADATION RATE OF THE DRILLING FLUIDS ORGANIC POLYMERS IN HIGH TEMPERATURE WELLS. CHEMICAL AND PHYSICAL SPECIFICATIONS: PURITY: ANHYDROUS SODIUM SULFITE (NA2SO3): 95%WT. MINIMUM WHITE TO OFF-WHITE POWDE CATALYZED WITH COBALT: 0.03%WT. MINIMUM PH (1% SOLUTION IN DI WATER): HIGHER THAN 8. SAUDI ARAMCO RESERVES THE RIGH TO COLLECT REPRESENTATIV PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WIT 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 SHE (MSDS). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT. (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY). PALLET, PLASTIC TYPE, HEAVY-DUTY SIZE (W X L X H), 120 X 120 X 15 CM, DOUBLE-DECK, 4- WAY ENTRY, RACKABLE/STACKABLE, ANTI-SLIP, CHEMICAL AND WEATHER RESISTANT, HYGIENIC AND RECYCLABLE AND SHALL BE CERTIFIED (BY A SAUDI ARAMCO RECOGNIZED INDEPENDENT MATERIALS TESTING AGENCY) FOR MINIMUM STATIC LOAD CAPACITY AS PER ISO 8611, MS 8314-05 PALLET PACKING SPECIFICATION.	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
1000187178	ANTIFREEZE; TRIETHYLENE GLYCOL TYPE,CAS NO: 112-27-6. MOLECULAR WEIGHT 150 G/MOL, BOILING POINT 285 DEGREE C. PURITY: MORE THAN OR EQUAL 99 (TYPICA IS 99.8) BASED ON ASTM E2409. DEG CONTENT IS LE THAN OR EQUAL 0.5 PERCEN WEIGHT BASED ON ASTM E2409, WATER/MOISTURE: LESS THAN OR EQUAL 0.2 WEIGHT PERCENT BASED ON ASTM E1064. (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY)	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
1000775823	CATALYST; TITANIUM DIOXIDE TYPE,FOR CLAUS SULFUR PLANTS,CYLINDRICAL EXTRUDATE 3-6 MM NOMINAL SIZE FORM,800-1100 KG (1763-2425 LB) SLING BAG, 140-200 KG (308-441 LB) DRUMS,TITANIUM DIOXIDE CLAUS CATALYST MAXIMISES HYDROLYSIS ACTIVITY FOR COS AND CS2, BULK DENSIT LESS THAN OR EQUAL TO 70 - 1100 KG/M3 (43 - 69 LBS/CU FT), TOTAL PORE VOLUME 0.40 - 0.60 CM3/GRAM, CRUSH STRENGTH MEASURED ON NOT LESS THA 50 BALLS SHOULD BE GREAT THAN OR EQUAL TO 14 KG, SURFACE AREA 100-260 M2/GRAM, USED IN CLAUS SULFUR REACTORS (CONVERTERS) IN GAS PLAN & REFINERIES (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY)	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
1000840182	AGENT; FLOW IMPROVER TYPE,FOR DRAG REDUCING AGENT,ISO TANK/ 6000 US GALLON,DENSITY: 8.0 LBS/GAL (0.96 G/CM3), FLASH POINT: NOT APPLICABLE, VISCOSITY: 350 CP @ 511S-1 (NON-NEWTONIAN),(AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY)	Drilling & Chemicals	Western Europe, Eastern Europe and Africa

1000845612	MICROMAX û MANGANESE TETROXIDE ADDITIVE DRILLING FLUID; FINE REDDISH BROWN POWDER FORM,FINE REDDISH BROWN POWDER OF MANGANESE TETROXIDE (MM3O4) WITH AVERAGE SPHERICAL PARTICLE DIAMETER 0.5 û 2 MICRONS. IT IS USED AS WEIGHT MATERIAL IN DRILLING, COMPLETION AND CEMENTING FLUIDS TO REACH HIGH DENSITY DRILLING FLUIDS WITH LOW EQUIVALENT CIRCULATING DENSTY (ECD), MINIMAL SAG AND CAUSE LESS FORMATION DAMAGE. THE CHEMICAL AND ITS ASSOCIATED ELEMENTS MUST NOT BE HARMFUL TO PERSONNEL AND/OR PROPERTIES,FOR USED AS WEIGHT MATERIAL IN DRILLING, COMPLETION AND CEMENTING FLUIDS, MANGANESE TETRAOXIDE,1000 KG (2204 LBS.) MULTI -WALL MOISTURE-PROOF POLYETHYLENE LINED BAGS WITH LIFTING STRAPS, WITHOUT BOTTOM SPOUT. LIFTING STRAP BAG IS DISPOSABLE, TOP CLOSURE WATERTIGHT, STACKABLE. MINIMUM TENSILE STRENGTH FACTOR 5, FLEXURAL STRENGTH FOR NORMAL HANDLING & OUTSIDE STORAGE. THE DISPOSABLE SUPER SACKS SHOULD HAVE AT LEAST 75% OF THEIR SHELF LIFE REMAINING (THE PERIOD FROM DATE OF MANUFACTURING TO THE WARRANTED EXPIRATION DATE) WHEN SHIPPED OR RECEIVED AT DESIGNATED PLACE OF DELIVERY TO SAUDI ARAMCO. REFER TO SAP NUMBER: 1000840600 FOR DISPOSABLE SUPER SACKS SPECIFICATIONS. SUPPLIERS ARE REQUIRED TO WEIGHT THE TRUCKS BEFORE AND AFTER LOADING AND SUBMIT TO MATERIAL SUPPLY AN OFFICIAL TICKET PRINT DATA STATING: DATE AND TIME COMPANY AND ADDRESS, TRUCK IDENTITY NUMBER, MATERIAL NAME, TRUCK WEIGHT BEFORE AND AFTER LOADING. SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL, APPEARANCE: REDDISH-BROWN POWD, CHEMICAL AND PHYSICAL SPECIFICATIONS APPEREANC FINE REDDISH BROWN POWDE ODDRILESS. MINSO4: 85% WT MINIMUM HE CONTENT: 4.5% MAXIMUM PARTICLE DIAMETE DID LESS THAN 5 MICRONS AND D50 0.5 û 2 MICRONS, SOLUBILITY IN WATER: INSOLUBLE, PH (5G IN 50 DI WATER): 7 û 10.5, SPECIFIC GRAVITY @ 68 DE F (20 DEG C): 4.8, MINIM BULK DENSITY: 84 LB/FT3 (950-1050 KG/M3), SURFAC AREA: 1 û 5 M2/G. MICROMA IS ONLY SLIGHTLY SOLUBLE IN ORGANICA ACIDS SUCH A CITRIC ACID, AND IT MUST NOT BE TREATED WITH HYDROCHLORIC ACID (HCL), BECAUSE THE	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
