

ID	Material	Description	Long Description	Commodity	Region
12831	6000001838	CONTROLLER; PROGRAMMABLE LOGIC; ENERGY M	CONTROLLER PROGRAMMABLE LOGIC; ANY INPUT PT,ANY OUTPUT P,SAES-K-011,UL-916 ASHRAE 135,ENERGY MANAGEMENT SYSTEM: BUILDING	Static Equipment	East Europe
12866	6000014875	DAMPER; BACK DRAFT	DAMPER; BACK DRAFT TYPE,SIZE ANY,AMCA 511	Others	East Europe
12874	6000014878	AIR HANDLING UNIT; CUSTOM BUILT	AIR HANDLING UNIT; AIR HANDLING UNIT CUSTOM BUILT TYPE,ANY,AMCA 99, NFPA 70, NFPA 90A, AHRI 430, AHRI 410 SEAL FOR COILS, AMCA 210 AND 301 SEA FOR FANS	Others	East Europe
12882	6000002419	Water Filter Media	FILTER; SAND BED TYPE,FOR WATER SERVICE, FILTER MEDIA,WATER,32-SAMSS-034,WATER FILTER MEDIA INCLUDING: SAND, ANTHRACITE, MANGANESE GREEN SAND, BERM, GARNET, GRAVEL (AS SUPPORTING LAYER). MERGE WITH 6000001776, 6000001777, 6000002510	Others	East Europe
12891	6000008555	Thermal & Electro-dialysis Desal Sys	DESALINATION; THERMAL & ELECTRO-DIALYSIS DESALINATION SYSTEMS TYPE,REVERSAL (EDR) EQUIPMENT	Others	East Europe
12899	6000012705	Oil Skimmer	UNIT; OIL SKIMMER TYPE,OIL/WATER-OIL SKIMMERS: A DRUM, DISK SURFACE OIL SKIMMER, OR DOUBLE ARM INTERNAL FLOAT OIL SKIMMER THAT REMOVES SURFACE OILS FLOATING ON OILY WATER RELY ON ADHESION OF OIL TO THE SURFACE OF THE MECHANISM.	Others	East Europe
12908	6000010110	Water Media Filters	FILTER; WATER MEDIA FILTERS TYPE	Others	East Europe
12918	6000012655	WASTEWATER ODOR CONTROL	CONTROL; WASTEWATER ODOR TYPE,	Others	East Europe
12928	6000016133	REACTOR; , MOVING BED BIOLOGICAL	REACTOR; MOVING BED BIOLOGICAL REACTOR TYPE,SAES-A-104,IS A SINGLE OR MULTIPLE- STAGE ACTIVATED SLUDGE BIOLOGICAL TREATMENT PROCESS SYSTEM FOR CARBON AND/OR NITROGEN REMOVAL USING MOVING PLASTIC CARRIERS WITH FIXED BIOFILM	Others	East Europe
12936	6000017280	UNIT; ELECTRO-DEIONIZATION	UNIT; ELECTRO-DEIONIZATION TYPE,NA,WATER ELECTRO-DEIONIZATION (EDI) UNIT ASSEMBLED AND READY TO CONNECT AND START. CONSISTS OF: (1) ELECTRO-DEIONIZATION UNIT TO PRODUCE DEIONIZED WATER FROM RO 2ND PASS. (2) CO2 REMOVAL SYSTEM THROUGH MEMBRANE CONTACTORS. (3) CONTROL AND INSTRUMENTATION.	Others	East Europe
12944	6000010115	Wastewater Package Treatment Plant	UNIT; WASTEWATER PACKAGE TREATMENT PLANT TYPE	Others	East Europe
12953	6000001314	MONITOR; FIREFIGHTING, HYDRANT-MOUNTED TYPE,UL/FM	MONITOR; FIREFIGHTING, HYDRANT-MOUNTED MANUALLY OPERATED TYPE,ANY RANGE,MEETING 21-SAMSS-16,INDUSTRIAL MONITOR SYSTEM, WILL BE INSTALLED ON#9COM 6000001310	Others	East Europe
12962	6000002696	PANEL CONTROL; FIRE PUMP TYPE,UL/FM LISTED/APPROVED,CO	PANEL CONTROL; FIRE PUMP TYPE,UL 218 LISTED,FOR DIESEL/ELECTRICAL FIRE PUMP CONTROLLERS PANELS SHALL BE LISTED FOR +50 DEG CELSIUS, ENCLOSURE MUST BE NEMA 250/NEMA TYPE 4 FOR ONSHORE AND NEMA TYPE 4X FOR OFFSHORE AND NEAR SHORE ENVIRONMENT OUTDOOR WITH SHELTER INSTALLATION, INDOOR WITH AIR-CONDITIONED INSTALLATIONS ARE ALLOWED TO BE ONLY UL 218 LISTED WITHOUT 50 DEG/NEMA 4/4X ENCLOSURE, ALL PANELS MUST BE CAPABLE OF PROVIDING THE PUMPS SEQUENCING FUNCTIONS IN SAES-B-017 / SAES-P-116	Others	East Europe
12972	6000011727	DETECTOR FIRE PROTECTION; VERY EARLY WARNING ASPIRED SMO	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.	Others	East Europe
12982	6000017250	SUPPRESSOR; FIRE PROTECTION, WET CHEMICAL SYSTEM FOR CO	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, EXPELLANT GAS, PENUMATIC RELEASE, ACTIVATION MECHANISM, CONTROL EQUIPMENT FOR POWER/GAS, COVERS, CONTROL PANELS.	Others	East Europe
12991	6000014422	MONITOR; FIREFIGHTING, REMOTE CONTROL TYPE,ELECTRICAL	MONITOR; FIREFIGHTING, REMOTE CONTROL TYPE,ANY RANGE,ELECT OR HYDRAULIC OPERATED SUPPLY,MEETING 21-SAMSS-16,FULL SYSTEM FULL CONTROL INDUSTRIAL APPLICATIONS MEETING PROJECT SPECS	Others	East Europe
13000	6000001011	POWER SUPPLY;ELECTRICAL;SOLAR,CP	POWER SUPPLY ELECTRICAL; HODIC PROTECTION POWER PLY ELECTRICAL SOLAR POWER TYPE,ANY POWER,ANY,17-SAMSS-012	Electrical	East Europe
13017	6000001040	ANODE GALVANIC;MAGNESIUM,WITHOUT LEAD,CP	ANODE GALVANIC; MAGNESIUM,17-SAMSS-006,CATHODIC PROTECTION WITHOUT LEADS	Electrical	East Europe
13027	6000012080	BOX; JUNCTION, FOR U/G ANODE BED,CP	BOX ELECTRICAL; CATHODIC PROTECTION UNDERGROUND ANODE BED JUNCTION BOX TYPE,SIZE 2500CM3 (MINIMUM),CYLINDRICAL OR BOX SHAPE,12X16MM2 AND 2X70MM2 CONNECTN,12+2 TERMINAL SCREW LUG COONECTN,FOR WEATHERPROOF (DIRECT BURIAL),NON-CLASSIFIED,NON-METALLIC SUITABLE FOR DIRECT BURIAL AND IMMERSION SERVICE IN AMBIENT TEMPERATURE SEAWATER,OPTIONAL FINISH,OPTIONAL THK,17-SAMSS-008 'JUNCTION BOX FOR CATHODIC PROTECTION',MEMBRANE GLANDS & FILLER/ SEALING COMPOUND SUITABLEFOR DIRECT BURIAL AND IMMERSION SERVICE IN AMBIENT TEMPERATURE SEAWATE	Electrical	East Europe
13036	6000016800	ANODE; GALVANIC; ALUMINUM, WITHOUT LEAD	ANODE GALVANIC; ALUMINUM, WITHOUT LEAD,17-SAMSS-006,CATHODIC PROTECTION	Electrical	East Europe
13045	6000016801	ANODE; GALVANIC; ZINC, WITHOUT LEAD; CP	ANODE GALVANIC; ZINC, WITHOUT LEAD,17-SAMSS-006,CATHODIC PROTECTION	Electrical	East Europe
13054	6000016802	ANODE; MMO GRID, WITHOUT LEAD; CP	ANODE IMPRESSED CURRENT; GRID SYSTEM, WITHOUT LEAD TERMINAL,MIXED METAL OXIDE COATED TITANIUM BASE, TITANIUM CONDUCTOR BAR & ANODE WIRE CONNECTION,FOR CATHODIC PROTECTION,17-SAMSS-007	Electrical	East Europe
13131	6000011555	UPS SYSTEM ABOVE 200 KVA	POWER SUPPLY UNINTERRUPTIBLE; ABOVE 200 KVA POWER,17-SAMSS-516,SAES-P-103	Electrical	East Europe
13140	6000012042	UPS SYS ABOVE 10 TO 200KVA FOR IT & COMM	POWER SUPPLY UNINTERRUPTIBLE; ABOVE 10 KVA UP TO 200 KVA POWER,17-SAMSS-516,SAES-P-103,MANUFACTURER STANDARD PRODUCT, IT & COMMUNICATION PRODUCT RANGE	Electrical	East Europe
13163	6000017620	UNIT, PREFABRICATED SUBSTATION, Yes, Yes	UNIT; PREFABRICATED SUBSTATION TYPE,16-SAMSS-524,PREFABRICATED SUBSTATIONS RATED UP TO 52KV FOR OFFSHORE AND ONSHORE.	Electrical	East Europe
13180	6000015923	BUS; ISOLATED PHASE BUS DUCT	BUS; SIZE ANY,ANY,16-SAMSS-523,ISOLATED PHASE BUS DUCT	Electrical	East Europe
13189	6000016991	UNIT; MOBILE SUBSTATION; 69KV AND BELOW	UNIT; MOBILE SUBSTATION TYPE,OPERATING AT 69KV AND BELOW	Electrical	East Europe
13199	6000017680	COATING, ELECTRICAL INSULATORS, HIGH VOL	COATING; ELECTRICAL INSULATORS TYPE,FOR HIGH VOLTAGE,SILICON	Electrical	East Europe
13207	6000012401	OHL COMPOSITE INSULATOR FOR T & D	INSULATOR TRANSMISSION & DISTRIBUTION; OHL COMPOSITE TYPE,UP TO 230 KV,15-SDMS-02,15-TMSS-5	Electrical	East Europe
13216	6000000774	TRAY; CABLE, FIBERGLASS	TRAY; CABLE TYPE,FIBERGLASS,NEMA FG-1,S-P-104 SEC. 9	Electrical	East Europe
13224	6000014870	POLE LINE; POWER TRANSMISSION, 69 KV	POLE LINE; POWER TRANSMISSION TYPE,ANY LG,TAPERED TUBULAR STEEL SHAPE,GALVANIZED STEEL,SEC 20-TMSS-02,RATED 69 KV AND UP.	Electrical	East Europe
13247	6000002677	FLOWMETER; ANNUBAR; PITOT TUBE;	FLOWMETER; ANNUBAR, PITOT TUBE TYPE	Instrumentation and IT	East Europe
13253	6000002689	CALIBRATION GAS CYLINDER FOR GAS MONITOR	CYLINDER; CALIBRATION GAS TYPE,SIZE ANY,ANY,FOR COMBUSTIBLE & TOXIC GAS MONITORS ONLY	Instrumentation and IT	East Europe
13261	6000002742	FLOWMETER;FOR REDUCE PIPING REQUIREMENTS	FLOWMETER; 34-SAMSS-010,SPECIALTY FLOWMETER FOR REDUCING PIPING REQUIREMENTS	Instrumentation and IT	East Europe
13286	6000002787	MONITOR; GAS; COMBUSTIBLE; OPEN PATH TYP	MONITOR GAS; COMBUSTIBLE,ANY RANGE,34-SAMSS-514,OPEN PATH TYPE	Instrumentation and IT	East Europe
13302	6000002925	ANALYZER; NIR SPECTROMETER;	ANALYZER; NIR SPECTROMETER TYPE,ANY RANGE,	Instrumentation and IT	East Europe
13312	6000002926	TRANSMITTER; MULTIVARIABLE;	TRANSMITTER; MULTIVARIABLE TYPE,ANY RANGE	Instrumentation and IT	East Europe
13344	6000009906	CUSTODY PRESET CONTROLLER, TRUCK LOADING	COMPUTER FLOW; CUSTODY PRESET CONTROLLER TYPE,34-SAMSS-847,FOR TRUCK LOADING AND UNLOADING SYSTEMS	Instrumentation and IT	East Europe
13353	6000009910	CUSTODY WEIGH SCALE	SCALE WEIGH; CUSTODY TRANSFER TYPE,34-SAMSS-180	Instrumentation and IT	East Europe
