STANDARD SPECIFICATION FOR BOILER COMPOUND AND WATER TREATING CHEMICALS



Institutional Water Treatment Program

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COMMODITY NO: 2900-141-0011

ORGANIC BLEND C, 50 LB. MOISTURE-PROOF BAGS OR 400 LB. FIBRE DRUMS

A UNIFORM MIXTURE OF SODIUM LIGNOSULFO-NATE, SODIUM HEXAMETAPHOSPHATE, AND ANTI-FOAM FOR USE AS A BOILER WATER ADDITIVE TO CONTROL SCALE FORMATION AND TO PREVENT STEAM CONTAMINATION. THE BLEND SHALL BE SUITABLE FOR USE IN THE GENERATION OF STEAM FOR THE PROCESS-ING OF FOOD, READILY SOLUBLE IN WATER, CONTAIN LESS THAN 0.5% INSOLUBLE MATTER, AND HAVE THE FOLLOWING COMPOSITION:

SODIUM LIGNOSULFONATE (as Item 2900-141-0012)	79-82%
SODIUM HEXAMETAPHOSPHATE	14-17%
ANTI-FOAM (POLYAMIDE OR POLYHYDRIC ALCOHOL TYPE)	1.8-3.0%

COMMODITY NO: 2900-141-0012

ORGANIC BLEND E, 50 OR 100 LB. MULTI-WALLED PAPER BAGS OR APPROVED EQUAL OR 400 LB. FIBRE DRUMS.

SODIUM LIGNOSULFONATE, PARTIALLY DESULFONATED, TOTAL SULFUR LESS THAN 5.5% AS S, CALCIUM LESS THAN 0.10% AS CA, PH OF 3% SOLUTION APPROX. 12.0 @ 25 DEG. C, MAXIMUM MOISTURE 6%, WATER INSOLUBLE MATTER LESS THAN 0.2%, BROWN FREE FLOWING POWDER, SUITABLE FOR TREATMENT OF WATER USED FOR GENERATING STEAM FOR THE PROCESSING OF FOOD.

COMMODITY NO: 2900-141-0013

ORGANIC BLEND F, 50 LB. MOISTURE-PROOF BAGS OR 400 LB. FIBRE DRUMS.

A UNIFORM MIXTURE OF SODIUM LIGNOSULFO-NATE, SODIUM SULFITE AND ANTI-FOAM FOR USE AS A BOILER WATER ADDITIVE TO CONTROL SCALE FORMATION AND TO PREVENT STEAM CONTAMINATION. THE BLEND SHALL BE SUITABLE FOR USE IN THE GENERATION OF STEAM FOR THE PROCESSING OF FOOD, READILY SOLUBLE IN WATER, CONTAIN LESS THAN 0.5% INSOLUBLE MATTER AND HAVE THE FOLLOWING COMPOSITION:

SODIUM LIGNOSULFONATE	81-85%
(as Item 2900-141-0012)	
SODIUM SULFITE	12-14%
ANTI-FOAM (POLYAMIDE OR	3-4%
POLYHYDRIC ALCOHOL TYPE).	

COMMODITY NO: 2900-141-0014

DOMESTIC BOILER WATER TREATMENT BLEND, 50 LB. MOISTURE-PROOF BAGS OR 400 LB. FIBRE DRUMS.

SODA ASH (Na ₂ CO ₃)	25-30%
DISODIUM PHOSPHATE ANHY-	25-30%
DROUS (Na ₂ HPO ₄)	
SODIUM SULFITE ANHYDROUS	20-25%
(Na_2SO_3)	
MARACELL XE	8-12%
CORN STARCH	5-10%
SODIUM SEPTAPHOSPHATE OR	4-7%
SODIUM HEXAMETAPHOSPHATE	

THE BLEND SHALL BE A UNIFORM MIXTURE READILY DISPERSIBLE IN WATER. MOISTURE-PROOF BAGS OR FIBRE DRUMS SHALL BE OF PROPER MECHANICAL STRENGTH AND CHEMICAL RESISTANCE.

COMMODITY NO: 2900-141-0015

CAUSTIC SODA, FLAKE, 100 or 500 LB., STEEL DRUMS.

ANHYDROUS, NaOH, 76.0% MINIMUM Na₂0 FLAKE OR BEADS.

COMMODITY NO: 2900-141-0017

SODA ASH, LIGHT, 100 LB. MULTIWALL PAPER BAGS OR APPROVED EQUAL.

SHALL CONTAIN NOT LESS THAN 99% BY WEIGHT SODIUM CARBONATE (Na₂CO₃), LIGHT, OF WHICH NOT LESS THAN 58% SHALL BE IN THE FORM OF SODIUM OXIDE (Na₂0). IT SHALL NOT CONTAIN INSOLUBLE MATTER EXCEEDING 0.05%. IT SHALL BE A DRY WHITE POWDER CONTAINING NO LARGE LUMPS OR CRYSTALS AND NO CHIPS OR OTHER FOREIGN MATTER AND SHALL BE "FREE FLOWING" AND SUITABLE FOR STORAGE IN CLOSED HOPPERED BINS, FOR TRANSFERRING IN CONVEYING EQUIPMENT AND FOR FEEDING IN DRY-FEEDING MACHINES.

COMMODITY NO: 2900-141-0018

DISODIUM PHOSPHATE, 100 LB. MOISTURE-PROOF PAPER BAGS.

ANHYDROUS, Na₂HPO₄, 49% P₂O₅, FOOD GRADE.

COMMODITY NO: 2900-141-0021

SODIUM NITRATE, 100 LB. PAPER BAGS, PELLETS OR GRANULAR, U.S.P., (NaN0₃).

SODIUM SULFITE, ANHYDROUS, 100 LB. MULTIWALL PAPER BAGS OR APPROVED EQUAL.

Na₂SO₃ - POWDERED, TECHNICAL GRADE, CON-TAINING 90% MINIMUM Na₂SO₃, BALANCE BEING PRINCIPALLY SODIUM SULFATE. IT SHALL NOT PRODUCE PHENOLIC OR OBJECTIONABLE ODORS IN STEAM.

COMMODITY NO: 2900-141-0023

CYCLOHEXYLAMINE, 5, 30, 55 gal. (39,230,425 lbs.) DRUMS, NET.

C₆HIINH₂, 60-65%, TO BE USED FOR INHIBITING CORROSION IN CONDENSATE LINES. SOFTENED WATER IS TO BE EMPLOYED AS THE DILUTION WATER.