1000876207	COPOLYMER POLYMER SWEEP STICK ADDITIVE DRILLING FLUID; SOLID FORM, ACRYLIC COPOLYMER, FOR USED TO PROVIDE VISCOSITY, REDUCE FRICTION, ENCAPSULATE CUTTINGS AND PROVIDE A LIMITE AMOUNT OF FLUID-LOSS CONTROL IN WBM., ACRYLIC COPOLYMER STICK, 20 STICKS IN 6 GAL METAL CONTAINER SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL, COPOLYMER POLYMER SWEEP STICK: SOLID ACRYLIC COPOLYMER STICK USED TO PROVIDE VISCOSITY, REDUCE FRICTION, ENCAPSULATE CUTTINGS AND PROVIDE A LIMITED AMOUNT OF FLUID-LOSS CONTROL IN WATER-BASE DRILLING FLUIDS. IT IS DROPPED IN THE DRILL STRING DURING CONNECTIONS AND PROVIDES CONSISTENT HIGH VISCOSITY SWEEPING PILL ALTERNATIVE TO HIGH-VISCOSITY MUD SWEEPS. CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: A TUBE FILLED WITH POLYMER SIZE: 1-1/4 15 IN.SPECIFIC GRAVITY @ 68 (20 (2) 1.85 û 1.99 SOLUBLE IN WATER SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WIT THE MATERIAL DESCRIPTION AND SPECIFICATIONS.PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE O 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 NAM AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHE (MSDS). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT. (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY). PALLET, PLASTIC TYPE, HEAVY-DUTY SIZE (W X L X H), 120 X 120 X 15 CM, DOUBLE-DECK, 4- WAY ENTRY, RACKABLE/STACKABLE, ANTI-SLIP, CHEMICAL AND WEATHER RESISTANT, HYGIENIC AND RECYCLABLE AND SHALL BE CERTIFIED (BY A SAUDI ARAMCO RECOGNIZED INDEPENDENT MATERIALS TESTING AGENCY) FOR MINIMUM STATIC LOAD CAPACITY AS PER ISO 8611, MS 8314-05 PALLET PACKING SPECIFICATION.	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
1000908540	HOLEZYME-ST CAKE REMOVER-WILDCAT ADDITIVE DRILLING FLUID; LIQUID FORM, ENZYME, FOR IT IS USED FOR DEGRADING WATER BASED MUD FILTER CAKE, STARCH SPECIFIC ENZYME, 55 GAL (208 LITER) PLASTIC DRUM SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL, LIQUID ENZYME USED FOR DEGRADING WATER BASED MU FILTERCAKE. IT IS A STAR SPECIFIC ENZYME THAT BREAKS DOWN THE STARCH POLYMERS PRESENT IN THE MUD FILTER CAKE AND ENABLES MORE EFFECTIVE ACIDIZING TREATMENT. THE CAKE ACID-SOLUBLE DRILL SOLIDS AND BRIDGING PARTICLES CREATING THE NEAR-WELLBORE DAMAGE CAN BE REMOVED ALLOWING THE MAXIMUM POTENTIAL PRODUCTION. IT IS SUITAB FOR ENVIRONMENTS UP TO 2 F AND OVER A WIDE RANGE PH (3-10). CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: CLEAR LIGHT BROWN LIQUID SPECIFIC GRAVITY @ 68 (20 C): 0.91-1.2 FLASH POINT (PMCC): #320 F (160 C) P 5.5-7.5. SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WIT THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICAT 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 NAM AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHE (MSDS). "UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT" (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY). PALLET, PLASTIC TYPE, HEAVY-DUTY SIZE (W X L X H), 120 X 120 X 15 CM, DOUBLE-DECK, 4- WAY ENTRY, RACKABLE/STACKABLE, ANTI-SLIP, CHEMICAL AND WEATHER RESISTANT, HYGIENIC AND RECYCLABLE AND SHALL BE CERTIFIED (BY A SAUDI ARAMCO RECOGNIZED INDEPENDENT MATERIALS TESTING AGENCY) FOR MINIMUM STATIC LOAD CAPACITY AS PER ISO 8611, MS 8314-05 PALLET PACKING SPECIFICATION.	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
1000959459	CHEMICAL; GR GT GRADE,METHYLDIETHANOLAMINE,FOR GAS TREATMENT AGENT,LIQUID FORM,ISO TANK,2,2-(METHYLIMINO) DIETHANOL N-METHYLDIETHANOLAMINE > 99 %, 2-METHYLAMINOETHANOL N-METHYL-2-ETHANOLAMINE < 0.5%,MDEA,COLORLESS, ODOR: AMMONIACAL, PH: 10.4, BOILING POINT (760 MMHG): 247.3 C, VAPOR PRESSURE < 0.01 KPA AT 20 C, VAPOR DENSITY (AIR = 1): 4.1, SPECIFIC GRAVITY (H2O = 1): 1.041 AT 20 C. MDEA IS CAPABLE OF UNDERGOING REACTIONS TYPICAL OF BOTH ALCOHOLS AND AMINES, FORMING QUATERNARY AMINE SALTS, SOAPS, AND ESTERS. THIS MAKES MDEA A USEFUL INTERMEDIATE IN THE SYNTHESIS OF NUMEROUS PRODUCTS, AND HAS RESULTED IN ITS USE IN MANY DIVERSE AREAS, INCLUDING COATINGS, TEXTILE LUBRICANTS, POLISHES, DETERGENTS, PESTICIDES, PERSONAL CARE PRODUCTS, AND PHARMACEUTICALS.	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