13370	6000014531	MPFM FOR GAS FIELD APPLICATION	FLOWMETER; MULTIPHASE FLOWMETER TYPE,34-SAMSS-001,FOR GAS,FLOW	Instrumentation and IT	East Europe
13432	6000009899	CUSTODY FLOW COMPUTER, LIQUID, PANEL-MNT	COMPUTER FLOW; PANEL MOUNTED TYPE,34-SAMSS-841,FOR LIQUID CUSTODY TRANSFER	Instrumentation and IT	East Europe
13449	6000009900	CUSTODY FLOW COMPUTER, GAS, PANEL-MNTD	COMPUTER FLOW; PANEL MOUNTED TYPE,34-SAMSS-846,FOR GAS CUSTODY TRANSFER	Instrumentation and IT	East Europe
13457	1000757581	H2S SCAVENGER, POWDER	H2S SCAVENGER-ZINC-FREE IRON GLUCONATEADMIXTURE DRILLING MUD; POWDER FORM,IRON GLUCONATE,FOR SCAVENGES 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). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT.	Chemicals	East Europe
13468	1000022136	WATER SOLUBLE CORROSION INHIBITOR	CORROSION INHIBITOR-MICROBIOSTAT ADDITIVE DRILLING FLUID; LIQUID FORM,CORROSION INHIBITOR AND BIOCID,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 BIOCID 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. 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). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT.	Chemicals	East Europe

13477	1000022533	CALCIUM CHLORIDE (77-78%) 2200 lb/BAG	CALCIUM CHLORIDE (77-78%) 1000 KG/BIG BAG ADDITIVE DRILLING FLUID; DRY FLAKES, PELLETS, OR GRANULAR FORM, DRY FLAKES, PELLETS, OR GRANULAR, WATER-SOLUBLE, USED AS WEIGHTING AGENT TO FORMULATE SOLIDS-FREE COMPLETION BRINES AND TO PROVIDE THE DESIRED WATER PHASE SALINITY AND ACTIVITY IN INVERT EMULSION MUDS. IN ADDITION, IT IS USED AS AN ACCELERATOR IN OIL WELL CEMENT SLURRIES. CALCIUM CHLORIDE QUALITY IS MONITORED BY EXPEC ARC LABORATORIES. EXPEC CERTIFICATE OF ACCEPTANCE (EXPEC/COA) REFERRING TO THE RESPECTIVE BATCH NUMBER MUST BE ATTACHED TO EACH SHIPMENT DOCUMENTS ACCEPTED FOR FIELD APPLICATIONS, FOR USED AS WEIGHTING AGENT TO FORMULATE SOLIDS-FREE COMPLETION BRINES AND TO PROVIDE THE DESIRED WATER PHASE SALINITY AND ACTIVITY IN INVERT EMULSION MUDS. IN ADDITION, IT IS USED AS AN ACCELERATOR IN OIL WELL CEMENT SLURRIES. CALCIUM CHLORIDE 77-78%, 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 AND 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, ASTM D98-68/PRACTICE E29 / ASTM D345 - 02(2010) STANDARD TEST METHOD FOR CaCl2 SAMPLING AND TESTING, CHEMICAL AND PHYSICAL SPECIFICATIONS APPEARANCE: DRY FREE FLOWING WHITE FLAKES OR PELLETS - PURITY: CaCl2 77% WT. MINIMUM PASS THROUGH 7/16 IN SCREEN: 100% WT. NO PARTICLES GREATER THAN 11MM IN ANY DIMENSION. MALKALI CHLORIDES AS NaCl: 7% WT. MAXIMUM AND MGCL2: 1% WT. MAXIMUM HEAVY METALS AS Pb: 0.005% WT. MAXIMUM - SULFATE AS MCASO4: 0.05% WT. MAXIMUM. FE: 15 PPM MAXIMUM WATER INSOLUBLE: 0.20% WT. MAXIMUM.	Chemicals	East Europe
13486	1000022538	CALCIUM CHLORIDE (94-98%) 2200 lb/BAG	CALCIUM CHLORIDE (94-98%) 1000 KG/BIG BAG ADDITIVE DRILLING FLUID; DRY FLAKES, PELLETS, OR GRANULAR FORM, DRY FLAKES, PELLETS, OR GRANULAR, WATER-SOLUBLE USED AS WEIGHTING AGENT FOR FORMULATING SOLIDS-FREE COMPLETION BRINES AND TO PROVIDE THE DESIRED WATER PHASE SALINITY AND ACTIVITY IN INVERT EMULSION MUDS IN ADDITION, IT IS USED AS AN ACCELERATOR IN OIL WELL CEMENT SLURRIES. CALCIUM CHLORIDE QUALITY IS MONITORED BY EXPEC ARC LABORATORIES. EXPEC CERTIFICATE OF ACCEPTANCE (EXPEC/COA) REFERRING TO THE RESPECTIVE BATCH NUMBER MUST BE ATTACHED TO EACH SHIPMENT DOCUMENTS ACCEPTED FOR FIELD APPLICATIONS, FOR USED AS WEIGHTING AGENT FOR FORMULATING SOLIDS-FREE COMPLETION BRINES AND TO PROVIDE THE DESIRED WATER PHASE SALINITY AND ACTIVITY IN INVERT EMULSION MUDS IN ADDITION, IT IS USED AS AN ACCELERATOR IN OIL WELL CEMENT SLURRIES. CALCIUM CHLORIDE 94-98%, 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, ASTM D98-68/PRACTICE E29 / ASTM D345 - 02 (2010) STANDARD TEST METHOD FOR CaCl2 SAMPLING AND TESTING, CHEMICAL AND PHYSICAL SPECIFICATIONS APPEARANCE: DRY FREE FLOWING WHITE FLAKES OR PELLETS - PURITY: CaCl2 94 %WT. MINIMUM PASS THROUGH 4 MESH SCREEN: 100% WT. NO PARTICLES GREATER THAN 4.5MM IN ANY DIMENSION ALKALI CHLORIDES AS NaCl: 5.0% WT. MAXIMUM - AS MGCL2: 0.5% WT. MAXIMUM HEAVY METALS AS Pb: 0.005% WT. MAXIMUM. SULFATE AS CASO4: 0.05% WT. MAXIMUM FE: 15 PPM MAXIMUM WATER INSOLUBLE: 0.20% WT. MAXIMUM. REMAINING COMPONENT IS WATER OF CRYSTALLIZATION PH:	Chemicals	East Europe
13494	1001129231	Anhydrous Calcium Bromide Dry	CALCIUM BROMIDE [CaBr2] DRY 95% ADDITIVE DRILLING FLUID; WHITE FREE FLOWING POWDER, CRYSTALLINE OR GRANULAR FORM, CALCIUM 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 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 SOLUTIONS TO FORMULATE. SOLIDS-FREE NON-DAMAGING HIGH-DENSITY BRINE BLENDS WITH DENSITIES UP TO 143 PCF (19.1 LB/GAL). APPEARANCE: WHITE FREE FLOWING POWDER CRYSTALLINE OR GRANULAR, NO LUMPS SATURATED BRINE SOLUTION: CLEAR COLORLESS PURITY AS CaBr2, PERCENT 95 MINIMUM SG AT 77 DEG F (25 DEG C): 3.2 - 3.4 SOLUBILITY IN WATER AT 68 DEG F (20 DEG C), WT PERCENT 58 MINIMUM IRON, PPM: 10 MAXIMUM CHLORIDE AS CaCl2, WT PERCENT 1.5 MAXIMUM SULFATE, PPM: 200 MAXIMUM HEAVY METALS, PPM: 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 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), PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT. 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.	Chemicals	East Europe
13502	1001130337	Radiagreen EME Salt	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 DARK AMBER. SWEET AND MILD ODOR SOLUBILITY IN WATER: INSOLUBLE IN WATER SPECIFIC GRAVITY AT THE RANGE BETWEEN 68F (20C): 0.95 - 1.05 FLASH POINT (PMCC): GREATER THAN 212F (100C) 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 (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT. 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. IT IS NON-DAMAGING TO PRODUCING ZONES, NON-TOXIC, ENVIRONMENTALLY FRIENDLY AND HELPS PREVENT BIT BALLING AND DIFFERENTIAL STICKING. THE PRODUCT 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.	Chemicals	East Europe
13511	1000823699	THINNER OBM	THINNER/DISPERSANT-OBM CONDITIONER ADDITIVE DRILLING FLUID; LIQUID FORM, SULFONATE BLEND WITH FATTY ACID, FOR USED TO LOWER RHEOLOGICAL PROPERTIES OF OIL BASE FLUIDS, POLYOLEFIN/ORGANIC SULFONATE BLEND WITH FATTY ACID, 55 GALLON (208 LITER) DRUM. SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL, THINNER/DISPERSANT-OIL-BASE MUD CONDITIONER: LIQUID POLYOLEFIN/ORGANIC SULFONATE BLEND WITH FATTY ACID DERIVATIVES USED TO LOWER RHEOLOGICAL PROPERTIES FOR OIL BASE FLUIDS. OTHER ASSOCIATED ELEMENTS MUST NOT BE HARMFUL TO PERSONNEL AND/OR ADVERSELY AFFECT FLUID PROPERTIES. CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: DARK AMBER LIQUID SOLUBILITY: INSOLUBLE IN WATER SPECIFIC GRAVITY: 0.90 - 0.96 FLASH POINT (PMCC): > 212°F (100°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). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT	Chemicals	East Europe