COMMODITY NO: 2900-141-0026

HYDRATED LIME, 50 LB. MUTLIWALL PAPER BAGS

SHALL CONTAIN NOT LESS THAN 90.0% Ca(OH)₂ (EQUIVALENT TO 68% AVAILABLE CaO CONTENT) AND SHALL DISPERSE PROPERLY TO PROVIDE SATISFACTORY TREATMENT OR SOFTENING OF PUBLIC WATER SUPPLIES. IT SHALL BE WHITE, DRY, FINELY POWDERED AND FREE FROM LUMPS AND ANY FOREIGN MATERIAL WHICH MAY INTERFERE WITH THE OPERATION OF CONVEYING AND DRYFEED EQUIPMENT.

COMMODITY NO: 2900-141-0030

SULFURIC ACID, 5, 13.5, 55 GL. DRUM, (75, 200, 750 LB.) H₂50₄, 66 DEG. BAUME.

COMMODITY NO: 2900-141-0032

QUICK LIME, 50 LB. MULTIWALL PAPER BAG OR APPROVED EQUAL.

SHALL CONTAIN NOT LESS THAN 90% AVAIL-ABLE CALCIUM OXIDE. SHALL BE OF QUALITY KNOW AS "QUICK-SLAKING", SHALL SLAKE SATISFACTORILY, READILY DISINTEGRATING INTO A SUSPENSION OF FINELY DIVIDED MATERIAL WITHOUT THE PRODUCTION OF OBJECTIONABLE AMOUNTS OF UNDISSOLVED UNSLAKED MATERIAL IN THE SLAKER.

SHALL BE SUBSTANTIALLY FREE OF CORE, ASH AND DIRT. SHALL PASS THROUGH A 3/4" SCREEN, AND NOT MORE THAN 5% SHALL PASS A NO. 100 U.S. STANDARD SIEVE, AND SHALL NOT CONTAIN MATERIAL WHICH MAY INTERFERE WITH THE OPERATION OF CONVEYING OR DRY-FEED EQUIPMENT.

COMMODITY NO: 2900-141-0033

SODIUM TRIPOLYPHOSPHATE, ANHYDROUS, WHITE GRANULAR, 100 LB. MOISTURE-PROOF BAGS.

 $Na_5P_30_{10}$, FOOD GRADE, 57.0% MINIMUM, P_20_5 PH OF 1% SOLUTION 9.6 @ 25 DEG. C.

COMMODITY NO: 2900-141-0034

NITROGENOUS, FILM-FORMING CHEMICAL, 350 LB. NET, NON-RETURNABLE STEEL DRUMS.

FOR PREVENTION OF RETURN STEAM CONDEN-SATE LINE CORROSION. SHALL NOT CONTAIN LESS THAN 15% ACTIVE INGREDIENTS, AS, FOR EXAMPLE, OCTADECYLAMINE. THE BASIC INGREDIENT SHALL BE A NITROGENOUS ORGANIC CHEMICAL OF HIGH MOLECULAR WEIGHT, WHICH WILL VAPORIZE THROUGH STEAM DISTILLATION AND WHICH IS CAPABLE OF DEVELOPING A NON-WETTABLE FILM ON METAL SURFACE, AS FOR EXAMPLE, OCTADECYLAMINE (C18H37NH2).

SHALL HAVE PROVEN PROTECTIVE FILM-FORMING PROPERTIES UNDER CONDENSATE LINE CONDITIONS. THE BIDDER IS TO SUPPLY INFORMATION AS TO THE EFFECTIVENESS OF THIS CHEMICAL IN PREVENTING RETURN LINE CORROSION, ITS TOXICITY AND THE PERCENTAGE OF ACTIVE INGREDIENT.

COMMODITY NO: 2900-141-0035

ALUM, 50 LB. MULTIWALL PAPER BAGS OR APPROVED EQUAL.

 $AL_2(SO_4)_3$, SHALL CONTAIN NOT LESS THAN 17% AVAILABLE WATER SOLUBLE ALUMINA (Al₂O₃).

INSOLUBLE MATTER SHALL NOT EXCEED 0.5%. SHALL BE GROUND TO SUCH SIZE THAT NOT LESS THAN 90% SHALL PASS A NATIONAL BUREAU OF STANDARDS NO.10 SIEVE AND 100% SHALL PASS A NATIONAL BUREAU OF STANDARDS NO. 4 SIEVE AND SHALL BE FREE OF LUMPS AND FOREIGN MATERIAL WHICH MAY INTERFERE WITH THE OPERATION OF CONVEYING AND DRY-FEED EQUIPMENT.

COMMODITY NO: 2900-141-0040

MORPHOLINE, 450 LB. DRUMS, NET. C4H9ON - CORROSION INHIBITOR GRADE, TO BE USED FOR PREVENTING CORROSION IN CONDENSATE LINES, MORPHOLINE CON-TENT BY WEIGHT 40-42% BY ACID TITRATION, MAXIMUM APHA COLOR 15%.

SODIUM SILICATE, IN 600 LB. DRUMS.

LIQUID, 3.25 Si0₂/Na₂0 RATIO , APPROX. pH 11.3, APPROX. DENSITY 11.8 LB./GAL. APPROX. 29.5%, SiO₂, SUITABLE FOR APPLICATION TO PUBLIC WATER SUPPLIES LESS THAN 0.5% SUSPENDED SOLIDS.

COMMODITY NO: 2900-141-0044

LIQUID SULFITE, IN 5, 13, 55 GAL. CONTAINER

38.0 - 42.0
≤ 3.5
≤ 15
3.6 - 4.6
1.310 - 1.370
10.9 - 11.3

COMMODITY NO: 2900-141-0051

HYDROCHLORIC ACID, 6 ½ GAL. CARBOY APPROX, 62#, MURIATIC.

HCl, TECHNICAL, IS DEG. BAUME, 27.9% SP. GR. 1.14, FOR SCALE REMOVAL.

COMMODITY NO: 2900-141-0060

CALCIUM HYPOCHLORITE GRANULAR POWDER, 5 LB. CANS or 100 lb. Drums.

Ca(OCl)₂, HYDRATED, 65.0% MINIMUM AVAILABLE CHLORINE, WHITE TO OFF-WHITE FREE FLOWING GRANULAR SOLID, FREE OF LUMPS AND FOREIGN MATERIAL, FOR TREAT-MENT OF DRINKING WATER, PH 1% SOLUTION APPROX. 11 @ 25 DEG. C.

COMMODITY NO: 2900-141-0062

SODIUM HYPOCHLORITE SOLUTION, 1 GAL. or 5 gal. CONTAINER.