1001062664	ULTRA LOW FLUID INVASION ADDIDITIVE ADDITIVE DRILLING FLUID; FREE FLOWING POWDER TAN FORM, BLEND OF MICRO SIZED ORGANIC PRODUCTS BIOPOLYMERS AND FIBERS, FOR IS AN ENVIRONMENTALLY FRIENDLY AND BIODEGRADABLE BLEND OF MICRO SIZED ORGANIC PRODUCTS, BIOPOLYMERS IS DESIGNED TO SEAL LOW PRESSURE ZONES CREATING AN ULTRA LOW PERMEABILITY SEAL COMPATIBLE WITH WBM AND OBM ALONG WITH MOST COMPLETION FLUIDS, CELLULOSE, SILICA, CRYSTALLINE QUARTZ, BAGS PER PALLET, APPEARANCE: FREE FLOWING POWDER TAN SPECIFIC GRAVITY@68 F=1.0-1.65 PH (5% WT N DI WATER) =6-7 D50= 80-200, CONTAINER MUST BE PROPER LABELED WITH PRODUCT NAM BATCH NUMBER, PRODUCTION DATE, EXPIRATION DATE, S NUMBER AND COUNTRY OF ORIGIN, THE ORIGINAL MANUFACTURER NAME AND CONTACT INFORMATION. EAC SACK SHALL CONTAIN A SPECIFIED NET MASS SAUDI ARAMCO RESERVES THE RIGH TO COLLECT REPRESENTATIV PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WIT THE MATERIAL DESCRIPTION AND SPECIFICATION. MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE O ANALYSIS FOR EVERY BATCH (COA) AND CERTIFICATE OF ORIGIN (COO). SHIPMENTS PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL. HAZCOM ACCORDING TO THE MATERIA SAFETY DATA SHEET (MSDS) SHIPMENTS OF PRODUCTS MU CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL. "UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT" (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY). PALLET, PLASTIC TYPE, HEAVY-DUTY SIZE (W X L X H), 120 X 120 X 15 CM, DOUBLE-DECK, 4- WAY ENTRY, RACKABLE/STACKABLE, ANTI-SLIP, CHEMICAL AND WEATHER RESISTANT, HYGIENIC AND RECYCLABLE AND SHALL BE CERTIFIED (BY A SAUDI ARAMCO RECOGNIZED INDEPENDENT MATERIALS TESTING AGENCY) FOR MINIMUM STATIC LOAD CAPACITY AS PER ISO 8611, MS 8314-05 PALLET PACKING SPECIFICATION.	Drilling & Chemicals	Western Europe, Eastern Europe and Africa

1001130337	EXTREME LUBRICANT FOR UNDERBALANCE COILED TUBING DRILLING ADDITIVE DRILLING FLUID; YELLOW TO DARK AMBER LIQUID FORM, BLEND OF FATTY AMIDES ACID AND ESTERS, OR POLYOL ESTER OF FATTY ACIDS, FOR 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, INCLUDING COILED TUBING, BLEND OF FATTY AMIDES ACID AND ESTERS, OR POLYOL ESTER OF FATTY ACIDS 55 GAL (208 LITER) DRUM (NET VOLUME) APPEARANCE: YELLOW TO DA AMBER. SWEET AND MILD OD SOLUBILITY IN WATER:	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
	ESTER OF FATTY ACIDS,55 GAL (208 LITER) DRUM (NET VOLUME),APPEARANCE: YELLOW TO DA AMBER. SWEET AND MILD OD SOLUBILITY IN WATER: INSOLUBLE IN WATER SPECIFIC GRAVITY AT THE RANGE BETWEEN 68F (20C): 0.95 - 1.05 FLASH POINT (PMCC): GREATER THAN 212 (100C) IT WILL NOT GREAS OR PHASE OUT. SAUDI ARAM RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WIT THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND/OR SUPPLIER ARE		
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	PRODUCT IS COMPATIBLE WI SEAWATER AND MONOVALENT BRINE-BASED DRILLING FLUIDS. OTHER ASSOCIATED ELEMENTS MUST NOT BE HARMFUL TO PERSONNEL AND/OR ADVERSELY AFFECT FLUID PROPERTIES. (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY). PALLET, PLASTIC TYPE, HEAVY-DUTY SIZE (W X L X H), 120 X 120 X 15 CM, DOUBLE-DECK, 4- WAY ENTRY, RACKABLE/STACKABLE, ANTI-SLIP, CHEMICAL AND WEATHER RESISTANT, HYGIENIC AND RECYCLABLE AND SHALL BE CERTIFIED (BY A SAUDI ARAMCO RECOGNIZED INDEPENDENT MATERIALS TESTING AGENCY) FOR MINIMUM STATIC LOAD CAPACITY AS PER ISO 8611, MS 8314-05 PALLET		
600000037	PACKING SPECIFICATION. PIPE METALLIC; ANY NPS,ANY,PE, PEX, PA, PVDF, PEEK,FLEXIBLE PIPE,ER, INTERMEDIATE LAYERS AND ER SHEATHING STRUCTURE,API 17J,APPLICATIONS: ONSHORE / OFFSHORE WATER AND HYDROCARBON APPLICATIONS, REINFORCEMENT: STEEL AND FIBER	Nonmetallic	Western Europe, Eastern Europe and
600000062	TUBING METALLIC; ANY OD,CARBON STEEL,ASTM,BOILER OR HEAT EXCHANGER, ASTM	Pipe	Africa Western Europe, Eastern Europe and Africa
6000000296	VALVE GATE; SIZE UP TO NPS 12,ANY RATING, ALLENDS SUPPLY,CAST OR DUCTILE IRON BODY,04-SAMSS-035,04-SAMSS-048 AWWA,WITH OR WITHOUT ACTUATOR	Valves	Western Europe, Eastern Europe and Africa
6000000297	VALVE GATE; SIZE NPS 14 AND ABOVE,ANY RATING, ALLENDS SUPPLY,CAST OR DUCTILE IRON BODY,04-SAMSS-035,AWWA,WITH OR WITHOUT ACTUATOR	Valves	Western Europe, Eastern Europe and Africa
600000302	VALVE GLOBE; ANY NPS,ANY RATING SUPPLY,ANY ENDS END CONN,CAST OR DUCTILE IRON BODY,04-SAMSS-035,04-SAMSS-048 04-SAMSS-002,WITH OR WITHOUT ACTUATOR, ANY SIZE	Valves	Western Europe, Eastern Europe and Africa
600000308	VALVE PLUG; LUBRICATED TYPE,SIZE ANY SIZE,ANY PRESSURE RATING SUPPLY,ANY END CONN,STEEL BODY,04-SAMSS-035,04-SAMSS-048 04-SAMSS-053,04-SAMSS-055 ASME B16.34,API 599 API 6A,WITH OR WITHOUT ACTUATOR,ASME CLASS 150 AND UP, API 2000 TRHU 5000.	Valves	Western Europe, Eastern Europe and Africa
6000001310	HYDRANT FIRE; 6 IN INLET,PR 200 PSI WP,UL OR/AND FM,COMPLYING WITH 21-SAMSS-15. WITH OR WITHOUT FIRE MONITOR FLANGE. WITH OR WITHOUT BREAKABLE FLANGE CHECK VALVE ASSEMBLY .FOR BREAKABLE FLANGE VALVE SEPARATELY. PURCHASE ORDER MUST SPECIFY THE OPTIONS AS PER 21-SAMSS-15.	Safety & Security Equip	Western Europe, Eastern Europe and Africa
6000001314	MONITOR; FIREFIGHTING, HYDRANT-MOUNTED MANUALLY OPERATED TYPE, ANY RANGE, MEETING 21-SAMSS-16, INDUSTRIAL MONITOR SYSTEM, WILL BE INSTALLED ON#9COM 6000001310	Safety & Security Equip	Western Europe, Eastern Europe and Africa