13520	1000021672	HYDROXY ETHYL CELLULOSE (HEC)	HYDROXY ETHYL CELLULOSE (HEC) ADDITIVE DRILLING FLUID; DRY FREE FLOWING WHITE POWDER FORM, HYDROXY ETHYL CELLULOSE (HEC), FOR MULTI-PURPOSE VISCOSIFYING POLYMER FOR FRESHWATER, SEA WATER SALT SATURATED WATER AND COMPLEX BRINE SYSTEMS, HYDROXY ETHYL CELLULOSE (HEC), 50 LBS. (22.7 KG). MULTI-WALLED PAPER BAG, VALVE/SPOUT TYPE, COMPLETELY SEALED, MOISTURE AND WATER PROOF. THE CONSTRUCTION OF THE MULTI-WALLED PAPER BAG SHALL BE AS FOLLOWS: 1ST PLY (INTERIOR PLY) 10# COATING 0.000285 MICRON ALUMINUM SHEET 6# PE COATING 50 LB NATURAL KRAFT PAPER THE ALUMINUM SHEET IS COATED ON ONE SIDE WITH 10# PE THE 10# IS NEXT TO THE PRODUCT. THE COATED ALUMINUM SHEET LAMINATED TO THE 50 LB KRAFT PAPER. 2ND PLY 50 LB NATURAL KRAFT PAPER. 3RD PLY 50 LB NATURAL KRAFT PAPER. 4TH PLY 50 LB BLEACH WHITE NATURAL KRAFT PAPER (EXTERIOR PLY). THE BLEACHED PAPER IS "FULLY BLEACHED WHITE". SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL, HEC-HYDROXY ETHYL CELLULOSE: IS A NON-IONIC POLYMER, DRY FREE FLOWING WHITE POWDER DISPERSES EASILY AND RAPIDLY DISSOLVES IN FRESH WATER, SEA WATER, SALT SATURATED BRINE AND COMPLEX DIVALENT BRINE BLENDS TO DEVELOP VISCOSITY RELATED CHARACTERISTICS FOR DRILLING AND COMPLETION FLUIDS THAT IMPART MINIMUM FORMATION DAMAGE. THE HEC SHOULD BE EASILY BROKEN WITH ACID, ENZYMES, OR OXIDIZING AGENTS TO MAXIMIZE THE POTENTIAL FOR HYDROCARBON RECOVERY AND SHOULD BE STABLE AT TEMPERATURES UP TO 250°F (121°C). CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: WHITE TO CREAM-COLORED HYDROXYETHYLCELLULOSE (HEC) SHALL NOT CONTAIN ANY STARCH, GUAR OR ANY OTHER POLYMERS OR THEIR DERIVATIVES. MOISTURE: 8% WT. MAXIMUM SPECIFIC GRAVITY, 1.38-1.40 PARTICLE SIZE: PASS THROUGH U.S. 20 MESH SCREEN (840 MICRON); 100% 1% WT. SOLUTION IN DEIONIZED WATER BROOKFIELD SPINDLE #4, 30 RPM. (ASTM D 2196-91): VISCOSITY AT 77°F (25°C): 4,400-6,500 PH @ 77°F (25°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). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT.	Chemicals	East Europe

13534	1000814796	ACETIC ACID > 96%	MICRO WASH-GLACIAL ACID-BAKER HUGHES ADDITIVE DRILLING FLUID; CLEAR, COLORLESS LIQUID FORM,LIQUID CARBOXYLIC ACID,FOR USED FOR ACIDIZING SOLUBLE CALCIUM CARBONATE PARTICLES AFTER USING OBM.,LIQUID CARBOXYLIC ACID WITH THE MOLECULAR FORMULA OF CH3COOH,275 GALLON IBC TOTE CONTAINER SPECIFICATIONS: LEAK PREVENTION MECHANISM: VALVE CLOSED WITH SCREW CAP PE-DISC AND FLAT GASKET, VALVE HANLDE SECURED WITH A LOCKING SCREW. INNER CONTAINER SHOULD BE HIGH MOLECULAR WEIGHT, HIGH DENSITY POLYETHYLENE (HMWHDPE) W/EXTRUSION BLOW MOLDED, SPECIALLY SHAPED TO ENSURE COMPLETE DISCHARGE OF CONTENTS. OUTER CONTAINER SHOULD BE RIGID, WELDED GALVANIZED TUBULAR STEEL GRIDWITH A LARGE PERMANENTLY FIXED IDENTIFICATION PLATE.MOLDED BOTTOM SHELL SHOULD BE PRESSED GALVANIZED STEEL BASE SHAPED TO SUPPORT THE INNER CONTAINER AND ASSIST TOTAL DRAINAGE. PALLETES SHOULD BE STEEL AND HAVE 4 WAYS ENTRIES. SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,MICRO-WASH ACETIC ACID-BAKER HUGHES: CLEAR LIQUID CARBOXYLIC ACIDS WITH THE FORMULA OF CH3COOH, USED FOR ACIDIZING SOLUBLE CALCIUM CARBONATE PARTICLES, AFTER USING OBM, IN WELLBORE REMEDIATION AND CLEANUP PROCESS TO IMPROVE WELL PRODUCTIVITY. BAKER HUGHES MICRO-WASH ACID SYSTEM CONSISTS OF: PRIME-743 (SAP #1000811425), PRIME-760 (SAP #1000811426), PRIME-770 (SAP #1000811427), OHR-759 (SAP #1000811421), OHR-AC (SAP #1000811422), OHR-757 (SAP #1000811423), OHR-750 (SAP #1000811424), GLACIAL ACETIC ACID (SAP #1000814796), AND FORMIC ACID (SAP #1000811877). CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: CLEAR LIQUID, STRONG PUNGENT VINEGAR ODOR ACETIC ACID: >96% DENSITY: 1040-1050 KG/M³ (1.040-1.050 G/CM³) AT 25°C BOILING POINT: 242.6 °F (117 °C) MINIMUM FLASH POINT: >39 °C/102 °F (CLOSED CUP) AUTO-IGNITION TEMPERATURE: 799°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	Chemicals	East Europe
13541	1000021930	XANTHAN GUM (POWDER)	XANTHAN GUM BIO-POLYMERADDITIVE DRILLING FLUID; DRY FREE FLOWING POWDER FORM,PUREXANTHAN GUM BIO-POLYMER,FOR IS USED AS A RHEOLOGY CONTROL AND SUSPENSION AGENT IN FRESH WATER, SEA WATER, AND SATURATED BRINE-BASED DRILLING, COMPLETION AND WORKOVER FLUIDS.,PURE XANTHAN GUM BIO-POLYMER,25 KG (55.1 LBS.) MULTI-WALL PAPER BAG, VALVE/SPOUT TYPE COMPLETELY SEALED, MOISTURE AND WATER PROOF. THE CONSTRUCTION OF THE MULTI-WALLED PAPER BAG SHALL BE AS FOLLOWS: 1ST PLY 50 LB. NATURAL KRAFT PAPER (INTERIOR PLY) 2ND PLY 50 LB. NATURAL KRAFT PAPER 3RD PLY SEPARATE INNER BAG LINER, HIGH DENSITY ORIENTED AND CROSS-LAMINATED INNER POLY-ETHYLENE RESIN LINER (TUBULAR SHAPE) WITH A MINIMUM WALL THICKNESS OF 0.1 MM. 4TH PLY 50 LB. NATURAL KRAFT PAPER. 5TH PLY 60 LB. NATURALKRAFT PAPER. WET STRENGTH (EXTERIOR PLY) SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,API SPECIFICATION 13A 18TH EDITION, AUGUST 2010, ERRATA 1, AUGUST 2014.XANTHAN GUM BIO-POLYMER: DRILLING GRADE PURE, DRY, FREEFLOWING FINE POWDER ANIONIC POLYSACCHARIDE, READILY SOLUBLE IN WATER BRINE. THE BIO-POLYMER PRODUCED BY A DISTINCT FERMENTATIONPROCESS OF XANTHOMONAS CAMPESTRIS. THE PRODUCT SHALL NOT CONTAIN ANY OTHER POLYSACCHARIDE, SUCH AS STARCH, GUAR GUM OR OTHER NATURALLY OCCURRING POLYMERS OR THEIR DERIVATIVES. IT IS USED AS A RHEOLOGY CONTROL AND SUSPENSION AGENT IN FRESH WATER, SEA WATER, AND SATURATED BRINE-BASED DRILLING, COMPLETION ANDWORKOVER FLUIDS. XANTHAN GUM QUALITY IS MONITORED EXPEC ARC LABORATORIES. EXPEC CERTIFICATE OF ACCEPTANCE [EXPEC/COA]REFERRING TO THE RESPECTIVE BATCH NUMBER MUST BE ATTACHED TO EACH SHIPMENT DOCUMENTS ACCEPTED FOR FIELD APPLICATIONS.CHEMICAL AND PHYSICAL SPECIFICATIONS: OFF-WHITE, FREE-FLOWING GRANULAR POWDER. SCREEN ANALYSIS: LESS THAN 425 MM (PASS THROUGH 40 US MESH SCREEN) - 95% MINIMUM LESS THAN 75 MM (PASS THROUGH 200 US MESH SCREEN) - 50% MAXIMUM QUALITATIVE LAB TESTS WILL BE PERFORMED TO DETECT THE PRESENCE OF: STARCH, GUAR, OR THEIR DERIVATIVES: ABSENT CELLULASE ENZYMES: NEGATIVE SULFATE REDUCING BACTERIA: NEGATIVE CELLULOLYTIC BACTERIA: NEGATIVE MOISTURE CONTENT: 10% MAXIMUM NO INGREDIENT LEVELS GREATER THAN OR EQUAL TO 0.1%WT. TO BE IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN PERFORMANCE REQUIREMENTS: LOW XANTHAN GUM CONCENTRATION DEVELOPS PSEUDOPLASTIC FLUID BEHAVIOR (HIGH VISCOSITY UNDER LOW SHEER AND LOW VISCOSITY UNDER HIGH SHEER) TEMPERATURE STABILITY: STABLE	Chemicals	East Europe
13548	1000021557	CALCIUM BROMIDE (SOL 53% WT MINIMUM)	CALCIUM BROMIDE (CaBr2) SOLUTION ADDITIVE DRILLING FLUID; SINGLE SALT [CaBr2], SOLIDS-FREE BRINE FORM,CALCIUM BROMIDE (CaBr2),FOR A PURE SOLIDS-FREE BRINE USED IN COMPLETION FLUIDS AND CAN BE BLENDED WITH ZINC/CALCIUM BROMIDE AND CALCIUM CHLORIDE SOLUTIONS TO FORMULATE NON-DAMAGING FLUIDS OF DENSITIES UP 143 PCF (19.1 LB/GAL),CALCIUM BROMIDE,55 GAL (208 LITER) 340 KG POLYPROPYLENE-LINED STEEL DRUMS SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,REFER TO API 13J FIFTH EDITION, OCTOBER 2014,CALCIUM BROMIDE SOLUTION [CaBr2]: PURE, SOLIDS-FREE BRINE 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 SOLUTIONS TO FORMULATE, SOLIDS-FREE NON-DAMAGING HIGH DENSITY BRINE BLENDS WITH DENSITIES UP TO 143 PCF (19.1 LB/GAL). CHEMICAL AND PHYSICAL SPECIFICATIONS: CALCIUM BROMIDE (CaBr2) SOLUTION 52% WT. MINIMUM COLORLESS, CLEAR LIQUID WITH NO ODOR CHLORIDE CONTENT: 1000 PPM (0.1% WT.) MAXIMUM TURBIDITY: 6 NTU MAXIMUM SULPHATE CONTENT: 100 PPM (0.01% WT.) MAXIMUM IRON CONTENT: 5 PPM MAXIMUM TOTAL HEAVY METALS (ZN, PB, HG, AS AND CD): 5 PPM MAXIMUM DENSITY: 1.70 GM/CC (14.2 LB/GAL / 106.2 PCF) AT 70°F (20.1°C) MINIMUM PH OF 10% SOLUTION IN DI WATER: [BASIC ] 7- 8.5 TRUE CRYSTALLIZATION TEMPERATURE (TCT): 10°F (-12.2°C) SOLIDS RETAINED ON 5 MICRONS FILTER PAPER: NONE 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, SAP NUMBER, EXPIRATION DATE, AND COUNTRY OF ORIGIN, MANUFACTURER NAME AND CONTACT INFORMATION. HAZCOM ACCORDING TO THE MATERIAL SAFETY DATA SHEET (MSDS). "UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT"	Chemicals	East Europe
13561	6000007293	COUPLING: OCTG; HIGH NICKEL	COUPLING OCTG; DUPLEX STAINLESS STEEL AND NICKLE BASE ALLOYS,SEAMLESS,API-5CRA,ISO-13680 AND 45-SAMSS-006,GR API-5CRA GROUP-2 TO GROUP-4 GRADES,SIZE ANY,CAL-IV QUALIFIED THREAD END CONN,ANY LG	Pipe & OCTG	East Europe
13566	6000007303	CASING: OCTG; HIGH NICKEL; SEAMLESS	CASING OCTG; DUPLEX STAINLESS STEEL AND NICKLE BASE ALLOYS,SEAMLESS,API-5CRA,ISO-13680 AND 45-SAMSS-006,GR API-5CRA GROUP-2 TO GROUP-4 GRADES,SIZE 4-1/2 IN AND LARGER SIZES,CAL-IV QUALIFIED THREAD END CONN	Pipe & OCTG	East Europe
13572	6000007305	CROSSOVER: OCTG; HIGH NICKEL	ADAPTER OCTG NIPPLE/CROSSOVER/SWAGE; DUPLEX STAINLESS STEEL AND NICKLE BASE ALLOYS,SEAMLESS,API-5CRA,ISO-13680 AND 45-SAMSS-006,GR API-5CRA GROUP-2 TO GROUP-4 GRADES,CAL-IV QUALIFIED THREAD	Pipe & OCTG	East Europe