NaOCI, CLEAR, LIGHT YELLOW LIQUID CONTAINING NOT LESS THAN 10% AVAILABLE CHLORINE BY VOLUME, SUITABLE FOR THE CHLORINATION OF PUBLIC WATER SUPPLIES. INSOLUBLE MATTER <0.15%, TOTAL FREE ALKALI <1.5% (AS NaOH), PH 12.

COMMODITY NO: 2900-141-0064

CATION EXCHANGE RESIN, 5 CU. FT. PLASTIC LINED FIBRE DRUMS OR 2 CU. FT. BURLAP BAGS.

STRONGLY ACIDIC TYPE, HIGH CAPACITY SULFONATED COPOLYMER OF STYRENE AND DIVINYLBENZENE. THE RESIN SHALL BE STABLE TO 120 DEG. C., INSOLUBLE IN ALL COMMON SOLVENTS, RESISTANT TO PHYSICAL ATTRITION, AND CHEMICALLY STABLE IN THE PH RANGE FROM I TO 14. THE CHEMICAL AND PHYSICAL PROPERTIES SHALL CONFORM TO THE FOLLOWING SPECI-FICATIONS WHEN RECEIVED.

PHYSICAL FORM SPHERICAL BEADS IONIC FORM SODIUM THEORETICAL TOTAL 2.0 MEQ/L CAPACITY (WET) MOISTURE CONTENT 44-48% WEIGHT 53 LB/CU FT PARTICLE SIZE 16-50 MESH RETENTION ON #16 SIEVE LESS THAN 1.0% **RETENTION ON #50 SIEVE** 99.0+%AMBERLITE IR120, DOWEX HCR, DUOLITE C-20 IONIC C-249, IWT C-361 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0065

CARBON, POWDERED ACTIVATED, IN 35 LB. MULTIWALL PAPER BAGS OR APPROVED EQUAL.

SHALL BE A GRADE IN EXTENSIVE USE FOR THE REMOVAL OF TASTE AND ODOR FROM MUNICIPAL WATER SUPPLIES. IT IS A CHARRED OR CARBONIZED RESIDUE OF AN ORGANIC MATERIAL, PREPARED IN SUCH A WAY AS TO POSSESS A HIGHLY ABSORPTIVE CAPACITY, PARTICULARLY WITH RESPECT TO TASTE AND ODOR-PRODUCING SUBSTANCES IN WATER. THE MOISTURE SHALL NOT EXCEED 8% BY WEIGHT.

FINENESS SHALL BE SUCH THAT NOT LESS THAN 99% WILL PASS A 100 MESH SIEVE AND NOT LESS THAN 95% WILL PASS A 200 MESH SIEVE, AND NOT LESS THAN 90% WILL PASS A 325-MESH SIEVE, AS TESTED BY THE WET-SCREEN METHOD.

ABSORPTION CAPACITY SHALL BE DETERMINED BY THE USE OF THE STANDARD PHENOL TEST OR BY MEASUREMENT OF THE THRESHOLD ODOR REDUCTION IN THE WATER TO BE TREATED.

COMMODITY NO: 2900-141-0067

CALCIUM CHLORIDE FLAKE, 100 LB. MULTIWALL BAG.

CaCl₂ - 77-80% CALCIUM CHLORIDE, TECHNICAL GRADE FOR REFRIGERATING BRINE.

COPPER SULFATE, CRYSTALS, 100 LB. MULTIWALL PAPER BAGS OR APPROVED EQUAL.

CuS0₄.5H₂0 - AT LEAST 99% PURITY, BLUE, ABOUT 1" SIZED CRYSTALS.

COMMODITY NO: 2900-141-0069

INHIBITED LIQUID ACID, I GAL. BT. or 13 gal. FOR REMOVING SCALE.

SHALL BE COMPOSED OF HYDROCHLORIC (OR MURIATIC) ACID (7-20 DEG. BAUME, 10-31% HCI) AND A SMALL PERCENTAGE (APPROX. 1%) OF AN EFFECTIVE CORROSION INHIBITOR. THIS FORMULATION SHALL BE EFFECTIVE IN REMOVAL OF CALCIUM CARBONATE SCALE AND SHALL PROVIDE AT 140-160 DEG. F. AT LEAST 90% CORROSION INHIBITION EFFICIENCY FOR 1020 STEEL AND 50%. CORROSION INHIBITION EFFICIENCY FOR COPPER ALLOYS.

COMMODITY NO: 2900-141-0073

INHIBITED POWDERED ACID, IN 100 LB. DRUMS, FOR REMOVING SCALE.

SHALL BE COMPOSED OF SULFAMIC ACID (NH_2SO_3H), 99% NONHYDROSCOPIC AND A SMALL PERCENTAGE (APPROX. 1%) OF AN EFFECTIVE CORROSION INHIBITOR.

THIS FORMULATION SHALL BE EFFECTIVE IN REMOVAL OF CALCIUM CARBONATE SCALE AND SHALL PROVIDE AT 140-160 DEG. AT LEAST 90% CORROSION INHIBITION EFFICIENCY FOR 1020 STEEL AND 316 STAINLESS STEEL AND 50% CORROSION INHIBITION EFFICIENCY FOR COPPER ALLOYS.

THE CONTAINER SHALL BE RESISTANT TO CORROSION BY THE PRODUCT.

COMMODITY NO: 2900-141-0075

CAUSTIC SODA, GROUND FLAKE, 450 LB. STEEL DRUM.

NaOH, 76% Na₂0 FOR SEWER AND DRAIN LINE CLEANING.

COMMODITY NO: 2900-141-0078

SODIUM BISULFATE, (NaHSO₄) IN 100 LB. PAPER BAGS, GLOBULAR, DRY.

COMMODITY NO: 2900-141-0081

CLOSED SYSTEM TREATMENT BLEND, 50 LB. MOISTURE-PROOF BAGS OR FIBRE DRUMS, MAXIMUM 400 LBS.

THE BLEND SHALL BE A UNIFORM MIXTURE, READILY SOLUBLE IN WATER.

COMMODITY NO: 2900-141-0086

CHELANT SOLUTION, 55 GAL. POLYETHYLENE-LINED STEEL DRUMS, 600 LB. NET.

38-39% TETRASODIUM ETHYLENEDIAMINE TETRA ACETIC ACID (EDTA) IN WATER, SP. GR. 1.31 @ 25 DEG. C., PH OF 1% SOLUTION 11-12.

DOW CHEMICAL VERSENE 100 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0090

FERRIC SULFATE, WATER SOLUBLE, 100 LB. POLYETHYLENE LINED SAGS.