6000001430	BEADS; SIZE ANY, NATURAL OR SYNTHETIC RUBBER SPONGE, POLYVINYL CHLORIDE FOAM, POLYETHYLENE FOAM OTHER SUITABLE MATERIAL., FLOAT COLLAR FOR MARINE HOSES UNIT. 22-SAMSS-004 E FLOATATION COMPRESSOR, DRY, SCREW TYPE 21, SAMSS, 003, FOR AIR SERVICE	Nonmetallic	Western Europe, Eastern Europe and Africa
6000002338	COMPRESSOR; DRY-SCREW TYPE,31-SAMSS-002,FOR AIR SERVICE FLARE; PROCESSED PLANT TYPE,32-SAMSS-022,ENGINEERING AND SUPPLY FLARE SYSTEMS. INCLUDING TEMPERATURE CONTROLS, IGNITERS WITH	Compressors Host Transfer Equip	Western Europe, Eastern Europe and Africa
6000002508	ACCESSORIES, STACK INCLUDES BLOWERS, FLARE TIP WITH ACCESSORIES, SEAL GAS WITH ACCESSORIES, AND BURNPIT WITH ACCESSORIES. RE DR CYLINDER; CALIBRATION GAS TYPE, SIZE ANY, ANY, FOR COMBUSTIBLE & TOXIC GAS MONITORS ONLY	Heat Transfer Equip Instrumentation	Western Europe, Eastern Europe and Africa Western Europe,
6000002914	ANALYZER; GAS CHROMATOGRAPH TYPE, ANY RANGE, 34-SAMSS-510, PROCESS GAS OR LIQUID	Instrumentation	Eastern Europe and Africa Western Europe,
6000003721	SUSPENSION SUB-SEA MUDLINE; HANGERS, RUNNING AND RETRIEVING, AND TIEBACK TOOLS TYPE,45-SAMSS-005,API 6A AND 17D,FOR OIL AND	Drilling & Chemicals	Eastern Europe and Africa Western Europe,
6000004305	EXPLORATION WELLS API MONOGRAMMED OR NON-MONOGRAMMED NACE MR0175 LOW ALLOY STEEL OR INCONEL MATERIAL PUMP SUBMERSIBLE; ELECTRIC SUBMERSIBLE PUMP, PUMP/MOTOR ASSEMBL, ESP SYSTEM INCLUDES BOTH SURFACE AND DOWNHOLE	Drilling & Chemicals	Eastern Europe and Africa Western Europe,
	EQUIPMENT. SURFACE SKIDS INCLUDE, BUT NOT LIMITED TO VARIABLE SPEED DRIVE, TRANSFORMERS, DISTRIBUTION PANEL, LOOP SWITCHES, JUNCTION BOX, SURFACE CABLE WELLHEAD PENETRATOR. DOWNHOLE EQUIPMENT INCLUDES, BUT NOT LIMITED TO, CABLE, PACKER PENETRATOR, MOTOR LEAD EXTENSION, AUTO FLOW VALVE, Y-TOOL, WIRELINE PLUGS, CABLE PROTECTOR, PUMP, SEAL, MOTOR, SENSOR, PUP JOINT, ADJUSTABLE SUB, POD, SHROUD, USE REPLACEMENT 9COM 6000002370.		Eastern Europe and Africa
6000007813	GRATING; FIRE RETARDANT TYPE,SIZE ANY,PULTRUDED PHENOLIC RESIN,12-SAMSS-023,NONMETALLIC FIBER-REINFORCED COMPOSITE PLATFORMS. SHORE	Nonmetallic	Western Europe, Eastern Europe and Africa
6000009906	COMPUTER FLOW; CUSTODY PRESET CONTROLLER TYPE,34-SAMSS-847,FOR TRUCK LOADING AND UNLOADING SYSTEMS	Instrumentation	Western Europe, Eastern Europe and Africa
6000009908	GAUGE TANK LEVEL; ANY TYPE,ANY RANGE,34-SAMSS-321,CUSTODY TANK RADAR GAUGE, CUSTODY TRANSFER TANK LEVEL GAUGING	Instrumentation	Western Europe, Eastern Europe and Africa
6000010781	BLOCK; FOUNDATION FIELDBUS(FF) WIRING TYPE, INCLUDING POWER SUPPPLIES, FOR USE WITH FOUNDATION FIELD-BUS INSTRUMENTS ONLY	Instrumentation	Western Europe, Eastern Europe and Africa
6000014300	PIPE NON-METALLIC; MAXIMUM 14 IN NPS,REINFORCED THERMOSETTING RESIN,REINFORCED THERMOSETTING RESIN (RTR),FOR WATER (NON-UTILITY) AND HYDROCARBON APPLICATIONS MAX TEMP 200 F,01-SAMSS-042,API 15HR API 15LR	Nonmetallic	Western Europe, Eastern Europe and Africa
6000014200	PIPE; COPPER NICKEL (CUNI) PIPE OR T TYPE, COPPER-NICKEL EITTING: DIDE: EEMILA 224 CUNI DIDE EITTINGS ALL TYPES INCLUDING ELPOWS TEES DEDUCEDS CARS COUDUNG PRANCH CONNECTION DW OR	Pipe Pittings	Western Europe, Eastern Europe and Africa
6000014202	FITTING: PIPE; EEMUA 234,CUNI PIPE FITTINGS, ALL TYPES, INCLUDING ELBOWS, TEES, REDUCERS, CAPS, COUPLING, BRANCH CONNECTION, BW OR SW OR THREADED AS PER EEMUA 234. NON-HYDRCARBON UTILITY.	Pipe Fittings	Western Europe, Eastern Europe and Africa

6000014895	PIPE NON-METALLIC; ANY NPS,ANY,ISO 13628-5,15-SAMSS-503 15-SAMSS-504,UMBILICAL SYSTEM IS AN INTEGRATED BUNDLE OF TUBES, HOSES, POWER CABLES AND/OR FIBER OPTICS ENCLOSED WITH AN OUTER RING SPECIALLY DESIGNED FOR THE SUBSEA ENVIRONMENT TO WHICH IT WILL BE DEPLOYED. OFFSHORE TO TRANSFER POWER, CHEMICALS, WATER, OIL, GAS, AIR, COMMUNICATIONS AND MORE TO AND FROM SUBSEA DEVELOPMENTS.	Nonmetallic	Western Europe, Eastern Europe and Africa
6000015510	ANODE GALVANIC; HIGH TEMPERATURE ZINC,17-SAMSS-006,CATHODIC PROTECTION	Electrical	Western Europe, Eastern Europe and Africa
6000015670	PUMP CENTRIFUGAL; API 685 SEALLESS TYPE,SIZE ANY,ANY,SINGLE STAGE(S),31-SAMSS-685	Pumps	Western Europe, Eastern Europe and Africa
6000016111	CHEMICAL; ANY,SAEP-501,DRA IT IS A CHEMICAL THAT IS COMPOSED OF LONG CHAINS OF VERY HIGH MOLECULAR WEIGHT POLYMERS SUSPENDED IN A CARRIER FLUID USED IN FLUID-TRANSPORTING-PIPELINE TO REDUCE PIPELINE FRICTIONAL LOSSES/PRESSURE DROP FOR THE PURPOSE OF INCREASING PIPELINE FLOW RATE AND/OR DECREASING PIPELINE OPERATING PRESSURE	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