13579	6000007307	PUP JOINT: CASING OCSG; HIGH NICKEL	PUP JOINT OCTG; DUPLEX STAINLESS STEEL AND NICKLE BASE ALLOYS,SEAMLESS,API-5CRA,ISO-13680 AND 45-SAMSS-006,GR API-5CRA GROUP-2 TO GROUP-4 GRADES,SIZE 4-1/2 IN AND LARGER SIZES,CAL-IV QUALIFIED THREAD END CONN	Pipe & OCTG	East Europe
13585	6000015250	Non-Metallic OCTG Products	CASING OCTG; THERMOSETTING POLYMERS REINFORMCED WITH FIBERGLASS,API 15HR,45-SAMSS-006 API-SL SIZE 4-1/2 IN -10-3/4 IN	Instrumentation and IT	East Europe
13595	6000010721	Expandable Pipe System	UNIT; ANY TYPE,EXPANDABLE CASING & ACCESSORIES	Drilling Equipment	East Europe
13596	6000010721	Expandable Pipe System	UNIT; ANY TYPE,EXPANDABLE CASING & ACCESSORIES	Drilling Equipment	East Europe
13604	6000015784	Multilateral system	LATERAL; ANY NPS,ANY,LATERALS AND ACCESSORIES EQUIPMENT	Drilling Equipment	East Europe
13609	6000004089	Open Hole Expandable latch anchor whipstock	WHIPSTOCK; RETRIEVABLE TYPE, ANY CSG DRE,DRILLING OPERATIONS	Drilling Equipment	East Europe
13614	6000004043	Single ICD Installation	CEMENTER; ANY TOOL OD,ANY DRILL OD,MULTI STAGE INFLATABLE AND MECHANICAL PACKER FOR CEMENTING (DV)	Drilling Equipment	East Europe
13619	6000004047	Isolation packer expandable	PACKER; ANY TYPE,MECHANICAL, SWELLABLE, ISOLATION PACKERS	Chemicals	East Europe
13977	6000013000	Multiplexer; Foundation Fieldbus (FF)	MULTIPLEXER; FOUNDATION FIELDBUS (FF) TYPE,SAES-J-904,AA MULTI-INPUT TEMPERATURE	Instrumentation and IT	East Europe
13987	6000010128	SUBMARINE,POWER CABLE,69 KV THRU 230 KV	CABLE ELECTRICAL,HIGH VOLTAGE; 69 KV THROUGH 230 KV SUPPLY,ANY CONDUCTO.SUBMARINE POWER CABLE TYPE,COPPER CONDUCTO,POWER TYPE,15-SAMSS-504	Electrical	East Europe
13995	6000000999	FORM-WOUND BRUSHLESS SYNCH. MOTOR	MOTOR SYNCHRONOUS; 500 HP MINIMUM POWER,4000 V MINIMUM,3 PHASE PHASE,HORIZONTAL MTG,17-SAMSS-520	Electrical	East Europe
14005	6000018110	FENCE, RIGID WELDED MESH (RWM), 3 METERS	FENCE; RIGID WELDED MESH (RWM) TYPE,3 METERS HEIGHT, 3 TO 3.5 METERS WIDTH HT,STAINLESS STEEL,SAES-O -202	Others	East Europe
12826	6000001838	CONTROLLER; PROGRAMMABLE LOGIC; ENERGY M	CONTROLLER PROGRAMMABLE LOGIC; ANY INPUT PT,ANY OUTPUT P.SAES-K-011,UL-916 ASHRAE 135,ENERGY MANAGEMENT SYSTEM: BUILDING	Static Equipment	West Europe
12860	6000014875	DAMPER; BACK DRAFT	DAMPER; BACK DRAFT TYPE,SIZE ANY,AMCA 511	Others	West Europe
12868	6000014878	AIR HANDLING UNIT; CUSTOM BUILT	AIR HANDLING UNIT; AIR HANDLING UNIT CUSTOM BUILT TYPE,ANY,AMCA 99, NFPA 70, NFPA 90A, AHRI 430, AHRI 410 SEAL FOR COILS, AMCA 210 AND 301 SEA FOR FANS	Others	West Europe
12877	6000002419	Water Filter Media	FILTER; SAND BED TYPE,FOR WATER SERVICE, FILTER MEDIA,WATER,32-SAMSS-034,WATER FILTER MEDIA INCLUDING: SAND, ANTHRACITE, MANGANESE GREEN SAND, BERM, GARNET, GRAVEL (AS SUPPORTING LAYER). MERGE WITH 6000001776, 6000001777, 6000002510	Others	West Europe
12886	6000008555	Thermal & Electro-dialysis Desal Sys	DESALINATION; THERMAL & ELECTRO-DIALYSIS DESALINATION SYSTEMS TYPE,REVERSAL (EDR) EQUIPMENT	Others	West Europe
12902	6000010110	Water Media Filters	FILTER; WATER MEDIA FILTERS TYPE	Others	West Europe
12912	6000012655	WASTEWATER ODOR CONTROL	CONTROL; WASTEWATER ODOR TYPE	Others	West Europe
12922	6000016133	REACTOR ; MOVING BED BIOLOGICAL	REACTOR; MOVING BED BIOLOGICAL REACTOR TYPE,SAES-A-104,IS A SINGLE OR MULTIPLE- STAGE ACTIVATED SLUDGE BIOLOGICAL TREATMENT PROCESS SYSTEM FOR CARBON AND/OR NITROGEN REMOVAL USING MOVING PLASTIC CARRIERS WITH FIXED BIOFILM	Others	West Europe
12947	6000001314	MONITOR; FIREFIGHTING, HYDRANT-MOUNTED TYPE,UL/FM	MONITOR; FIREFIGHTING, HYDRANT-MOUNTED MANUALLY OPERATED TYPE,ANY RANGE,MEETING 21-SAMSS-16,INDUSTRIAL MONITOR SYSTEM, WILL BE INSTALLED ON#COM 6000001310	Others	West Europe
12966	6000011727	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.	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.	Others	West Europe
12976	6000017250	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, EXPELLANT GAS, PENUMATIC RELEASE, ACTIVATION MECHANISM, CONTROL EQUIPMENT FOR POWER/GAS, COVERS, CONTROL PANELS.	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, EXPELLANT GAS, PENUMATIC RELEASE, ACTIVATION MECHANISM, CONTROL EQUIPMENT FOR POWER/GAS, COVERS, CONTROL PANELS.	Others	West Europe
13012	6000001040	ANODE GALVANIC;MAGNESIUM,WITHOUT LEAD,CP	ANODE GALVANIC; MAGNESIUM,17-SAMSS-006,CATHODIC PROTECTION WITHOUT LEADS	Electrical	West Europe



13021	6000012080	BOX: JUNCTION, FOR U/G ANODE BED,CP	BOX ELECTRICAL; CATHODIC PROTECTION UNDERGROUND ANODE BED JUNCTION BOX TYPE,SIZE 2500CM3 (MINIMUM),CYLINDRICAL OR BOX SHAPE,12X16MM2 AND 2X70MM2 CONNECTN,12+2 TERMINAL SCREW LUG COONECTN,FOR WEATHERPROOF (DIRECT BURIAL),NON-CLASSIFIED,NON-METALLIC SUITABLE FOR DIRECT BURIAL AND IMMERSION SERVICE IN AMBIENT TEMPERATURE SEAWATER,OPTIONAL FINISH,OPTIONAL THK,17-SAMSS-008 'JUNCTION BOX FOR CATHODIC PROTECTION',MEMBRANE GLANDS & FILLER/ SEALING COMPOUND SUITABLEFOR DIRECT BURIAL AND IMMERSION SERVICE IN AMBIENT TEMPERATURE SEAWATE	Electrical	West Europe
13031	6000016800	ANODE; GALVANIC; ALUMINUM, WITHOUT LEAD	ANODE GALVANIC; ALUMINUM, WITHOUT LEAD,17-SAMSS-006,CATHODIC PROTECTION	Electrical	West Europe
13040	6000016801	ANODE; GALVANIC; ZINC, WITHOUT LEAD; CP	ANODE GALVANIC; ZINC, WITHOUT LEAD,17-SAMSS-006,CATHODIC PROTECTION	Electrical	West Europe
13049	6000016802	ANODE; MMO GRID, WITHOUT LEAD; CP	ANODE IMPRESSED CURRENT; GRID SYSTEM, WITHOUT LEAD TERMINAL,MIXED METAL OXIDE COATED TITANIUM BASE, TITANIUM CONDUCTOR BAR & ANODE WIRE CONNECTION,FOR CATHODIC PROTECTION,17-SAMSS-007	Electrical	West Europe
13057	6000000030	PIPE; NON-METALLIC; THERMOPLASTIC; CPVC;	PIPE NON-METALLIC; ANY NPS, CHLORINATED POLYVINYL CHLORIDE (CPVC),ISO 15877,ASTM F441,SOLID-WALL, MAXIMUM TEMPERATURE IS 82 C HOT AND COLD WATER INSTALLATIONS AND FOR HEATING SYSTEM INSTALLATIONS SYSTEM. HOT AND COLD WATER INSTALLATIONS WITHIN BUILDINGS, WATER FOR HUMAN CONSUMPTION, WATER FOR HEATING SYSTEMS.	Nonmetallic	West Europe
13064	6000000031	PIPE; NON-METALLIC; ALL SIZES; THERMOPLA	PIPE NON-METALLIC; ANY NPS,THERMOPLASTIC, UPVC,M D1785,1452 AND ASTM D4216,SOLID-WALL, MAXIMUM TEMPERATURE IS 45 C, (UNPLASTICIZED) POLYVINYL CHLORIDE (PVC/ UPVC) WATER SUPPLY AND FOR BURIED AND ABOVE-GROUND DRAINAGE AND SEWERAGE UNDER PRESSURE WATER MAINS AND SERVICES, WATER ABOVE GROUND FOR BOTH OUTSIDE AND INSIDE BUILDINGS, BURIED AND ABOVE GROUND DRAINAGE AND SEWERAGE UNDER PRESSURE, HYDROCHLORIC ACID,PHOSPHORIC ACID AND LPG, NGL	Nonmetallic	West Europe
13073	6000000042	Pipe; Nonmetallic, (RTP) PIPE	PIPE NON-METALLIC; MAXIMUM 8 INCHES NPS,REINFORCED THERMOPLASTIC (RTP),INTERNAL / EXTERNAL LINING THERMOPLASTIC(PE,PE- RT, PP PA,PVDF,PREFABRICATED SPOOL ENDS,FOR WATER AND HYDROCARBON APPLICATIONS MAX TEMP 180 F,API RP 155,ONSHORE / OFFSHORE WATER AND HYDROCARBON APPLICATIONS	Nonmetallic	West Europe
13101	6000013160	PIPE&FITTINGS;NON-METAL;RTR	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	Pipe & OCTG	West Europe
13107	6000013900	PIPE; NON-METAL; LINED PIPING SYSTEMS	PIPE NON-METALLIC; SIZES RANGES FROM NPS 1 TO 20 NPS,ASME/ANSI CLASS 150 AND 300 SUPPLY,CARBON STEEL,NGED PIPE&FITTINGS SYSTEM VY DUTY PTFE& PFA LINED,01-SAMSS-025,CORROSIVE FLUIDS INCLUDING ACIDS AND ALKALINE SOLUTIONS SUCH AS HYDROCHLORIC ACID, NITRIC ACID, PHOSPHORIC ACID, CHLORINE/WATER, HYDRAULIC OIL, HYPOCHLORITE (SODIUM OR CALCIUM), SODIUM HYDROXIDE (CAUSTIC SODA), WATER, SEA/SALINE, WATER, AERATED AQUIFER, DESALINATION BRINE, PRODUCED WATER, DISPOSAL SALT, WATER BRINE.	Pipe & OCTG	West Europe
13114	6000014681	SERVICE: WET -TYPE COMPOSITE REPAIR EXT.	SERVICE; WET-TYPE THERMOSET COMPOSITE FIBER REINFORCED OMPOSITE. TYPE,SAEP-345,ASME-PC2 ISO 24817,USE FOR WATER, HYDROCARBON, CHEMICALS PLANT PIPING AND PIPELINES. SUITABLE FOR EXTERNAL CORROSION UP TO 80 PERCENT METAL LOSS. FOR PLANT PIPING AND FITTINGS, IT SHALL BE UTILIZED AS A TEMPORARY REPAIR WITH A PRIOR APPROVAL FROM NONMETALLIC SCC.	Pipe & OCTG	West Europe