 $Fe_2(SO_4)_3$ - WATER SOLUBLE FERRIC ION SHALL BE NOT LESS THAN 18.0%, TOTAL INSOLUBLES SHOULD NOT EXCEED 6.0%. TYPICAL SCREEN ANALYSIS INDICATES 100% SHOULD PASS THROUGH 3 MESH; 95% THROUGH 4 MESH. FOR USE AS A COAGULANT IN WATER, SEWAGE AND INDUSTRIAL WASTE TREATMENT.

COMMODITY NO: 2900-141-0091

POTASSIUM PERMANGANATE, 110 LB. NET STEEL DRUMS.

KMN0₄ - 97% MINIMUM, TECHNICAL AND FREE FLOWING, CRYSTALLINE. TYPICAL SCREEN ANALYSIS IS FOR NO MORE THAN 20% BY WEIGHT TO BE RETAINED ON A 40-MESH SCREEN AND FOR NO MORE THAN 15% TO PASS **A** 200-MESH SCREEN. FOR TASTE AND ODOR CONTROL OF POTABLE WATERS AND FOR ALGAE CONTROL OF COOLING TOWERS.

DIATOMITE, DIATOMACEOUS SILICA, 50 LB. MULTI-WALLED PAPER BAGS, WHITE POWDER, FLUX CALCINED, FILTER AID.

SUITABLE FOR REMOVAL OF FINE SUSPENDED SOLIDS FROM SWIMMING POOL WATER DURING FILTRATION.

CELITE 545 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0094

SODIUM FLUORIDE, 100 LB. MULTI-WALL PAPER BAGS.

FINE DRY WHITE CRYSTALLINE POWDER CON-TAINING NOT MORE THAN 0.040% "HEAVY METALS" EXPRESSED AS LEAD (Pb). SHALL CONTAIN A MINIMUM OF 42.9% FLUORIDE (F) CORRESPONDING TO APPROXIMATELY 95% SODIUM FLUORIDE (NaF), AND SHALL NOT CONTAIN INSOLUBLE MATTER EXCEEDING 0.6% OR MOISTURE EXCEEDING 0.5%. SHALL BE SUITABLE FOR FEEDING WITH A CONVENTIONAL DRY-FEED MACHINE AS USED IN MUNICIPAL WATER TREATMENT EQUIPMENT.

COMMODITY NO: 2900-141-0096

SATMP SCALE INHIBITOR, 15 GAL. POLYETHYLENE DRUMS, 170 LB.

PENTASODIUM SALT OF AMINOTRI (METHYLENEPHOSPHONIC ACID),(Na₂PO₃CH₂)₂N (NaHPO₃CH₂) 39-41% AQUEOUS SOLUTION, PH OF 1% SOLUTION 10-11, SP. GR. 1.4 @ 20 DEG. C, PALE YELLOW SOLUTION, SUITABLE FOR USE AS A THRESHOLD TREATMENT FOR COOLING WATER.

MONSANTO DEQUEST 2006 OR APPROVED EQUAL

COMMODITY NO: 2900-141-0109

HEDP SCALE INHIBITOR, 15 GAL. POLYETHYLENE DRUMS, 170 LB. NET.

1-HYDROXYETHYLIDENE-1, 1-DIPHOSPHONIC ACID (C(OH)(CH₃)(PO₃H₃)₂), ACTIVE ACID 60%, H₃PO₃ 3%, PH 1% SOLUTION LESS THAN 2.0, APPROX. DENSITY 12.1 LB/GAL.

MONSANTO DEQUEST 2010 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0112

L ITHIUM BROMIDE, 30 GAL/DRUM, APPROX. WEIGHT, 400 LBS. LiBr, 54%, SP. GR. 1.60

COMMODITY NO: 2900-141-0113

HYDROBROMIC ACID, 60 LB. CANS. HBr, 48%. SP. GR. 1.5.

COMMODITY NO: 2900-141-0114

LITHIUM HYDROXIDE, 50 LB CAN. LiOH.H₂0, POWDERED

COMMODITY NO: 2900-141-0115

LITHIUM CHROMATE, 15 GAL. DRUMS, APPROX. 166 LBS Li,CrO₄, 35.5% SP. GR. 1.33

COMMODITY NO: 2900-141-0120

CATION EXCHANGE RESIN, 5 CU. FT. PLASTIC LINED FIBRE DRUMS OR 2 CU. FT. BURLAP BAGS.

WEAKLY ACIDIC TYPE CONTAINING CARBOXYLIC ACID GROUPS WITHIN AN ACRYLIC-DIVINYLBENZENE MATRIX. THE RESIN SHALL BE STABLE TO 120 DEG. INSOLUBLE IN ALL COMMON SOLVENTS, RESISTANT TO PHYSICAL ATTRITION, AND STABLE IN A PH RANGE FROM 5 TO 14. THE CHEMICAL AND PHYSICAL PROPERTIES SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS WHEN RECEIVED.

PHYSICAL FORM SPHERICAL BEADS IONIC FORM HYDROGEN THEORETICAL TOTAL 4.0-4.4 MEQ/L CAPACITY (WET) 5.0-5.5 PK MOISTURE CONTENT 45-53% WEIGHT 47-50 LB/FT3 SPECIFIC GRAVITY 1.15-1.25 PARTICLE SIZE (US SIEVE) < 0.5% **RETENTION ON #16 SIEVE** <98.0% < 98.0% AMBERLITE IRC-84, DOWEX CCR-2, DUOLITE CC-3, IONAC CC, IWT C281 OR APPROVED

COMMODITY NO: 2900-141-0133

DIETHYLAMINOETHANOL, SUPPLIED IN 55 GAL. DRUMS. 400 LES.

(C₂H₅)2N(CH₂CH₂.OH), CORROSION INHIBITOR GRADE FOR INHIBITING CORROSION IN CONDENSATE LINES, DIETHYLAMINOETHANOL 99.5% MINIMUM, MAXIMUM APHA COLOR 15, SP. GR. @20 DEG. C. 0.88-0.89.

SOFTENED WATER BOILER TREATMENT BLEND L, 50 LB. MOISTURE-PROOFED BAGS OR 400 LB. NET FIBRE DRUMS.

ORGANIC BLEND (ITEM 2899-141-0012) 20-25%

DISODIUM PHOSPHATE (ITEM 2899-141-0018) 15-20%

SODIUM SULFITE (ITEM 2899-141-0022) 57-62%

THE BLEND SHALL BE A UNIFORM MIXTURE WHICH READILY DISSOLVES IN WATER AND DOES NOT CONTAIN OVER 0.5% INSOLUBLE MATTER. FIBRE DRUMS TO BE OF PROPER MECHANICAL STRENGTH AND CHEMICAL RESISTANCE.