6000016171	ABSORBENT; ANY TYPE,ANY FORM,ADSORBENT: FOR REMOVAL OF MERCURY, MERCAPTANS, HYDROCARBON (BTEX) OR VOLATILE ORGANIC COMPOUND FROM NATURAL GAS, HYDROCARBON CONDENSATE, LPG, NATURAL GASOLINE AND NAPHTHA AND WATER. IT INCLUDES ACTIVATED CARBON, SULFUR/POTASSIUM IODIDE IMPREGNATED CARBON, METAL SULFIDE OR METAL OXIDE	Drilling & Chemicals	Western Europe, Eastern Europe and Africa
6000011229	BURNER; HIGH INTERSITY TYPE,HIGH INTERSITY,FOR SULFUR RECOVER UNIT REACTION FURNACE	Heat Transfer Equip	Western Europe, Eastern Europe and Africa
6000017041	SWITCHGEAR; SF6 GAS INSULATED TYPE,13.8 AND 34.5KV,ANY BIL,SDMS-09,S-P-116,SF6 GAS INSULATED METAL CLAD 13.8 AND 34.5KV SWITCHGEARS, MAXIMUM RATING IS 2500A	Electrical	Western Europe, Eastern Europe and Africa
600000390	CHAIN LOAD RATED; ANY TRADE SI,ANY LOAD,M A391,M A973,CHAIN 80 OR 100 FOR SLINGS LIFTING ASSEMBLIES EXCLUDING POWER ANCHOR CHAIN DE D RATED HORE NSMISSION AND	Gen Sup & Bldg. Mat.	Western Europe, Eastern Europe and Africa
6000017130	PIPE NON-METALLIC; ANY NPS,ANY,01-SAMSS-034, SAES-B-017, ISO 14692,PIPE & FITTING, FIRE-RETARDANT NONMETALLIC RTR FOR ABOVEGROUND FIREWATER SYS. EPOXY BASED REINFORCED THERMOSETTING RESIN PRESSURIZED PIPE. FILAMENT WOUND MANUFACTURING PROCESS WITH ADDITIONAL FIRE RETARDANT LAYER FOR ABOVEGROUND FIREWATER PIPING SYSTEMS (RAW/FIRE COMBINED WATER SYSTEM AND DEDICATED FIREWATER SYSTEM) IN ACCORDANCE WITH FM 1614. FIRE PERFORMANCE CLASSIFICATION AS PER ISO 14692-2 SECTION 6.5.2.	Nonmetallic	Western Europe, Eastern Europe and Africa
600000181	FLANGE PIPE; ALL DESIGNS TYPE,ANY NPS,ANY,EEMUA 234,COPPER-ALLOY FLANGES AND CS BACKING (LAP JOINT) FLANGES PER EEMUA 234. OR OTHER COPPER ALLOYS AS PER ASME 16.5, PIPE FLANGES AND FLANGED FITTINGS, UTILITY, NON-HYDROCARBON.	Pipe Fittings	Western Europe, Eastern Europe and Africa
6000014893	DETECTOR LEAK; FIBER OPTIC TYPE,FOR PIPELINE,SAES-Z-003,THE FIBER OPTIC CABLE SENSING METHOD ANALYSES THE HEAT/TEMP AND THE CONDUCTIVITY OF THE CABLE TO DETECT THE LEAK OCCURS. FOR PIPELINE LEAK DETECTION SYSTEM (PLDS) APPLICATIONS.	Instrumentation	Western Europe, Eastern Europe and Africa
600000903	SWITCH DISCONNECT; HIGH VOLTAGE,ANY ACTION,ELECTRICAL TYPE,30-TMSS-01	Electrical	Western Europe, Eastern Europe and Africa
	BROMIDE (CABR2) DRY 95%,FOR WHITE FREE FLOWING POWDER,CRYSTALLINE OR GRANULAR WITH NO LUMPS,CALCIUM BROMIDE SALT USED FOR PREPARING COMPLETION FLUIDS AS A SINGLE CABR2 SALT SOLUTION WITH MINIMUM DENSITY OF 1.70 GM/CC,AND CAN BE BLENDED WITH ZINC BROMIDE AND CALCIUM CHLORIDE SOLUT,CALCIUM BROMIDE (CABR2) DRY 95%,25 KG (55.1 LB) BAG (NET WEIGHT),WHITE FREE FLOWING POWDE CRYSTALLINE OR GRANULAR WITH NO LUMPS, CALCIUM BROMIDE SALT USED FOR PREPARING COMPLETION FLUIDS AS A SINGLE CABR2 SALT SOLUTION WITH MINIM DENSITY OF 1.70 GM/CC, A CAN BE BLENDED WITH ZINC BROMIDE AND CALCIUM CHLORIDE SOLUTIONS TO FORMULATE, SOLIDS-FREE NON-DAMAGING HIGH-DENSIT BRINE BLENDS WITH DENSITIES UP TO 143 PCF (19.1 LB/GAL). APPEARANC WHITE FREE FLOWING POWDE CRYSTALLINE OR GRANULAR, NO LUMPS SATURATED BRIND SOLUTION: CLEAR COLORLES PURITY AS CABR2, PERCENT 95 MINIMUM SG AT 77 DEG (25 DEG C): 3.2 - 3.4 SOLUBILITY IN WATER AT 6 DEG F (20 DEG C), WT PERCENT 58 MINIMUM IRON, PPM: 10 MAXIMUM CHLORIDE AS CACL2, WT PERCENT 1.5 MAXIMUM SULFATE, PPM: 20 MAXIMUM HEAVY METALS, PP PB: 5 MAXIMUM HG: 1 MAXIMUM AS: 5 MAXIMUM CD 5 MAXIMUM SAUDI ARAMCO RESERVES THE RIGHT TO COLLECT REPRESENTATIVE PRODUCT SAMPLES AND CONDUCT LABORATORY TESTS TO ENSURE COMPLIANCE WIT THE MATERIAL DESCRIPTION AND SPECIFICATIONS. PRODUCT MANUFACTURER AND OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE O ANALYSIS FOR EVERY BATCH (COA) AND CERTIFICATE OF ORIGIN (COO). PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE O ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. U REFERRED IN THIS MATERIA IS NET VOLUME/WEIGHT. LABEL: PRODUCT NAME, BAT NUMBER, PRODUCTION DATE, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAM AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHE MSDS. (AS APPLICABLE, SAFETY DATA SHEET SHOULD BE SUBMITTED WITH PO OFFER AND DURING MATERIAL DELIVERY)		Eastern Europe and Africa
600000017	PIPE METALLIC; ANY NPS,ANY,STEEL,SINGLE STRAIGHT SEAM L-SAW,ASTM A671 CLASS 22 ONLY, ASTM A333,01-SAMSS-043,LOW	Pipe	Eastern Europe and
600000063	TEMPERATURE, EITHER TO APPLIED ASTM A671 OR ASTM A333 TUBING METALLIC; ANY OD, STEEL-ALLOY, ASTM GRADES TP 1, 11, 22, 5 AND 9	Pipe	Africa Eastern Europe and
600000067	TUBING METALLIC; ANY OD, NICKEL-ALLOY, 01-SAMSS-047	Pipe	Africa Eastern Europe and
600000076	BOSS WELDING; ANY OUTLET, ANY, ANY METAL, ANY METAL	Pipe Fittings	Africa Eastern Europe and