13119	6000017130	FIRE-RETARDANT RTR	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	West Europe
13127	6000011555	UPS SYSTEM ABOVE 200 KVA	POWER SUPPLY UNINTERRUPTIBLE; ABOVE 200 KVA POWER,17-SAMSS-516,SAES-P-103	Electrical	West Europe
13133	6000012042	UPS SYS ABOVE 10 TO 200KVA FOR IT & COMM	POWER SUPPLY UNINTERRUPTIBLE; ABOVE 10 KVA UP TO 200 KVA POWER,17-SAMSS-516,SAES-P-103,MANUFACTURER STANDARD PRODUCT, IT & COMMUNICATION PRODUCT RANGE	Electrical	West Europe
13157	6000017620	UNIT; PREFABRICATED SUBSTATION, Yes, Yes	UNIT; PREFABRICATED SUBSTATION TYPE,16-SAMSS-524,PREFABRICATED SUBSTATIONS RATED UP TO 52KV FOR OFFSHORE AND ONSHORE.	Electrical	West Europe
13174	6000015923	BUS; ISOLATED PHASE BUS DUCT	BUS; SIZE ANY,ANY,16-SAMSS-523,ISOLATED PHASE BUS DUCT	Electrical	West Europe
13183	6000016991	UNIT; MOBILE SUBSTATION; 69KV AND BELOW	UNIT; MOBILE SUBSTATION TYPE,OPERATING AT 69KV AND BELOW	Electrical	West Europe
13193	6000017680	COATING, ELECTRICAL INSULATORS, HIGH VOL	COATING; ELECTRICAL INSULATORS TYPE,FOR HIGH VOLTAGE,SILICON	Electrical	West Europe
13202	6000012401	OHL COMPOSITE INSULATOR FOR T & D	INSULATOR TRANSMISSION & DISTRIBUTION; OHL COMPOSITE TYPE,UP TO 230 KV,15-SDMS-02,15-TMSS-5	Electrical	West Europe
13210	6000000774	TRAY; CABLE, FIBERGLASS	TRAY; CABLE TYPE,FIBERGLASS,NEMA FG-1,S-P-104 SEC. 9	Electrical	West Europe
13219	6000014870	POLE LINE; POWER TRANSMISSION, 69 KV	POLE LINE; POWER TRANSMISSION TYPE,ANY LG,TAPERED TUBULAR STEEL SHAPE,GALVANIZED STEEL,SEC 20-TMSS-02,RATED 69 KV AND UP.	Electrical	West Europe
13227	6000001582	CONTROLLER; ELECTRONIC;COMPRESSOR	CONTROLLER; COMPRESSOR INCLUDING SURGE CONTROL TYPE,ANY RANGE,SPECIALIZED CONTROL SYSTEMS	Instrumentation and IT	West Europe
13233	6000002655	ANALYZER; BOTTOM SEDIMENT AND WATER;	ANALYZER; BOTTOM SEDIMENT AND WATER TYPE,ANY RANGE,TO BE USED FOR LIQUID SERVICE APPLICATION ONLY NOT IN MULTI-PHASE SERVICE	Instrumentation and IT	West Europe
13242	6000002677	FLOWMETER; ANNUBAR; PITOT TUBE;	FLOWMETER; ANNUBAR, PITOT TUBE TYPE	Instrumentation and IT	West Europe
13249	6000002689	CALIBRATION GAS CYLINDER FOR GAS MONITOR	CYLINDER; CALIBRATION GAS TYPE,SIZE ANY,ANY,FOR COMBUSTIBLE & TOXIC GAS MONITORS ONLY	Instrumentation and IT	West Europe
13256	6000002742	FLOWMETER;FOR REDUCE PIPING REQUIREMENTS	FLOWMETER; 34-SAMSS-010,SPECIALTY FLOWMETER FOR REDUCING PIPING REQUIREMENTS	Instrumentation and IT	West Europe
13280	6000002787	MONITOR; GAS; COMBUSTIBLE; OPEN PATH TYP	MONITOR GAS; COMBUSTIBLE,ANY RANGE,34-SAMSS-514,OPEN PATH TYPE	Instrumentation and IT	West Europe
13297	6000002925	ANALYZER; NIR SPECTROMETER;	ANALYZER; NIR SPECTROMETER TYPE,ANY RANGE,	Instrumentation and IT	West Europe
13306	6000002926	TRANSMITTER; MULTIVARIABLE;	TRANSMITTER; MULTIVARIABLE TYPE,ANY RANGE	Instrumentation and IT	West Europe
13323	6000009881	Custody Meter, Multi-Path, Ultrasonic Liquid	FLOWMETER; CUSTODY TRANSFER LIQUID TYPE,CUSTODY TRANSFER LIQUID	Instrumentation and IT	West Europe
13330	6000009890	CUSTODY PROVER, SMALL VOLUME, UNI PISTON	METER; UND PISTON(SMALL VOLUM) PROVER TYPE,34-SAMSS-119,FOR LIQUID CUSTODY TRANSFER	Instrumentation and IT	West Europe
13338	6000009906	CUSTODY PRESET CONTROLLER, TRUCK LOADING	COMPUTER FLOW; CUSTODY PRESET CONTROLLER TYPE,34-SAMSS-847,FOR TRUCK LOADING AND UNLOADING SYSTEMS	Instrumentation and IT	West Europe
13349	6000009910	CUSTODY WEIGH SCALE	SCALE WEIGH; CUSTODY TRANSFER TYPE,34-SAMSS-180	Instrumentation and IT	West Europe
13364	6000014531	MPFM FOR GAS FIELD APPLICATION	FLOWMETER; MULTIPHASE FLOWMETER TYPE,34-SAMSS-001,FOR GAS,FLOW	Instrumentation and IT	West Europe
13390	6000009831	CUSTODY METER, TURBINE, LIQUID	FLOWMETER TURBINE; CUSTODY TRANSFER LIQUID TYPE,ANY,34-SAMSS-117	Instrumentation and IT	West Europe
13399	6000009832	CUSTODY METER, POS DISPL , LIQUID	FLOWMETER POSITIVE DISPLACEMENT; CUSTODY TRANSFER LIQUID TYPE,ANY,34-SAMSS-118	Instrumentation and IT	West Europe
13408	6000009895	CUSTODY DENSITY METER, LIQUID	METER DENSITY; CUSTODY TRANSFER LIQUID TYPE,34-SAMSS-510	Instrumentation and IT	West Europe
13418	6000009898	CUSTODY CHROMATOGRAPH, GAS OR LIQUID	CHROMATOGRAPH PROCESS; FOR CUSTODY TRANSFER CHROMOTOGRAPHY,ANY DETECTOR,ANY CARRIER,34-SAMSS-510	Instrumentation and IT	West Europe
13429	6000009899	CUSTODY FLOW COMPUTER, LIQUID, PANEL-MNT	COMPUTER FLOW; PANEL MOUNTED TYPE,34-SAMSS-841,FOR LIQUID CUSTODY TRANSFER	Instrumentation and IT	West Europe
13443	6000009900	CUSTODY FLOW COMPUTER, GAS, PANEL-MNTD	COMPUTER FLOW; PANEL MOUNTED TYPE,34-SAMSS-846,FOR GAS CUSTODY TRANSFER	Instrumentation and IT	West Europe
13453	1000757581	H2S SCAVENGER, POWDER	H2S SCAVENGER-ZINC-FREE IRON GLUCONATEADMIXTURE DRILLING MUD; POWDER FORM,IRON GLUCONATE,FOR SCAVENGES 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). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT.	Chemicals	West Europe
13463	1000022136	WATER SOLUBLE CORROSION INHIBITOR	CORROSION INHIBITOR-MICROBIOSTAT ADDITIVE DRILLING FLUID; LIQUID FORM,CORROSION INHIBITOR AND BIOCID,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 BIOCID 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. 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). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT.	Chemicals	West Europe

13473	1000022533	CALCIUM CHLORIDE (77-78%) 2200 lb/BAG	<p>CALCIUM CHLORIDE (77-78%) 1000 KG/BIG BAG ADDITIVE DRILLING FLUID; DRY FLAKES, PELLETS, OR GRANULAR FORM, DRY FLAKES, PELLETS, OR GRANULAR, WATER-SOLUBLE, USED AS WEIGHTING AGENT TO FORMULATE SOLIDS-FREE COMPLETION BRINES AND TO PROVIDE THE DESIRED WATER PHASE SALINITY AND ACTIVITY IN INVERT EMULSION MUDS. IN ADDITION, IT IS USED AS AN ACCELERATOR IN OIL WELL CEMENT SLURRIES. CALCIUM CHLORIDE QUALITY IS MONITORED BY EXPEC ARC LABORATORIES. EXPEC CERTIFICATE OF ACCEPTANCE (EXPEC/COA) REFERRING TO THE RESPECTIVE BATCH NUMBER MUST BE ATTACHED TO EACH SHIPMENT DOCUMENTS ACCEPTED FOR FIELD APPLICATIONS, FOR USED AS WEIGHTING AGENT TO FORMULATE SOLIDS-FREE COMPLETION BRINES AND TO PROVIDE THE DESIRED WATER PHASE SALINITY AND ACTIVITY IN INVERT EMULSION MUDS. IN ADDITION, IT IS USED AS AN ACCELERATOR IN OIL WELL CEMENT SLURRIES. CALCIUM CHLORIDE 77-78%, 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 AND 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, ASTM D98-68/PRACTICE E29 / ASTM D345 - 02(2010) STANDARD TEST METHOD FOR CaCl2 SAMPLING AND TESTING, CHEMICAL AND PHYSICAL SPECIFICATIONS APPEARANCE: DRY FREE FLOWING WHITE FLAKES OR PELLETS - PURITY: CaCl2 77% WT. MINIMUM PASS THROUGH 7/16 IN SCREEN: 100% WT. NO PARTICLES GREATER THAN 11MM IN ANY DIMENSION. MALKALI CHLORIDES AS NaCl: 7% WT. MAXIMUM AND MGCL2: 1% WT. MAXIMUM HEAVY METALS AS PB: 0.005% WT. MAXIMUM - SULFATE ASMCASO4: 0.05% WT. MAXIMUM. FE: 15 PPM MAXIMUM WATER INSOLUBLE: 0.20% WT. MAXIMUM.</p>	Chemicals	West Europe
13482	1000022538	CALCIUM CHLORIDE (94-98%) 2200 lb/BAG	<p>CALCIUM CHLORIDE (94-98%) 1000 KG/BIG BAG ADDITIVE DRILLING FLUID; DRY FLAKES, PELLETS, OR GRANULAR FORM, DRY FLAKES, PELLETS, OR GRANULAR, WATER-SOLUBLE USED AS WEIGHTING AGENT FOR FORMULATING SOLIDS-FREE COMPLETION BRINES AND TO PROVIDE THE DESIRED WATER PHASE SALINITY AND ACTIVITY IN INVERT EMULSION MUDS IN ADDITION, IT IS USED AS AN ACCELERATOR IN OIL WELL CEMENT SLURRIES. CALCIUM CHLORIDE QUALITY IS MONITORED BY EXPEC ARC LABORATORIES. EXPEC CERTIFICATE OF ACCEPTANCE (EXPEC/COA) REFERRING TO THE RESPECTIVE BATCH NUMBER MUST BE ATTACHED TO EACH SHIPMENT DOCUMENTS ACCEPTED FOR FIELD APPLICATIONS, FOR USED AS WEIGHTING AGENT FOR FORMULATING SOLIDS-FREE COMPLETION BRINES AND TO PROVIDE THE DESIRED WATER PHASE SALINITY AND ACTIVITY IN INVERT EMULSION MUDS IN ADDITION, IT IS USED AS AN ACCELERATOR IN OIL WELL CEMENT SLURRIES. CALCIUM CHLORIDE 94-98%, 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 &amp; 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, ASTM D98-68/PRACTICE E29 / ASTM D345 - 02 (2010) STANDARD TEST METHOD FOR CaCl2 SAMPLING AND TESTING, CHEMICAL AND PHYSICAL SPECIFICATIONS APPEARANCE: DRY FREE FLOWING WHITE FLAKES OR PELLETS - PURITY: CaCl2 94 %WT. MINIMUM PASS THROUGH 4 MESH SCREEN: 100% WT. NO PARTICLES GREATER THAN 4.5MM IN ANY DIMENSION ALKALI CHLORIDES AS NaCl: 5.0% WT. MAXIMUM - AS MGCL2: 0.5% WT. MAXIMUM HEAVY METALS AS PB: 0.005% WT. MAXIMUM. SULFATE AS CASO4: 0.05% WT. MAXIMUM. FE: 15 PPM MAXIMUM WATER INSOLUBLE: 0.20% WT. MAXIMUM. REMAINING COMPONENT IS WATER OF CRYSTALLIZATION PH:</p>	Chemicals	West Europe