COMMODITY NO: 2900-141-0142

SODIUM SULFITE, (Na₂SO₃) PURE, FOOD GRADE, IN 100 LB. MOISTURE-PROOFED BAGS.

FOR REACTING WITH DISSOLVED OXYGEN TO PROVIDE OXYGEN-FREE CONDITIONS.

COMMODITY NO: 2900-141-0144

SILICONE TYPE ANTIFOAM, 5 GAL. CONTAINERS, 40 LB. NET.

FOOD GRADE, ANTIFOAM A CONTENT 10.5% +/-1.5%, SILICON CONTENT, 4.0 +/- 0.6%, CREAM APPEARANCE, FOR DEFOAMING FOUNTAINS OR COOLING BASINS AT 50 PPM DOSAGE.

DOW CORNING FG10 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0146

CAUSTIC SODA, LIQUID, 55 GAL. DRUM, CONTAINING ABOUT 700 LBS. NET.

NaOH, 48.5% MINIMUM, SHOULD BE KEPT ABOVE 50 DEG. F. TO PREVENT CRYSTALLI-ZATION.

COMMODITY NO: 2900-141-0151

MICROBIOCIDE A, 8.69 LB/GAL, IN 5 GAL. CONTAINERS (43 LB. NET) or 15 Gal containers (130 lb.)

BROAD-SPECTRUM MICROBIOCIDE FOR CONTROLLING ALGAE, BACTERIA, AND FUNGI IN COOLING WATER.

AS BUCKMAN LABORATORIES WSCP, DILUTED AS FOLLOWS:

ACTIVE INGREDIENT 20.0%

POLY(OXYETHYLENE(DIMETHYLIMINIO) ETHYLENE (DIMETHYLIMINIO) ETHYLENE DICHLORIDE

INERT INGREDIENTS 80.0%

EPA REG. NUMBER 30944-1 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0160

LIQUID CHROMATE TREATMENT, 30 GAL.

ROTA TIONALLY MOLDED DRUMS WITH FIBRE OVER-PACK, (APPROX. 375 LB.).

SHALL CONTAIN LESS THAN 0.1% INSOLUBLE MATTER. PH SHALL BE ABOVE 8.0.

COMMODITY NO: 2900-141-0161

LIQUID NITRITE-BORAX TREATMENT, 5 GAL. or 30 GAL. POLYETHYLENE-LINED PAILS, (50 LB. and 300 lb. NET WITH FIBRE OVER-PACK, FOR CLOSED SYSTEMS.

SODIUM NITRITE (NaN02)27-29%BORAX (Na2B402.5H20)1.5-2.5%SODIUM SALT OF TOLYL-0.1-0.2%TRIAZOLE, 50% AQUEOUS CAUSTI-CIZED SOLUTION.DEIONIZED WATER68-70%SHALL CONTAIN LESS THAN 0.1% INSOLUBLE MATTER.

COOLING TOWER BIOCIDE (H), 47 LB. NET WEIGHT FIBER CARTONS.

WESTERN CHEMICAL CO. BROMICIDE TM FOR BROAD SPECTRUM ACTIVITY AGAINST VARIOUS BACTERIAL, FUNGAL, MOLD, ALGAE, AND AQUATIC ORGANISMS, EFFECTIVE TO PH9. ACTIVE INGREDIENT 96% I-BROMO-3(CHLORO-5, 5 DIMETHYLHYDANTION, 4% INERT INGREDIENT (BINDER, ETC.), IN SOLID STICK FORM OR EQUIVALENT, 3/4"-I" IN DIAM., 3" LONG, OFF-WHITE IN COLOR. NORMAL DOSAGE RATES ARE CONTINUOUS AT 0.01 TO 0.02 LB./iOOO GAL.

EPA REGISTRATION NO. 5785-57-7547 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0179

SODIUM SALT OF TOLYTRIAZOLE, C,H,N₃, TECHNICAL GRADE, 50% AQUEOUS SOLUTION, PH 13.0-13.5. IN 5 GAL., 50 LB. STEEL PAILS.

COMMODITY NO: 2900-141-0181

LOW PRESSURE BOILER LIQUID WATER TREATMENT

SODIUM SULFITE (Na ₂ SO ₃)	4-6%
SODIUM TRIPOLYPHOSPHATE	1.5-2.5%
$(Na_5P_3O_{10})$	
DISODIUM PHOSPHATE, ADHYDROUS	7-9%
(Na_2HPO_4)	
POTASSTUM HYDROXIDE (KOH)	4-6%
PARTIALLY DESULFONATED SODIUM	1.5-2.5%
LIGNOSULFONATE (AS CIN	
2899-141-0012)	
DEIONIZED WATER	76-80%

THIS LIQUID TREATMENT SHALL CONTAIN LESS THAN 0.1% INSOLUBLE MATTER. IT SHALL BE SUPPLIED IN 30 GALLON (EST. 290 LB.) ROTATIONALLY MOLDED DRUMS WITH FIBRE OVERPACK.

COMMODITY NO: 2900-141-0182

FLUOSILICIC ACID, H_2SiF_6 , 30%, CLEAR, COLORLESS, OF SUITABLE PURITY FOR TREAT-MENT OF POTABLE WATER. IT SHALL BE SUPPLIED IN 50 GAL. DRUMS, RUBBER LINED 420 LB. BBL, T/C.

COMMODITY NO: 2900-141-0200

SODIUM MOLYBDATE, (Na₂MoO₄.2H₂0), CRYSTALLINE. SUPPLIED IN 200 LB. NET WEIGHT FIBRE OR POLYETHYLENE DRUM, OR 5 GALLON, 50 LB. NET POLYETHYLENE PAIL.

COMMODITY NO: 2900-141-0205

ACRYLATE COPOLYMER, FOR STABILIZING PHOSPHATE-BASED BOILER WATER TREATMENT PROGRAMS SUPPLIED IN 5 GALLON (50 LB. NET) AND 15 GALLON (150 LB. NET) POLYETHYLENE CONTAINERS.

MOL. WEIGHT AVERAGE 4500, PH 4.2, DENSITY 10.1 LB/GAL, 39-45% TOTAL SOLIDS

ROHM AND HAAS ACCUMER 2100 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0206

ACRYLATE TERPOLYMER, FOR DISPERSING WATER SUSPENDED IRON OXIDE AND OTHER SOLIDS, IN CORROSION-RESISTANT LINED 55 GAL. STEEL DRUMS, 550 LB. or 5 GAL., 50 LB.