600000078	CAP PIPE; BW TERMINAL,NPS NPS,METALLIC,SEAMLESS,02-SAMSS-013,ASTM / ASME,NOTE: CS, LTCS & LOW ALLOY STEEL CAPS ARE COVERED BY 9COM 6000000079	Pipe Fittings	Africa Eastern Europe and Africa
600000079	CAP PIPE; BW TERMINAL,ANY NPS,CARBON STEEL AND LOW ALLOY STEEL,02-SAMSS-005,ASTM ASME,MSS-SP,(INCLUDING LOW TEMPERATURE CARBON STEEL)	Pipe Fittings	Eastern Europe and Africa
600000081	CARDON STEEL) CAP PIPE; SW OR THREADED, NPT TERMINAL,MM, IN NPS,ALLOY STEEL,MM(IN),CLASS SUPPLY,ASTM,GR STEEL GREDE,FORGED, SEAMLESS,BARE FINISH,ANSI B1.20.1,ANSI B16.11,ANSI B16.11,ALLOY STEEL INCLUDING LOW ALLOY STEEL, STAINLESS STEEL, AND NICKEL ALLOY.	Pipe Fittings	Eastern Europe and Africa
600000082	CAP PIPE; SW, NPT TERMINAL,MM, IN NPS,CARBON STEEL,MM(IN),CLASS SUPPLY,ASTM,GR STEEL GREDE,FORGED, SEAMLESS,BARE FINISH,ANSI B12.20.1,ANSI B16.11,ANSI B16.11	Pipe Fittings	Eastern Europe and Africa
600000086	COUPLING PIPE; ANY TERMINAL, ANY SIZE NPS, CARBON STEEL, ANY SUPPLY, ANSI B1.20.1, ANSI B16.11, ANSI B16.11.	Pipe Fittings	Eastern Europe and Africa
6000000089	BRANCH PIPE; ELBOW-LET, WELDOLET, THREDILET, SOCKOLET, LATROLET, ETC TYPE, (CARBON STEEL, LT IN ACCORDANCE TO 02-SAMSS-005) ANY STEEL (LOW ALLOY, STAINLESS STEEL, NICKALE ALLOY IN ACCORDANCE TO 02-SAMSS-013),02-SAMSS-005,02-SAMSS-013,ANY SIZE, SPECIAL, INTEGRALLY REINFORCED CONNECTION	Pipe Fittings	Eastern Europe and Africa
	ELBOW PIPE; BUTT WELDING TERMINAL, STAINLESS STEEL & NICKEL ALLOY, ASTM / ASME, 02-SAMSS-013, ASTM ASME, NOTE: CS, LTCS & LOW ALLOY	Pipe Fittings	Eastern Europe and
600000090			Δfrica
600000090	STEEL ELBOWS ARE COVERED BY 9COM 6000000091 ELBOW PIPE; BUTT WELDING TERMINAL,CARBON STEEL & LOW ALLOY STEEL,02-SAMSS-005,ASTM ASME,MSS-,CARBON STEEL (INCLUDING LOW TEMPERATURE CARBON STEEL) & LOW ALLOY STEEL	Pipe Fittings	Africa Eastern Europe and Africa

600000094	ELBOW PIPE; SW, NPT TERMINAL,MM, IN NPS,CARBON STEEL (CS AND LOW TEMPERATURE STEEL),DEGREE DEG,SHORT, LONG, STND RADIUS,MM(IN),SCH,ASTM,FORGED, SEAMLESS,BARE FINISH,CLASS SUPPLY,ANSI B1.20.1,ANSI B1.16.11,ASTM / ANSI	Pipe Fittings	Eastern Europe and Africa
600000098	FLANGE PIPE; ANY TYPE,ANY NPS,ANY,CAMLOCK	Pipe Fittings	Eastern Europe and Africa
600000100	FLANGE PIPE; BLIND TYPE,ANSI, API SUPPLY,FLANGED TERMINAL,IN NPS,MM (IN),MM (IN) FLG BORE,CARBON STEEL AND LOW ALLOY ST.,ASTM,02- SAMSS-011	Pipe Fittings	Eastern Europe and Africa
600000107	FLANGE PIPE; SLIP ON TYPE,ANY NPS,CARBON STEEL AND LOW ALLOY ST.,ANSI B16.5,02-SAMSS-011	Pipe Fittings	Eastern Europe and
600000115	FLANGE PIPE; WN TYPE,ANSI SUPPLY,FLANGED TERMINAL,IN NPS,MM (IN),MM (IN) FLG BORE,CARBON STEEL AND LOW ALLOY ST.,02-SAMSS-011	Pipe Fittings	Africa Eastern Europe and
600000123	NIPPLE PIPE; SIZE IN,IN LG,ASTM,BARE FINISH,ASTM,ANSI,SEAMLESS	Pipe Fittings	Africa Eastern Europe and
600000126	REDUCER PIPE; BUTT WELD TERMINAL, STAINLESS STEEL AND NICKEL ALLOY, 02-SAMSS-013, ASTM ASME, NOTE: CS, LTCS AND LOW ALLOY REDUCERS ARE COVERED BY 9COM 6000000127	Pipe Fittings	Africa Eastern Europe and
600000127	REDUCER PIPE; BW TERMINAL,CARBON STEEL AND LOW ALLOY STEEL,02-SAMSS-005,ASTM ASME,MSS-SP,(INCLUDING LOW TEMPERATURE CARBON	Pipe Fittings	Africa Eastern Europe and
600000145	STEEL) TEE PIPE; BW TERMINAL,STAINLESS STEEL AND NICKEL ALLOY,02-SAMSS-013,ASTM ASME,NOTE: CS, LTCS AND LOW ALLOY STEEL TEES ARE COVERED BY OCOM, 6000000146	Pipe Fittings	Africa Eastern Europe and
600000146	BY 9COM 6000000146 TEE PIPE; BW TERMINAL,CARBON STEEL, AND LOW ALLOY ST,02-SAMSS-005,ASTM ASME,MSS-,(INCLUDING LOW TEMPERATURE CARBON STEEL)	Pipe Fittings	Africa Eastern Europe and
600000148	TEE PIPE; SOCKET OR THREADED TERMINAL,ANY NPS,ALLOY STEEL,ANSI B16.11,ANSI B16.11	Pipe Fittings	Africa Eastern Europe and Africa
600000149	TEE PIPE; SW, NPT TERMINAL,MM, IN NPS,CARBON STEEL,MM (IN), SCH,ASTM,FORGED, SEAMLESS,BARE FINISH,CLASS SUPPLY,ANSI B1.20.1,ANSI B16.11,ASME B16.11	Pipe Fittings	Eastern Europe and Africa
600000189	FLANGE PIPE; ANY TYPE,ANY NPS,CS, AS, SS,API 6A,ASME VIII DIV 2,CLAMP, COMPLETE ASSY,W/HUBS SEAL RING, BOLTS AND NUTS, ANY SIZE	Pipe Fittings	Eastern Europe and Africa
600000208	FITTING; COMPRESSION TYPE,316 STAINLESS STEEL,316 STAINLESS STEEL OR BETTER	Instrumentation	Eastern Europe and Africa
6000000221	TUBING; INSTRUMENTATION TYPE,STAINLESS STEEL OR NICKEL ALLOYS,ASTM A269,WITH SIZE 3/4 INCH (18 MM) OR SMALLER.	Instrumentation	Eastern Europe and Africa
600000248	VALVE, BALL; SIZE ANY,2000-5000 PSI SUPPLY SUPPLY,FLANGED OR BUTTWELD END CONN,STEEL BODY,STYLE SPLIT BODY,TRUNNION SUPPORTED SUPPORT,SOFT SEATED SEAT,04-SAMSS-055,API 6A,WITH OR WITHOUT ACTUATOR	Valves	Eastern Europe and Africa