13491	1001129231	Anhydrous Calcium Bromide Dry	<p>CALCIUM BROMIDE [CaBr2] DRY 95% ADDITIVE DRILLING FLUID; WHITE FREE FLOWING POWDER, CRYSTALLINE OR GRANULAR FORM, CALCIUM 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 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 SOLUTIONS TO FORMULATE. SOLIDS-FREE NON-DAMAGING HIGH-DENSITY BRINE BLENDS WITH DENSITIES UP TO 143 PCF (19.1 LB/GAL). APPEARANCE: WHITE FREE FLOWING POWDER CRYSTALLINE OR GRANULAR, NO LUMPS SATURATED BRINE SOLUTION: CLEAR COLORLESS PURITY AS CaBr2, PERCENT 95 MINIMUM SG AT 77 DEG F (25 DEG C): 3.2 - 3.4 SOLUBILITY IN WATER AT 68 DEG F (20 DEG C), WT PERCENT 58 MINIMUM IRON, PPM: 10 MAXIMUM CHLORIDE AS CaCl2, WT PERCENT 1.5 MAXIMUM SULFATE, PPM: 200 MAXIMUM HEAVY METALS, PPM: 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 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), PRODUCT MANUFACTURER AND/OR SUPPLIER ARE REQUIRED TO SUBMIT LAB CERTIFICATE OF ANALYSIS (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT. 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>	Chemicals	West Europe
13499	1001130337	Radiagreen EME Salt	<p>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 DARK AMBER. SWEET AND MILD ODOR SOLUBILITY IN WATER: INSOLUBLE IN WATER SPECIFIC GRAVITY AT THE RANGE BETWEEN 68F (20C): 0.95 - 1.05 FLASH POINT (PMCC): GREATER THAN 212F (100C) 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 (COA) AND CERTIFICATE OF ORIGIN (COO) FOR EVERY BATCH. UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT. 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. IT IS NON-DAMAGING TO PRODUCING ZONES, NON-TOXIC, ENVIRONMENTALLY FRIENDLY AND HELPS PREVENT BIT BALLING AND DIFFERENTIAL STICKING. THE PRODUCT 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.</p>	Chemicals	West Europe
13507	1000823699	THINNER OBM	<p>THINNER/DISPERSANT-OBM CONDITIONER ADDITIVE DRILLING FLUID; LIQUID FORM, SULFONATE BLEND WITH FATTY ACID, FOR USED TO LOWER RHEOLOGICAL PROPERTIES OF OIL BASE FLUIDS, POLYOLEFIN/ORGANIC SULFONATE BLEND WITH FATTY ACID, 55 GALLON (208 LITER) DRUM. SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL, THINNER/DISPERSANT-OIL-BASE MUD CONDITIONER: LIQUID POLYOLEFIN/ORGANIC SULFONATE BLEND WITH FATTY ACID DERIVATIVES USED TO LOWER RHEOLOGICAL PROPERTIES FOR OIL BASE FLUIDS. OTHER ASSOCIATED ELEMENTS MUST NOT BE HARMFUL TO PERSONNEL AND/OR ADVERSELY AFFECT FLUID PROPERTIES. CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: DARK AMBER LIQUID SOLUBILITY: INSOLUBLE IN WATER SPECIFIC GRAVITY: 0.90 - 0.96 FLASH POINT (PMCC): &gt; 212°F (100°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). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT</p>	Chemicals	West Europe
13516	1000021672	HYDROXY ETHYL CELLULOSE (HEC)	<p>HYDROXY ETHYL CELLULOSE (HEC) ADDITIVE DRILLING FLUID; DRY FREE FLOWING WHITE POWDER FORM, HYDROXY ETHYL CELLULOSE (HEC), FOR MULTI-PURPOSE VISCOSIFYING POLYMER FOR FRESHWATER, SEA WATER SALT SATURATED WATER AND COMPLEX BRINE SYSTEMS, HYDROXY ETHYL CELLULOSE (HEC), 50 LBS. (22.7 KG). MULTI-WALLED PAPER BAG, VALVE/SPOUT TYPE, COMPLETELY SEALED, MOISTURE AND WATER PROOF. THE CONSTRUCTION OF THE MULTI-WALLED PAPER BAG SHALL BE AS FOLLOWS: 1ST PLY (INTERIOR PLY) 10# COATING 0.000285 MICRON ALUMINUM SHEET 6# PE COATING 50 LB NATURAL KRAFT PAPER THE ALUMINUM SHEET IS COATED ON ONE SIDE WITH 10# PE THE 10# IS NEXT TO THE PRODUCT. THE COATED ALUMINUM SHEET LAMINATED TO THE 50 LB KRAFT PAPER. 2ND PLY 50 LB NATURAL KRAFT PAPER. 3RD PLY 50 LB NATURAL KRAFT PAPER. 4TH PLY 50 LB BLEACH WHITE NATURAL KRAFT PAPER (EXTERIOR PLY). THE BLEACHED PAPER IS "FULLY BLEACHED WHITE". SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL, HEC-HYDROXY ETHYL CELLULOSE: IS A NON-IONIC POLYMER, DRY FREE FLOWING WHITE POWDER DISPERSES EASILY AND RAPIDLY DISSOLVES IN FRESH WATER, SEA WATER, SALT SATURATED BRINE AND COMPLEX DIVALENT BRINE BLENDS TO DEVELOP VISCOSITY RELATED CHARACTERISTICS FOR DRILLING AND COMPLETION FLUIDS THAT IMPART MINIMUM FORMATION DAMAGE. THE HEC SHOULD BE EASILY BROKEN WITH ACID, ENZYMES, OR OXIDIZING AGENTS TO MAXIMIZE THE POTENTIAL FOR HYDROCARBON RECOVERY AND SHOULD BE STABLE AT TEMPERATURES UP TO 250°F (121°C). CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: WHITE TO CREAM-COLORED HYDROXYETHYLCELLULOSE (HEC) SHALL NOT CONTAIN ANY STARCH, GUAR OR ANY OTHER POLYMERS OR THEIR DERIVATIVES. MOISTURE: 8% WT. MAXIMUM SPECIFIC GRAVITY, 1.38-1.40 PARTICLE SIZE: PASS THROUGH U.S. 20 MESH SCREEN (840 MICRON): 100% 1% WT. SOLUTION IN DEIONIZED WATER BROOKFIELD SPINDLE #4, 30 RPM. (ASTM D 2196-91): VISCOSITY AT 77°F (25°C): 4,400-6,500 PH @ 77°F (25°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). UOM REFERRED IN THIS MATERIAL IS NET VOLUME/WEIGHT.</p>	Chemicals	West Europe

13531	1000814796	ACETIC ACID > 96%	MICRO WASH-GLACIAL ACID-BAKER HUGHES ADDITIVE DRILLING FLUID; CLEAR, COLORLESS LIQUID FORM,LIQUID CARBOXYLIC ACID,FOR USED FOR ACIDIZING SOLUBLE CALCIUM CARBONATE PARTICLES AFTER USING OBM.,LIQUID CARBOXYLIC ACID WITH THE MOLECULAR FORMULA OF CH3COOH,275 GALLON IBC TOTE CONTAINER SPECIFICATIONS: LEAK PREVENTION MECHANISM: VALVE CLOSED WITH SCREW CAP PE-DISC AND FLAT GASKET, VALVE HANLDE SECURED WITH A LOCKING SCREW. INNER CONTAINER SHOULD BE HIGH MOLECULAR WEIGHT, HIGH DENSITY POLYETHYLENE (HMWHDP E) W/EXTRUSION BLOW MOLDED, SPECIALLY SHAPED TO ENSURE COMPLETE DISCHARGE OF CONTENTS.OUTER CONTAINER SHOULD BE RIGID, WELDED GALVANIZED TUBULAR STEEL GRIDWITH A LARGE PERMANENTLY FIXED IDENTIFICATION PLATE.MOLDED BOTTOM SHELL SHOULD BE PRESSED GALVANIZED STEEL BASE SHAPED TO SUPPORT THE INNER CONTAINER AND ASSIST TOTAL DRAINAGE. PALLETS SHOULD BE STEEL AND HAVE 4 WAYS ENTRIES. SHIPMENT OF PRODUCTS MUST CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,MICRO-WASH ACETIC ACID-BAKER HUGHES: CLEAR LIQUID CARBOXYLIC ACIDS WITH THE FORMULA OF CH3COOH, USED FOR ACIDIZING SOLUBLE CALCIUM CARBONATE PARTICLES, AFTER USING OBM, IN WELLBORE REMEDIATION AND CLEANUP PROCESS TO IMPROVE WELL PRODUCTIVITY. BAKER HUGHES MICRO-WASH ACID SYSTEM CONSISTS OF: PRIME-743 (SAP #1000811425), PRIME-760 (SAP #1000811426), PRIME-770 (SAP #1000811427), OHR-759 (SAP #1000811421), OHR-AC (SAP #1000811422), OHR-757 (SAP #1000811423), OHR-750 (SAP #1000811424), GLACIAL ACETIC ACID (SAP #1000814796), AND FORMIC ACID (SAP #1000811877). CHEMICAL AND PHYSICAL SPECIFICATIONS: APPEARANCE: CLEAR LIQUID, STRONG PUNGENT VINEGAR ODOR ACETIC ACID: >96% DENSITY: 1040-1050 KG/M³ (1.040-1.050 G/CM³) AT 25°C BOILING POINT: 242.6 °F (117 °C) MINIMUM FLASH POINT: >39 °C/102 °F (CLOSED CUP) AUTO-IGNITION TEMPERATURE: 799°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	Chemicals	West Europe