PH 2.1-2.6, APPROXIMATE MOL. WT. 4500, 42-45% TOTAL SOLIDS, DENSITY 10 LB/GAL.

ROHM AND HAAS ACCUMER 3100 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0207

HYDROXYPHOSPHONO ACETIC ACID (HPA), FOR INHIBITING CORROSION OF STEEL IN RECIRCULATING COOLING WATER SYSTEMS. IN 15 GAL. POLYETHYLENE-LINED FIBRE DRUMS, 165 LB. NET WEIGHT.

50%. ACTIVE INGREDIENT, PH <1.0, SPECIFIC GRAVITY 1.32-1.42.

CIBA-GEIGY BELCOR 575 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0214

MICROBIOCIDE (N) AN AQUEOUS BLEND OF GLUTARALDEHYDE AND QUATERNARY AMMONIUM COMPOUNDS FOR CONTROLLING SLIME-FORMING AND SULFATE-REDUCING BACTERIA AND ALGAE IN COOLING WATER SYSTEMS.

ACTIVE INGREDIENTS, 16.5% GLUTARALDEHYDE, CAS#111-30-8 (14%), N-ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE, CAS # 139-08-2 (2.5%). INERT INGREDIENTS, 83.5%: WATER (82.5%), ETHANOL (0.6%), METHANOL (0.04%). 5 GAL. POLYETHYLENE PAIL (43 LBS. NET), 8.61 LB/GAL.

UNION CARBIDE AQUCAR 514. EPA REGISTRATION NO. 10352-31 OR APPROVED EQUAL.

SODIUM MOLYBDATE, 35% SOLUTION. SHALL BE A CLEAR, AQUEOUS SOLUTION CONTAINING 35.0% Na_2MoO_4 BY WEIGHT. 5 GAL. CONTAINER (58 LB.)

COMMODITY NO: 2900-141-0222

MICROBIOCIDE 0, 5 GAL POLYETHYLENE PAIL WITH POURABLE SPOUT, 42 LB. FOR CONTROL OF ALGAE IN OPEN RECIRCULATING COOLING WATER SYSTEMS AND ORNAMENTAL FOUNTAINS.

ACTIVE INGREDIENT: TERBUTHYLAZINE: 2:(TERT-BUTYLAMINO)4-CHLORO-6-(ETHY-LAMINO)-S-TRIAZINE 4% INERT INGREDIENTS: 100%

OFF-WHITE DISPERSION, FLASH POINT > 200 DEG. F, PH 6-9, FREEZING POINT 30-35 DEG F, COMPLETELY SOLUBLE, DENSITY 8.4 LB./GAL., VISCOSITY 400-1000 CPS @ 25 DEG. C.

RECOMMENDED DOSAGE FOR SLUG FEED APPLICATION IS 6 OZ/1000 GAL.

SUR TECH C-0104 OR APPROVED EQUAL. EPA REGISTRATION NO. 9386-34-63884.

COMMODITY NO: 2900-141-0223

SURFACTANT, NONIONIC, NONFOAMING, 5 GAL. POLYETHYLENE PAIL WITH POURABLE SPOUT, 40 LB.

FOR USE IN THE PASSIVATION OF NEW GAL-VANIZED TOWERS (IOMG/L) IN CONJUNCTION STATE COMMODITY #2900-141-0041(2 LB/1000 GAL.) AND FOR INCORPORATION IN CHEMICAL CLEANING SOLUTIONS, AS ROHM & HAAS SURFACTANT TRITON CF-54 OR EQUIVALENT.

COMMODITY NO: 2900-141-0226

CAUSTIC SODA, LIQUID, COMMERCIAL GRADE, SODIUM HYDROXIDE NaOH @ 25% SOLUTION, 1.27 SPECIFIC GRAVITY @ 60 DEGREES F, 2.58/GAL. PURE, WITH A FREEZE POINT OF 5 DEGREES F. SHALL BE SUITED FOR USE IN THE PRODUCTION OF POTABLE WATER. 5 GALLON, 15 GALLON, 55 GALLON, OR BULK. AGENCY TO SPECIFY PACKAGING.

COMMODITY NO: 2900-141-0227

AMMONIUM HYDROXIDE, LIQUID, WITH A CONCENTRATION OF 28% NH₃, DENSITY OF 0.897 @ 60 DEGREES F AND 2.2 LBS/GAL PURE AQUA AMMONIA. MUST BE PROVIDED IN 55 GALLON SHIPPING CONTAINERS. SHALL BE SUITED FOR USE IN THE PRODUCTION OF POTABLE WATER.

COMMODITY NO: 2900-141-0228

ALUMINUM SULFATE (LIQUID): 50% COMMERCIAL GRADE WITH A SPECIFIC GRAVITY OF 1.34 @ 60 DEGREES F AND 3.18 POUNDS/GALLON OF PURE Al₂. FREEZE POINT 4 DEGREES F. MUST MEET AWWA

COMMODITY NO: 2900-141-0230

CLOSED SYSTEM TREATMENT BLEND M2. FOR INHIBITION OF STEEL AND COPPER METAL AND ALLOYS IN A CLOSED RECIRCULATING SYSTEM. SUPPLIED IN 5-GALLON (47 LB NET WEIGHT) AND 15-GALLON (141 LB NET WEIGHT) POLYETHYLENE DRUMS.

WATER (DEIONIZED)	80-82%
Na ₂ MoO ₄ *2H ₂ 0 (AS 2900-141-0200)	5-6%
TOLYTRIAZOLE-TT-50S	0.8-1.2%
(AS 2900-141-0179) NaNO ₂	2.5-3.5%
"N"SILICATE(AS 2900-141-0042)	2.5-3.5%
SODIUM HYDROXIDE	2-3%
(NaOH AS 2900-141-0016) BORAX (Na ₂ B ₄ 0 ₇ *5H ₂ 0)	2-4%
SPECIFIC GRAVITY	1.1-1.2%
РН	>12%

THE CLEAR TO LIGHT YELLOW SOLUTION SHOULD CONTAIN <0.5% INSOLUBLE MATTER, AND BE PREPARED BY MIXING IN THE ABOVE ORDER.

COMMODITY NO: 2900-141-0231

SODIUM CHLORITE, LIQUID: 25% SOLUTION 2.58 LB OF SODIUM CHLORITE PER GALLON AT 70 DEGREES F. MUST BE PROVIDED IN 55 GALLON SHIPPING CONTAINERS.