600000268	VALVE CHECK; SIZE 2 INCH AND UP,ANSI 150 AND UP SUPPLY,STEEL BODY,DUAL PLATE,WAFER END CONN,04-SAMSS-035,04-SAMSS-048 API 594	Valves	Eastern Europe and Africa
600000269	VALVE CHECK; SIZE ANY,STEEL BODY,NOZZLE SPRING CONTROLLED,FLANGED OR BUTTWELD END CONN,04-SAMSS-035,04-SAMSS-048,NON-SLAM	Valves	Eastern Europe and Africa
600000270	VALVE CHECK; SIZE 1/2 THRU 2 INCH,STEEL BODY,ANY, THREADED, SOCKETWELD, FLANGED OR BUTT WELD ENDS END CONN,04-SAMSS-035,04- SAMSS-048	Valves	Eastern Europe and Africa
600000272	VALVE BUTTERFLY; HIGH PERFORMANCE, TRIPLE ECCENTRIC DESIGN TYPE,SIZE ANY,04-SAMSS-047,04-SAMSS-035 API 609 CATEGORY B,04-SAMSS 04-SAMSS-048 04-SAMSS-048,API 609 CATEGO,METAL SEATED, ZERO LEAKAGE WITH OR WITHOUT ACTUATOR BETTERFLY VALVE METAL SEATED, ZERO LEAKAGE. ANY SIZE AND ANY RATING FLANGED OR BETTWELD ENDS API 609 CATEGORY B	Valves	Eastern Europe and Africa
6000000275	VALVE CHECK; SIZE UP TO 12 INCH,CAST OR DUCTILE IRON BODY,SWING,FLANGED, LUG OR WAFER END CONN,04-SAMSS-035,04-SAMSS-048 04- SAMSS-005	Valves	Eastern Europe and Africa
6000000289	VALVE GATE THRU CONDUIT; SIZE NPS 2 AND UP,ASME CL 150 AND UP SUPPLY,FLANGED OR BUTTWELD END CONN,STEEL BODY,04-SAMSS- 050,METAL SEATED, WITH OR WITHOUT ACTUATOR	Valves	Eastern Europe and Africa
6000000292	VALVE GATE; SIZE UP TO NPS 12,ANY RATING, ALLENDS SUPPLY,NON-FERROUS, (BRONZE/ALUMINUM-BRONZE BODY,04-SAMSS-035,04-SAMSS-048 04-SAMSS-001,WITH OR WITHOUT ACTUATOR	Valves	Eastern Europe and Africa
6000000294	VALVE GATE WEDGE; FLEXIBLE TYPE,SIZE NPS 26 AND UP,ANY SUPPLY,FLANGED OR BUTTWELD END CONN,STEEL BODY,04-SAMSS-001,04-SAMSS-035 04,WITH OR WITHOUT ACTUATOR	Valves	Eastern Europe and Africa
600000295	VALVE GATE WEDGE; SIZE UP TO NPS 4,ANY RATING SUPPLY, THREADED, SOCKETWELD, FLANGED OR BUTTWELD END CONN,STEEL BODY,API 602,04- SAMSS-035 04-SAMSS-048,WITH OR WITHOUT ACTUATOR, SPECIAL ENDS	Valves	Eastern Europe and Africa
600000304	VALVE; INSTRUMENT TYPE,SIZE ANY SIZE,ANY PRESSURE RATING SUPPLY,ANY MATERIAL BODY,04-SAMSS-035,04-SAMSS-048	Valves	Eastern Europe and Africa
600000307	VALVE PLUG; EXPANDING TYPE,SIZE ANY SIZE,ANY PRESSURE RATING SUPPLY,ANY END CONN,STEEL BODY,04-SAMSS-041,04-SAMSS-035 04-SAMSS-048,WITH OR WITHOUT ACTUATOR	Valves	Eastern Europe and Africa
600000315	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,API 6A,WITH OR WITHOUT ACTUATOR	Valves	Eastern Europe and Africa
6000000323	VALVE CHECK; SIZE ANY,2000-5000 SUPPLY SUPPLY,STEEL BODY,SWING,FLANGED, BUTTWELD OR HUBBED END CONN,04-SAMSS-055,API 6A	Valves	Eastern Europe and Africa
600000583	STUD; CONTINUOUS THREAD TYPE,ANY,FLUOROPOLYMER COATED,ANY LG,09-SAMSS-107,SUPPLIED WITH OR WITHOUT COATED NUTS. FASTENERS, NUTS OR ANCHOR BOLTS SHALL BE SOURCED FROM SA APPROVED SOURCES FROM SA APPROVED SOURCES. LINKED TO 9COMS 6000000577, 6000000580 OR 6000000573	Gen Sup & Bldg. Mat.	Eastern Europe and Africa
6000000631	GRATING FIBERGLASS; ANY WD,ANY LG,ANY THK,FOR STRUCTURAL NON-FIRE INTEGR,12-SAMSS-023,ANSI/ACMA/FGMC FRP COMPOSITES	Nonmetallic	Eastern Europe and Africa
6000000774	TRAY; CABLE TYPE,FIBERGLASS,NEMA FG-1,S-P-104 SEC. 9	Nonmetallic	Eastern Europe and Africa
6000000806	CABLE ELECTRICAL HIGH VOLTAGE; 5 KV THROUGH 35 KV SUPPLY,ANY CONDUCTO,SUBMARINE POWER CABLE TYPE,COPPER CONDUCTO,XLPE OR EPR INSUL,POWER TYPE,15-SAMSS-503,AEIC CS6 OR CS8	Electrical	Eastern Europe and Africa
600000937	DRIVE VARIABLE SPEED; ANY RPM OUTP,IEC 60146 / 61136 OR NEMA ICS7,AFD SYSTEM, LESS THAN 1KV	Electrical	Eastern Europe and Africa
600000947	CHARGER FLOAT BATTERY; FLOAT VOLTAGE,ANY OUTPUT,GRATER OR EQUAL TO 100 AMP DC OUTPUT,ANY BATTERY,17-SAMSS-514	Electrical	Eastern Europe and Africa
600000951	BATTERY LEAD ACID STATIONARY; FLOODED ELECTROLYTE TYPE,2-6 VDC,17-SAMSS-511	Electrical	Eastern Europe and Africa
600000996	MOTOR INDUCTION; 500 HP AND ABOVE POWER,4000 V AND ABOVE,3 PHASE PHASE,TEFC/TEAAC/CACA ENCLOSUR,HORIZONTAL MTG,17-SAMSS-502,FORM-WOUND	Electrical	Eastern Europe and Africa
6000001012	POWER SUPPLY UNINTERRUPTIBLE; ABOVE 10 KVA UP TO 200 KVA POWER,17-SAMSS-516,SAES-P-103,INDUSTRIAL PLANTS PRODUCT RANGE	Electrical	Eastern Europe and Africa
6000001443	ARM; MARINE LOADING ARM TYPE,FOR OFFSHORE USE SELF-SUPPORTED WITH TRIPLE SWIVEL ASSEMBLY (TSA) EMERGENCY RELEASE SYSTEM (ERS) & QUICK CONNECT/DISCONNECT COUPLER (QCDC) CONSTRUCTION SPECIFICATION FOR MARINE LOADING ARMS 1999. OCIMF DESIGN &	Pipe Fittings	Eastern Europe and Africa
6000002340	BLOWER; CENTRIFUGAL TYPE,ANY,31-SAMSS-001 CHAPTER 2 OR 3	Heat Transfer Equip	Eastern Europe and Africa
6000002342	PUMP CENTRIFUGAL; SELF-PRIMING TYPE,SIZE ANY,ANY,SINGLE STAGE(S),MFR STANDARD	Pumps	Eastern Europe and Africa