13539	1000021930	XANTHAN GUM (POWDER)	XANTHAN GUM BIO-POLYMERADDITIVE DRILLING FLUID; DRY FREE FLOWING POWDER FORM,PUREXANTHAN GUM BIO-POLYMER,FOR IS USED AS A RHEOLOGY CONTROL AND SUSPENSION AGENT IN FRESH WATER, SEA WATER, AND SATURATED BRINE-BASED DRILLING, COMPLETION AND WORKOVER FLUIDS.,PURE XANTHAN GUM BIO-POLYMER,25 KG (55.1 LBS.) MULTI-WALL PAPER BAG, VALVE/SPOUT TYPE COMPLETELY SEALED, MOISTURE AND WATER PROOF. THE CONSTRUCTION OF THE MULTI-WALLED PAPER BAG SHALL BE AS FOLLOWS: 1ST PLY 50 LB. NATURAL KRAFT PAPER (INTERIOR PLY) 2ND PLY 50 LB. NATURAL KRAFT PAPER 3RD PLY SEPARATE INNER BAG LINER, HIGH DENSITY ORIENTED AND CROSS-LAMINATED INNER POLY-ETHYLENE RESIN LINER (TUBULAR SHAPE) WITH A MINIMUM WALL THICKNESS OF 0.1 MM. 4TH PLY 50 LB. NATURAL KRAFT PAPER. 5TH PLY 60 LB. NATURALKRAFT PAPER. WET STRENGTH (EXTERIOR PLY) SHIPMENT OF PRODUCT SHALL CONFORM TO SAUDI ARAMCO EXPORT PACKING MANUAL.,API SPECIFICATION 13A 18TH EDITION, AUGUST 2010, ERRATA 1, AUGUST 2014.XANTHAN GUM BIO-POLYMER: DRILLING GRADE PURE, DRY, FREEFLOWING FINE POWDER ANIONIC POLYSACCHARIDE, READILY SOLUBLE IN WATER BRINE. THE BIO-POLYMER PRODUCED BY A DISTINCT FERMENTATIONPROCESS OF XANTHOMONAS CAMPESTRIS. THE PRODUCT SHALL NOT CONTAIN ANY OTHER POLYSACCHARIDE, SUCH AS STARCH, GUAR GUM OR OTHER NATURALLY OCCURRING POLYMERS OR THEIR DERIVATIVES. IT IS USED AS A RHEOLOGY CONTROL AND SUSPENSION AGENT IN FRESH WATER, SEA WATER, AND SATURATED BRINE-BASED DRILLING, COMPLETION ANDWORKOVER FLUIDS. XANTHAN GUM QUALITY IS MONITORED EXPEC ARC LABORATORIES. EXPEC CERTIFICATE OF ACCEPTANCE (EXPEC/COA)REFERRING TO THE RESPECTIVE BATCH NUMBER MUST BE ATTACHED TO EACH SHIPMENT DOCUMENTS ACCEPTED FOR FIELD APPLICATIONS.CHEMICAL AND PHYSICAL SPECIFICATIONS: OFF-WHITE, FREE-FLOWING GRANULAR POWDER. SCREEN ANALYSIS: LESS THAN 425 MM (PASS THROUGH 40 US MESH SCREEN) - 95% MINIMUM LESS THAN 75 MM (PASS THROUGH 200 US MESH SCREEN) - 50% MAXIMUM QUALITATIVE LAB TESTS WILL BE PERFORMED TO DETECT THE PRESENCE OF: STARCH, GUAR, OR THEIR DERIVATIVES: ABSENT CELLULASE ENZYMES: NEGATIVE SULFATE REDUCING BACTERIA: NEGATIVE CELLULOLYTIC BACTERIA: NEGATIVE MOISTURE CONTENT: 10% MAXIMUM NO INGREDIENT LEVELS GREATER THAN OR EQUAL TO 0.1%WT. TO BE IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN PERFORMANCE REQUIREMENTS: LOW XANTHAN GUM CONCENTRATION DEVELOPS PSEUDOPLASTIC FLUID BEHAVIOR (HIGH VISCOSITY UNDER LOW SHEER AND LOW VISCOSITY UNDER HIGH SHEER) TEMPERATURE STABILITY: STABLE	Chemicals	West Europe
13558	6000007293	COUPLING: OCTG; HIGH NICKEL	COUPLING OCTG; DUPLEX STAINLESS STEEL AND NICKLE BASE ALLOYS,SEAMLESS,API-5CRA,ISO-13680 AND 45-SAMSS-006,GR API-5CRA GROUP-2 TO GROUP-4 GRADES,SIZE ANY,CAL-IV QUALIFIED THREAD END CONN,ANY LG	Pipe & OCTG	West Europe
13565	6000007303	CASING: OCTG; HIGH NICKEL; SEAMLESS	CASING OCTG; DUPLEX STAINLESS STEEL AND NICKLE BASE ALLOYS,SEAMLESS,API-5CRA,ISO-13680 AND 45-SAMSS-006,GR API-5CRA GROUP-2 TO GROUP-4 GRADES,SIZE 4-1/2 IN AND LARGER SIZES,CAL-IV QUALIFIED THREAD END CONN	Pipe & OCTG	West Europe
13571	6000007305	CROSSOVER: OCTG; HIGH NICKEL	ADAPTER OCTG NIPPLE/CROSSOVER/SWAGE; DUPLEX STAINLESS STEEL AND NICKLE BASE ALLOYS,SEAMLESS,API-5CRA,ISO-13680 AND 45-SAMSS-006,GR API-5CRA GROUP-2 TO GROUP-4 GRADES,CAL-IV QUALIFIED THREAD	Pipe & OCTG	West Europe
13578	6000007307	PUP JOINT: CASING OCSG; HIGH NICKEL	PUP JOINT OCTG; DUPLEX STAINLESS STEEL AND NICKLE BASE ALLOYS,SEAMLESS,API-5CRA,ISO-13680 AND 45-SAMSS-006,GR API-5CRA GROUP-2 TO GROUP-4 GRADES,SIZE 4-1/2 IN AND LARGER SIZES,CAL-IV QUALIFIED THREAD END CONN	Pipe & OCTG	West Europe
13584	6000015250	Non-Metallic OCTG Products	CASING OCTG; THERMOSETTING POLYMERS REINFORMCED WITH FIBERGLASS,API 15HR,45-SAMSS-006 API-5L,SIZE 4-1/2 IN -10-3/4 IN	Instrumentation and IT	West Europe
13593	6000010721	Expandable Pipe System	UNIT; ANY TYPE,EXPANDABLE CASING & ACCESSORIES	Drilling Equipment	West Europe
13594	6000010721	Expandable Pipe System	UNIT; ANY TYPE,EXPANDABLE CASING & ACCESSORIES	Drilling Equipment	West Europe
13603	6000015784	Multilateral system	LATERAL; ANY NPS,ANY LATERALS AND ACCESSORIES EQUIPMENT	Drilling Equipment	West Europe
13608	6000004089	Open Hole Expandable latch anchor whipstock	WHIPSTOCK; RETRIEVABLE TYPE ANY CSG DRE DRILLING OPERATIONS	Drilling Equipment	West Europe
13613	6000004043	Single ICD Installation	CEMENTER; ANY TOOL OD,ANY DRILL OD,MULTI STAGE INFLATABLE AND MECHANICAL PACKER FOR CEMENTING (DV)	Drilling Equipment	West Europe
13618	6000004047	Isolation packer expandable	PACKER; ANY TYPE,MECHANICAL, SWELLABLE, ISOLATION PACKERS	Chemicals	West Europe
13627	6000002244	COMPRESSOR; AIR; CENTRIFUGAL; INTEGRALLY	COMPRESSOR AIR; CENTRIFUGAL, INTEGRALLY GEARED TYPE,31-SAMSS-006	Rotating Equipment	West Europe
13638	6000002417	FILTER; ELEMENT; COMBUSTION GAS TURBINE;	FILTER ELEMENT; FOR COMBUSTION GAS TURBINE,32-SAMSS-008,AIR INLET, FINAL STAGE	Rotating Equipment	West Europe
13647	6000002367	PUMP; CENTRIFUGAL; CANNED MOTOR;	PUMP CENTRIFUGAL; CANNED MOTOR TYPE,SIZE ANY,ANY,SINGLE STAGE(S)ASME B73.3M / ISO15783	Rotating Equipment	West Europe
13653	6000016780	EJECTOR; PROCESS GAS	EJECTOR; GAS OR LIQUID,ANY PROCESS,ANY,NACE MR-0175/ISO-15156,EJECTOR PACKAGE F OR PROCESS GAS COMPRESSION. NOT FOR STEAM-VACUUM SERVICES.	Rotating Equipment	West Europe
13659	6000002371	PUMP; CENTRIFUGAL;VERTICAL;MOLTEN SULFUR	PUMP CENTRIFUGAL; VERTICAL TYPE,SIZE ANY,ANY,SINGLE STAGE(S),MFR STD DESIGN +SAES-G-005,MOLTEN SULFUR, SUMP	Rotating Equipment	West Europe
13673	6000010363	PUMP; MULTIPHASE, HELICO-AXIAL TYPE,ANY,31-SAMSS-004	PUMP; MULTIPHASE, HELICO-AXIAL TYPE,ANY,31-SAMSS-004	Rotating Equipment	West Europe
13680	6000017940	PUMP SUBMERSIBLE, CRYOGENIC PER API 610	PUMP SUBMERSIBLE; ANY,CRYOGENIC PER API 610, COMPLETE UNIT, PUMP ALONE OR MOTOR ALONE, INCLUDING ACCESSORIES	Rotating Equipment	West Europe
13689	6000012484	MICROTURBINES: GAS TURBINE GENERATORS, U	TURBINE COMBUSTION GAS; GAS TURBINE GENERATORS TYPE,UP TO 500 KW,32-SAMSS-100,S-K-502,MICROTURBINES	Rotating Equipment	West Europe
13715	6000000275	VALVE; CHECK;SWING;UP TO 12 IN; CI OR DI	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	Static Equipment	West Europe
13722	6000000296	VALVE; GATE; WEDGE OR DBL DISC; UP TO 12	VALVE GATE; SIZE UP TO NPS 12,ANY RATING, ALLEND S SUPPLY,CAST OR DUCTILE IRON BODY,04-SAMSS-035,04-SAMSS-048 AWWA,WITH OR WITHOUT ACTUATOR	Static Equipment	West Europe
13728	6000000297	VALVE GATE; SIZE NPS 14 AND ABOVE	VALVE GATE; SIZE NPS 14 AND ABOVE,ANY RATING, ALLEND S SUPPLY,CAST OR DUCTILE IRON BODY,04-SAMSS-035,AWWA,WITH OR WITHOUT ACTUATOR	Static Equipment	West Europe
13736	6000000302	VALVE; GLOBE; CAST OR DUCTILE IRON;	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	Static Equipment	West Europe
13743	6000000317	VALVE; PLUG; 4-WAY DIVERTER; 2 THRU 24	VALVE PLUG; 4-WAY DIVERTER TYPE,SIZE NPS 2 THRU 24,ASME CLASS 150 THRU 600 SUPPLY,FLANGED OR BUTTWELD END CONN,STEEL BODY,04-SAMSS-042,04-SAMSS-035 04-SAMSS-048,WITH OR WITHOUT ACTUATOR	Static Equipment	West Europe
13757	6000000490	LUMBER; PLYWOOD; EXTERIOR OR INTERIOR;	LUMBER; INTERIOR WOOD, EXTERIOR TYPE,ANY NPS,IBC 2006,ONSHORE UTILITIES ONLY	Static Equipment	West Europe
13765	6000002323	CRANE; JIB; HOISTING; 1/2 TON TO 10 TON;	CRANE JIB; HOISTING TYPE,1/2 TON TO 10 TON LIFT,SHOPS OPERATIO,HOISTING	Static Equipment	West Europe
13788	6000002415	EJECTOR; AIR; STEAM OR WATER.;	EJECTOR; ANY PROCESS,ANY,AIR,STEAM OR WATER.,AIR, STEAM OR WATER.	Static Equipment	West Europe
13803	6000002508	FLARE; PROCESSED PLANT; INCLUDING TEMPER	FLARE; PROCESSED PLANT TYPE,32-SAMSS-022,31-SAMSS-003 32-SAMSS-004,32-SAMSS-011 32-SAMSS-013,34-SAMSS-830 34-SAMSS-711,INCLUDING TEMPERATURE CONTROLS,IGNITERS AND STACK AND BURNPIT WITH ACCESSORIES, FOR FGRS INCLUDES: COMPRESSORS,PRESSURE VESSELS(WATER SEAL DRUMS) OR CONTROL VALVES WITH BUCKING PIN VALVES, BLOWERS AND AIR COOLED HEAT EXCHANGERS. FOR IN-HOUSE HPAAS (HIGH PRESSURE AIR ASSIST SYSTEM) FLARE SMOKELESS APPLICATION INCLUDE: HPAAS FLARE TIP, COMPRESSORS, PRESSURE VESSEL(S)(AIR DRYER AND RECEIVER DRUM), CONTROL VALVES AND HEAT EXCHANGERS.	Static Equipment	West Europe
13811	6000002748	IGNITER	IGNITER; FLARE TYPE,FLARE	Static Equipment	West Europe