FIVE(5) SHIPMENTS OF 275 GALLONS (5 BARRELS) AS REQUESTED BY WATER PLANT OPERATOR.

INHIBITED ETHYLENE GLYCOL, MINIMUM 92% GLYCOL BY WEIGHT, REMAINDER TO BE WATER AND INHIBITORS. SUITABLE FOR CLOSED-LOOP HVAC USAGE. SPECIFIC GRAVITY 1.125 - 1.144@ 60 DEGREE F. PH OF 50% SOLUTION 8.5-10.0. OPERATING TEMPERATURES OF -50 DEGREE F TO AT LEAST 250 DEGREE F, WITH FREEZE PROTECTION TO OR BELOW -60 DEGREE F AND BURST PROTECTION TO OR BELOW -100 DEGREE F. GLYCOL SHALL CONTAIN BUFFERING AGENTS TO PROVIDE RESERVE ALKALINITY. INHIBITORS WILL NOT BE SILICATE BASED. SOLUTION MAY BE DYED TO FACILITATE LEAK DETECTION SOLUTION MUST PASS ASTM D1384 CORROSION TEST (LESS THAN 0.5 MILS/YEAR PENETRA-TION) FOR THE FOLLOWING METALS: COPPER, BRASS, MILD STEEL, CAST IRON, SOLDER, AND ALUMINUM. AVAILABLE IN 5, 15, AND 50 GALLON CONTAINERS AS REQUESTED.

DOWTHERM SR-1, DOWTHERM 4000 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0233

UNINHIBITED ETHYLENE GLYCOL, MINIMUM 95% GLYCOL BY WEIGHT, REMAINDER TO BE WATER. SUITABLE FOR CLOSED-LOOP HVAC USAGE. SPECIFIC GRAVITY 1.13-1-14 @ 60 DEGREE F PH OF SOLUTION > 8.0. OPERATING TEMPERATURES OF -50 DEGREE F TO AT LEAST 250 DEGREE F, WITH FREEZE PROTECT-ION TO OR BELOW -60 DEGREE F AND BURST PRO-TECTION TO OR BELOW -100 DEGREE F. AVAILABLE IN 5, 15, AND 50 GALLON CONTAINERS AS REQUESTED. SOLUTION MAY BE DYED TO FACILITATE LEAK DETECTION.

COMMODITY NO: 2900-141-0234

INHIBITED PROPYLENE GLYCOL, MINIMUM 94% GLYCOL BY WEIGHT, REMAINDER TO BE WATER AND INHIBITORS. SUITABLE FOR CLOSED-LOOP HVAC USAGE. SPECIFIC GRAVITY 1.053 -1.063 @ 60 DEGREE F. PH OF 50^{-//}. SOLUTION 9.5-10.5. OPERATING TEMPERATURES OF -50 DEGREE F TO 325 DEGREE F, WITH FREEZE PROTECTION TO OR BELOW -60 DEGREE F AND BURST PROTECTION TO OR BELOW -100 DEGREE F. GLYCOL SHALL CONTAIN SUFFERING AGENTS TO PROVIDE RESERVE ALKALINITY. INHIBITORS WILL NOT BE SILICATE BASED. SOLUTION WILL BE DYED TO FACILITATE LEAK DETECTION. SOLUTION MUST PASS ASTM D1384 CORROSION TEST (LESS THAN 0.5 MILS/YEAR PENETRATION) FOR THE FOLLOWING METALS: COPPER, BRASS, MILD STEEL, CAST IRON, SOLDER, AND ALUMINUM. AVAILABLE IN 5, 15, AND

50 GALLON CONTAINERS AS REQUESTED.

DOWFROST HD OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0235

INHIBITED PROPYLENE GLYCOL, MINIMUM 95.5% GLYCOL BY WEIGHT, REMAINDER TO BE WATER AND INHIBITORS. SUITABLE FOR CLOSED-LOOP HVAC USAGE. SPECIFIC GRAVITY 1.050-1.060 @ 60 DEGREE F. PH OF 50% SOLUTION 9.0-10.0. OPERATING TEMPERATURES OF -50 DEGREE F TO 250 DEGREE F, WITH FREEZE PROTECTION TO OR BELOW -60 DEGREE F AND BURST PROTECTION TO OR BELOW -100 DEGREE F. GLYCOL SHALL CONTAIN SUFFERING AGENTS TO PROVIDE RESERVE ALKALINITY. INHIBITORS WILL NOT BE SILICATE BASED. SOLUTION WILL BE COLORLESS. SOLUTION MUST PASS ASTM D1384 CORROSION TEST (LESS THAN 0.5 MILS/YEAR PENETRATION) FOR THE FOLLOWING METALS: COPPER, BRASS, MILD STEEL, CAST IRON, SOLDER, AND ALUMINUM. AVAILABLE IN 5. 15 AND 50 GALLON CONTAINERS AS REQUESTED.

DOWFROST OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0236

UNINHIBITED PROPYLENE GLYCOL, MINIMUM .95.5% GLYCOL BY WEIGHT, REMAINDER TO BE WATER. SUITABLE FOR CLOSED-LOOP HVAC USAGE. SPECIFIC GRAVITY 1.045-1.055 60 DEGREE F. PH OF SOLUTION > 8.0. OPERATING TEMPERATURES OF -50 DEGREE F TO 250 DEGREE F, WITH FREEZE PROTECTION TO OR BELOW - 60 DEGREE F AND BURST PROTECTION TO OR BELOW -.100 DEGREE F. SOLUTION WILL BE COLORLESS. AVAILABLE IN 5, 15, AND 50 GALLON CONTAINERS AS

COMMODITY NO: 2900-141-0237

LIQUID GALVANIZED TOWER PASSIVATING BLEND.

SUPPLIED IN POLYETHYLENE PAILS, 5 GAL(53 LB), 15 GAL (160 LB), 30 GAL (320 LB) NET WEIGHT.

DEIONIZED WATER	74%
TETRAPOTASSIUM PYROPHOSPHATE (AS 2900-141-0123)	25%
SODIUM POLYACRYLATE	
(AS ROHM & HAAS 1110)	0.5%
SODIUM TOLYLTRIAZOLE (AS 2900-141-0179)	0.5%
SPECIFIC GRAVITY OF FORMULATION	

@ 20 DEG. C. 1.25-1.30; PH OF 1% SOLUTION 9.50-10.00, CLEAR LIQUID.

TYPICAL DOSAGE IS 4 GAL/1000 GAL TOWER CAPACITY.