6000002361	PUMP RECIPROCATING; POSITIVE DISPLACEMENT, CONTROLLED VOLUME TYPE,ANY,31-SAMSS-009	Pumps	Eastern Europe and Africa
			Airica

6000002366	PUMP CENTRIFUGAL; MAGNETIC DRIVE TYPE, SIZE ANY, ANY, SINGLE STAGE(S), HORIZONTAL MTG, ASME B73.3M / ISO15783	Pumps	Eastern Europe and
			Africa
6000002368	PUMP RECIPROCATING; PISTON, PLUNGER TYPE,ANY,API 674	Pumps	Eastern Europe and Africa
6000002433	HEAT EXCHANGER AIR COOLED; ANY TYPE,ANY INLT/OTL,32-SAMSS-011,NOTICE TO REQUISITIONER: THIS 9COM ACCESS TEMPLATE VIA HTTPS://SHAREK.ARAMCO.COM.S A/ORGS/30003143/30012601/3 0 014160/DOCUMENT/PRT/RT_TREE .HTM	Heat Transfer Equip	Eastern Europe and Africa
6000002461	SKID; MEMBRANE TYPE,32-SAMSS-038,NITROGEN GENERATION	Not assigned	Eastern Europe and Africa
6000002487	BUNDLE TUBE; ANY TYPE,32-SAMSS-007	Heat Transfer Equip	Eastern Europe and Africa
6000002529	HEAT EXCHANGER SHELL & TUBE; ANY TUBE DIA,ANY INLT/OTL,ANY INLT/OTL,ALL MATL OTHER THAN CARBON STEEL & LOW ALLOY STEEL OR SHELL,WALL THK GREATER THAN 38 MM (1.5 IN) TUBE THK,32-SAMSS-007	Heat Transfer Equip	Eastern Europe and Africa
6000002549	Non-Reclosing Pressure Relief Devices	Instrumentation	Eastern Europe and Africa
6000002738	FLOWMETER; ULTRASONIC TYPE,34-SAMSS-010,SPOOL OR IN-LINE TYPE	Instrumentation	Eastern Europe and Africa
6000002782	MONITOR GAS; COMBUSTIBLE,ANY RANGE,34-SAMSS-514	Instrumentation	Eastern Europe and Africa
6000002792	ORIFICE; ANY TYPE,SIZE ANY,ASSEMBLY: PLATE, FLANGE, SEALING RING	Instrumentation	Eastern Europe and Africa
6000002901	ACTUATOR VALVE ELECTRIC; SIZE ANY,ANY ACTION,34-SAMSS-716,ACTUATOR: FOR OPERATING VALVE ELECTRIC MOTOR	Instrumentation	Eastern Europe and Africa
6000002917	FLOWMETER; MPFM FOR OIL FIELD APPLICATION TYPE,34-SAMSS-001,FOR OIL FLOW RATE MEASUREMENT	Instrumentation	Eastern Europe and Africa
6000003659	COMPLETION ASSEMBLY TUBING; WELLHEAD, OIL TYPE,PR API 2 - 5M PSI,FOR H2S, CO2 AND AMINE,PSL 2,MR DD,PR 2 (APPENDIX F),TR U,API-6A,NACE MR0175 45-SAMSS-005,TO BE API MONOGRAMMED	Drilling & Chemicals	Eastern Europe and Africa
6000004087	VALVE; SUB-SURFACE SAFETY TYPE,SIZE ANY,API-14A,NACE MR-01-75/ ISO 1515,API MONOGRAMMED,API MONOGRAMMED	Drilling & Chemicals	Eastern Europe and Africa
6000007390	TRANSMITTER LIQUID LEVEL; GUIDED WAVE RADAR (GWR) TYPE,GUIDED WAVE RADAR (GWR) LEVEL TRANSMITTERS	Instrumentation	Eastern Europe and Africa
6000012420	VALVE BALL; SIZE NPS 26 AND UP,ASME CLASS 150 AND UP SUPPLY,FLANGED OR BUTTWELDED END CONN,STEEL BODY,STYLE SPLIT BODY,TRUNNION SUPPORTED SUPPORT,SOFT SEATED SEAT,04-SAMSS-051,04-SAMSS-035 04-SAMSS-048,WITH OR WITHOUT ACTUATOR	Valves	Eastern Europe and Africa
6000013742	VALVE, BALL; SIZE UP TO 24 IN,ANSI CL 150 AND UP SUPPLY,FLANGED OR BUTTWELD END CONN,ANY BODY,STYLE SPLIT BODY,TRUNNION SUPPORTED SUPPORT,04-SAMSS-048,04-SAMSS-035 04-SAMSS-051,DOUBLE ISOLATION TWIN BALL WITH OR WITHOUT ACTUATOR	Valves	Eastern Europe and Africa
6000015607	VALVE, BALL; SIZE 2-1/16 IN AND UP,2000-5000 PSI SUPPLY,FLANGED, HUBBED OR BUTTWELD END CONN,ANY BODY,STYLE SPLIT BODY OR TOP ENTRY,TRUNNION SUPPORTED SUPPORT,METAL SEATED SEAT,04-SAMSS-055,API 6A	Valves	Eastern Europe and Africa
600000101	FLANGE PIPE; BLIND TYPE,ALL SIZES NPS,HIGH ALLOY AND STAINLESS STEEL AND NICKEL ALLOY,02-SAMSS-011	Pipe Fittings	Eastern Europe and Africa
600000114	FLANGE PIPE; WN TYPE,ANY NPS,HIGH ALLOY AND STAINLESS STEEL AND NICKEL ALLOY,02-SAMSS-011	Pipe Fittings	Eastern Europe and Africa
6000002245	COMPRESSOR; CENTRIFUGAL BEAM-TYPE TYPE,API-617,31-SAMSS-001	Compressors	Eastern Europe and Africa
6000002490	TURBINE COMBUSTION GAS; AERO-DERIVATIVE & LIGHT INDUSTRIAL TYPE,ANY,UP TO 30,000 HP,32-SAMSS-100,S-K-502	Turbines	Eastern Europe and Africa
6000002491	TURBINE COMBUSTION GAS; AERO-DERIVATIVE TYPE,ANY,30,000 HP AND ABOVE,32-SAMSS-100,S-K-502	Turbines	Eastern Europe and Africa
6000002493	TURBINE COMBUSTION GAS; HEAVY INDUSTRIAL TYPE, ANY, UP TO 30,000 HP, 32-SAMSS-100, S-K-502	Turbines	Eastern Europe and Africa
6000002494	TURBINE COMBUSTION GAS; HEAVY INDUSTRIAL TYPE,ANY,30,000 HP & ABOVE,32-SAMSS-100,S-K-502	Turbines	Eastern Europe and Africa
6000002496	TURBINE STEAM; ANY,ANY STAGE(S),32-SAMSS-009	Turbines	Eastern Europe and Africa
6000002497	TURBINE STEAM; ANY,ANY STAGE(S),32-SAMSS-010, API 612,SPECIAL PURPOSE, FOR MECHANICAL DRIVE APPLICATION	Turbines	Eastern Europe and Africa
6000013960	TURBINE STEAM; ANY,ANY STAGE(S), 32-SAMSS-001, API 612, SPECIAL PURPOSE, FOR GENERATOR DRIVES	Turbines	Eastern Europe and Africa
6000014210	COMPRESSOR PROCESS; CENTRIFUGAL, INTEGRALLY GEARED TYPE, FOR ANY, 31-SAMSS-001	Compressors	Eastern Europe and Africa