13815	6000009264	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 UIGHT,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	Static Equipment	West Europe
13823	6000009414	VALVE, SANDWICH, 2 IN. AND UP, ASME CLAS	VALVE; GATE, SANDWICH TYPE,SIZE NPS 2 AND UP, STEEL,ASME CLASS 150 AND UP SUPPLY,FLANGE END CONN,04-SAMSS-035,04-SAMSS-048	Static Equipment	West Europe
13835	6000014491	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	Static Equipment	West Europe
13841	6000014971	COUPLER; LPG LOADING,INCLUDE VAPOR	COUPLER; LPG LOADING TYPE,SIZE ALL SIZES,HARD PIPE TERMINAL,INCLUDE VAPOR AND BREAKAWAY COUPLERS,CONTACT CSD FOR DETAILS	Static Equipment	West Europe
13848	6000017141	INLINE MIXING SKID;	UNIT; VALVE/SPOOL TYPE,SAES-A-010,01-SAMSS-010 ANSI B31.3,INLINE HIGH EFFICIENCY MIXER PACKAGE, ADJUSTABLE OR STATIC, TYPICALLY HAS SPOOL OR VAVLE, FITTINGS, INJECTION CONE, INJECTION PIPE SPOOL, INJECTION QUILL, HOUSING, INTERNAL MIXING PARTS. FOR SOUR AND NON SOUR SERVICE NPS PRODUCT RANGE PER PR, ANSI FLANGE 150 TO 900#. FOR MIXING OIL WITH WATER OR CHEMICALS. FABRICATION WITH APPROVED MANUFACTURER	Static Equipment	West Europe
13857	6000017370	SEAL, PRIMARY,FOR EXTERNAL FLOATING ROOF	SEAL; PRIMARY TYPE,32-SAMSS-005,FOR EXTERNAL FLOATING ROOFS	Static Equipment	West Europe
13866	6000017570	BURNER, BOILER, STEAM GENERATOR	BURNER; BOILER, STEAM GENERATOR TYPE,SIZE ANY,ANY SHAPE,ANY METAL 32-SAMSS-021	Static Equipment	West Europe
13875	6000018060	VESSEL, PRESSURE, ANY, FIBREGLASS-REINFO	VESSEL; PRESSURE TYPE,ANY,FIBREGLASS-REINFORCED PLASTIC (FRP),WATER SERVICES ONLY	Nonmetallic	West Europe
13884	6000017371	SEAL, SECONDARY, EXTERNAL FLOATING ROOFS	SEAL; SECONDARY TYPE,32-SAMSS-005,FOR EXTERNAL FLOATING ROOFS	Static Equipment	West Europe



13900	6000011206	SKID; FILTRATION SYSTEM	SKID; SKID/PACKAGE TYPE,SAES-A-017 (DESIGN),SAMSS-038 (SKID FABRICATION ASSEMBLY AND DESIGN OF FILTRATION SYSTEM (HYDROCARBON SERVICE) OIL /GAS/WATER STREAM	Static Equipment	West Europe
13908	6000000342	VALVE; KNIFE;	VALVE; KNIFE GATE, ALL MATERIALS TYPE,SIZE ALL SIZES,04-SAMSS-035,04-SAMSS-048,ALL PRESSURES	Static Equipment	West Europe
13917	6000000012	PIPE; STEEL API 5L; SAW STRAIGHT; SOUR	PIPE METALLIC; ALL SIZE NPS,ANY,STEEL,GR GRADE B THRU X65,SAW STRAIGHT SEAM,BARE,BEVELED ENDS,API 5L,01-SAMSS-035,SOUR SERVICE	Static Equipment	West Europe
13926	6000010871	PIPE METALLIC; SAW STRAIGHT; NON SOUR	PIPE METALLIC; ALL SIZE NPS,ANY,C5,GR GRADE B THRU X70,STRAIGHT SAW,API 5L,01-SAMSS-035,NON SOUR SERVICE	Static Equipment	West Europe
13953	6000015607	VALVE; BALL;MS,2-1/16 IN & UP,2K-5K PSI,	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	Static Equipment	West Europe
13963	6000017500	UNIT, METALLIC 3DPRINTING/ADDITIVE MANUF	UNIT; METALLIC 3DPRINTING/ADDITIVE MANUFACTURING INCLUDING ALL TYPE OF STEEL (E.G. INCONEL, TITANIUM, STAINLESS STEEL) TYPE,ANY METALLIC 3D PRINTED PRODUCT INCLUDING NEW PARTS MANUFACTURING, PART MODIFICATION AND REPAIR. METALLIC PART SUCH AS ROTATING EQUIPMENT, STATIC EQUIPMENT AND DRILL EQUIPMENT	Rotating Equipment	West Europe
13972	6000013000	Multiplexer; Foundation Fieldbus (FF)	MULTIPLEXER; FOUNDATION FIELDBUS (FF) TYPE,SAES-J-904,AA MULTI-INPUT TEMPERATURE	Instrumentation and IT	West Europe
13990	6000000999	FORM-WOUND BRUSHLESS SYNCH. MOTOR	MOTOR SYNCHRONOUS; 500 HP MINIMUM POWER,4000 V MINIMUM,3 PHASE PHASE,HORIZONTAL MTG,17-SAMSS-520	Electrical	West Europe
13999	6000018110	FENCE, RIGID WELDED MESH (RWM), 3 METERS	FENCE; RIGID WELDED MESH (RWM) TYPE,3 METERS HEIGHT, 3 TO 3.5 METERS WIDTH HT,STAINLESS STEEL,SAES-O -202	Others	West Europe
14007	6000015902	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.#	Electrical	West Europe
13971	6000000482	LUMBER; PRESSURE TREATED	LUMBER; ANY NPS,PRESSURE TREATED,09-SAMSS-002,ONSHORE UTILITIES ONLY	Static Equipment	West Europe
13987	6000014710	FLANGE; PIPE: CONNECTOR, MECHANICAL END	FLANGE PIPE; CONNECTOR TYPE,ANY NPS,ANY,MECHANICAL END CONNECTORS	Static Equipment	West Europe
11365	6000002393	BOILER; FIRE TUBE; AND COMONENTS	BOILER; FIRE TUBE AND COMPONENTS TYPE,32-SAMSS-021	Static Equipment	West Europe
12692	6000016462	ENGINE; ENGINE, GAS OR DUEL FUEL INDUSTRIAL TYPE	ENGINE; ENGINE, GAS OR DUEL FUEL INDUSTRIAL TYPE,ANY BHP	Rotating Equipment	West Europe
12665	6000012733	CHILLER: ABSORPTION; WATER COOLED	CHILLER; ANY TYPE,ANY SUPPLY,AHRI 560,UL-1995 ASHRAE 90.1,ABSORPTION, SUSTAINABLE, HIGH EFFICINCY, COMPRESSOR-LESS, WATER COOLED DIRECT FIRED OR EXCESS/WASTE STEAM/HEAT FOR HVAC APPLICATION.	Static Equipment	West Europe
14008	60000000841	CIRCUIT BREAKER; AIR; 480 V; LOW VOLTAGE	CIRCUIT BREAKER AIR; ANY POLE,480 V,LOW VOLTAGE POWER TYPE,FRAME ANY,40 DEG C AMBIENT,FOR INDOOR,16-SAMSS-502	Electrical	West Europe
14009	60000000841	CIRCUIT BREAKER; AIR; 480 V; LOW VOLTAGE	CIRCUIT BREAKER AIR; ANY POLE,480 V,LOW VOLTAGE POWER TYPE,FRAME ANY,40 DEG C AMBIENT,FOR INDOOR,16-SAMSS-502	Electrical	East Europe
14012	6000016111	DRAG REDUCING AGENT (DRA)	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	Instrumentation and IT	West Europe
14013	6000016111	DRAG REDUCING AGENT (DRA)	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	Chemicals	East Europe
	6000002481	TANK; FIBER GLASS; 32-SAMSS-002	TANK; ANY TYPE,ANY,FIBER GLASS,32-SAMSS-002	Nonmetallic	Either
	6000014202	FITTING; PIPE; CUNI;ALL TYPES:EEMUA 234	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.	Static Equipment	Either
	6000002886	GAUGE; LEVEL; GLASS;	GAUGE LEVEL; GLASS TYPE,34-SAMSS-010,WITH BACKFLOW PREVENTER VALVE OR CHECK VALVE AS ASSEMBLY IF REQUIRED.	Instrumentation and IT	Either
	6000000328	VALVE;PLUG;UP TO NPS 12 CAST OR DUCTILE	VALVE PLUG; SIZE UP TO NPS 12,ANY PRESSURE RATING SUPPLY,ALL ENDS END CONN,CAST IRON BODY,04-SAMSS-035,04-SAMSS-048,WITH OR WITHOUT ACTUATOR	Static Equipment	Either
	6000000686	BUILDING; SPACE FRAME; STEEL;	BUILDING; SPACE FRAME TYPE,SIZE ANY,STEEL,12-SAMSS-007,SAES-M-001 SAES-M-100,ONSHORE	Static Equipment	Either
	6000001430	FLOAT COLLAR; FOR MARINE HOSE	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	Static Equipment	Either
	6000002453	MIXER; SIDE ENTRY; 32-SAMSS-017; GEARED;	MIXER; SIDE ENTRY TYPE,32-SAMSS-017,GEARED, ELECTRIC DRIVEN	Static Equipment	Either
	6000002732	MONITOR; FLAME MONITORING SYSTEM	MONITOR; IGNITERS AND BURNERS USED E MONITORING SYSTEM D IN FIRED EQUIPMENT. TYPE,ANY RANGE,34-SAMSS-617	Instrumentation and IT	Either
	6000008842	PUMP, CENTRIFUGAL, HORIZONTAL, MOLTEN SU	PUMP CENTRIFUGAL; HORIZONTAL TYPE,SIZE ANY,ANY,SINGLE STAGE(S),MFR STD DESIGN +SAES-G-005,MOLTEN SULFHUR	Rotating Equipment	Either
	6000009909	Custody Tank Management System, Radar	COMPUTER; FOR CUSTODY TRANSFER,34-SAMSS-321,CUSTODY TANK MANAGEMENT SYSTEM, RADAR	Instrumentation and IT	Either
	6000010092	VALVE; CONTROL, CUSTODY DIGITAL FLOW CON	VALVE; CONTROL TYPE,SIZE ANY,SAES-Y-103,FOR CUSTODY TRANSFER DIGITAL FLOW CONTROL VALVE	Instrumentation and IT	Either
	6000013342	FILTER; AIR, WITH BLEED FAN	FILTER; SAND, AIR, WITH BLEED FAN TYPE	Static Equipment	Either
	6000013820	REACTOR INTERNALS	REACTOR; REACTOR INTERNALS TYPE,AXIAL FLOW REACTORS, RADIAL FLOW REACTORS AND REGENERATORS COMPRISING OF DISTRIBUTION AND (RE)-DISTRIBUTION TRAYS, INLET DIFFUSERS, QUENCH MIXING, FILTER DECKS, CATALYST SUPPORT GRIDS, OUTLET COLLECTORS, SUPPORT BEAMS, CENTERPIPE, OUTER GRIDS, SCALLOPS, INNER AND OUTER SCREENS	Static Equipment	Either
	6000014891	NEGATIVE PRESSURE WAVE (ACOUSTIC) PLDS	DETECTOR LEAK; NEGATIVE PRESSURE WAVE (ACOUSTIC) TYPE,FOR PIPELINE,SAES-Z-003,THE ACOUSTIC PRESSURE WAVE METHOD ANALYSES THE RAREFACTION WAVES PRODUCED WHEN A LEAK OCCURS. FOR PIPELINE LEAK DETECTION SYSTEM (PLDS) APPLICATIONS.	Instrumentation and IT	Either
	6000014900	MACHINE; HOT TAP; PIPELINE SERVICE	MACHINE; HOT TAP TYPE,WITH/WITHOUT POWER UNIT	Drilling Equipment	Either