DRY GALVANIZED TOWER PASSIVATING BLEND. SUPPLIED IN 50, 100, 250 LB POLYETHYLENE PAILS. TYPICAL DOSAGE IS 8.3 LBS/1000 GALLONS TOWER CAPACITY	
SODIUM TRIPOLYPHOSPHATE (AS 2900-141-0033)	70%
TETRAPOTASSIUM PYROPHOSPHATE (AS 2900-141-0123)	20%
TRITON CF-54 (AS 2900-141-0041)	10%
TYPICAL DOSAGE IS 8.3 POUNDS/1000 GAL. TOWER CAPACITY.	
COMMODITY NO: 2900-141-0239	
3 - AMINE BLEND 10-5-10 FOR INHIBITING CORROSION IN CONDENSA LINES. SUPPLIED IN POLYETHYLENE DRUN 30 GALLON (245 LB) & 55 GALLON (450 LB) NET WEIGHT.	ATE 1S,
WATER, DEIONIZED	59-60%
CYCLOHEXYLAMINE (60-65% BY WEIGHT, AS 2900-141-0025)	19-21%
MORPHOLINE (40-42% BY WEIGHT, AS 2900-141-0040)	9-11%
DEAE (DIETHYLAMINOETHANOL 99.5% BY WEIGHT, AS 2900-141-0i33)	9-11%
SPECIFIC GRAVITY OF FORMULATION @ 20 DEG. C975985; PH@,12.5, MAXIMUM	

ALPHA COLOR 15%

COMMODITY #2900-141-0240

POLYMER CLEANING SOLUTIONF FOR CLOSED SYSTEMS FOR CLEANING CLOSED SYSTEMS HTHW, MTW AND CHILED WATER SYSTEMS THAT HAVE BECOME FOULED WITH CORROSION PRODUCTS. THE DOSAGE RATE IS 1 GALLON PER 100 GALLONS OF SYSTEM WATER. SUPPLIED IN 5, 15, 30, 55 GALLON POLYETHYLENE DRUMS WITH POURABLE SPOUT.

WATER, DEIONIZED	73-75%
HEDP (1-DYDROXYETHYLIDEDE-1,	
1-DIPHOSPHONIC ACID, 60% ACTIVE ACID,	
(AS 2900-141-0109)	9-11%
ACURMER 3100 TERPOLYMER	
(AS 2900-141-0206)	9-11%
CAUSTIC SODA NaOH	5-7%

COMMODITY # 2900-141-0241

COOLING TOWER BLEND K7 FOR INHIBITION OF MINERAL SCALE DEPOSITION AND THE CORROSION OF IRON AND COPPER METALS OR ALLOYS IN OPEN RECIRCULATING SYSTEMS. SUPPLIED IN 5, 15, AND 55 GALLON CORROSION RESISTANT CONTAINERS.

WATER, DEIONIZED 50-51% POTASSIUM HYDROXIDE (KOH) 17-18% SODIUM SALT OF TOLYLTRIAZOLE (AS 2900-141-0179) 7-8% ACCUMER 3100 (AS 2900-141-0206) 9-10% HYDROXYPHOSPHONO ACETIC ACID (HPA), (AS 2900-141-0207) 9-10% 2-PHOSPHONOBUTANE-1,2,4-TRICARBOXYLIC ACID (PBTC), 50% ACTIVE, AS BAHIBIT AM 6-7% OR APPROVED EQUAL

pH > 11, CLEAR SOLUTION CONTAINING \$<0.5%\$ INSOLUBLE MATTER, AND SHALL BE PREPARED BY MIXING IN THE ABOVE ORDER.

COMMODITY #2900-141-0244

BOILER BLEND B2

WATER, DEIONIZED	71-72%
POTASSIUM HYDROXIDE (KOH)	2-3%
DISODIUM PHOSPHATE (AS 2900-141-0018)	6-7%
ACCUMER 2100 (AS 2900-141-0205)	2-3%
SODIUM SULFITE (NA ₂ SO ₃)	16-17%

pH > 11, THIS LIQUID TREATMENT SHOULD CONTAIN < 0.1% INSOLUBLE MATTER AND SHALL BE PREPARED BY MIXING IN THE ABOVE ORDER. SHOULD BE SUPPLIED IN 15 AND 30 GALLON CORROSION RESISTANT CONTAINERS.

COMMODITY #2900-141-0246

BOILER DISPERSANT D1

WATER, DEIONIZED	60%
ACCUMER 2100 (AS 2900-141-0205)	20%
ACCUMER 4210 (AS ROHM AND	
HAAS 4210 POLYMALEIC	20%
ACID OR APPROVED EQUAL)	

 $p\rm H>3,$ THIS LIQUID TREATMENT SHOULD CONTAIN <0.1% INSOLUBLE MATTER AND SHALL BE PREPARED BY MIXING IN THE ABOVE ORDER. SHOULD BE SUPPLIED IN 15 AND 30 GALLON CORROSION RESISTANT CONTAINERS.

COMMODITY #2900-141-0247

MICROBIOCIDE GA FOR CONTROL OF SLIME-FORMING AND SULFATE REDUCING BACTERIA AND ALGAE IN OPEN RECIRCULATING SYSTEMS.

ACTIVE INGREDIENTS: GLUTARALDEHYDE (CAS #111-30-8) 15% INERT INGREDIENTS: 85%

5 GALLON POLYETHYLENE CONTAINER, 44 LBS, EPA REGISTRATION #10352-23, UNION CARBIDE AQUCAR 515 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-0250

LOW MOLYBDATE COOLING TOWER BLEND K12

FOR INHIBITION OF MINERAL SCALE DEPOSITION AND THE CORROSION OF IRON AND COPPER METALS OR ALLOYS IN OPEN RECIRCULATING SYSTEMS. SUPPLIED IN 5, 15, AND 55 GALLON CORROSION RESISTANT CONTAINERS.

WATER, DEIONIZED	53.5%
SODIUM MOLYBDATE	5.5%
(Na2MoO42H20, AS 2900-141-0200)	
POTASSIUM HYDROXIDE (KOH)	12.0%
SODIUM SALT OF TOLYLTRIAZOLE	3.7%
(as 2900-141-0179)	
ACCUMER 3100	12.9%
(as 2900-141-0206)	
HYDROXYPHOSPHONO ACETIC ACID (HPA)	7.4%
(as 2900-141-0207)	
2-PHOSPHONOBUTANE-1,2,4-TRICARBOZYLIC ACID	5.0%
(PBTC, 50% active as Bahibit AM or approved equal)	

SPECIFIC GRAVITY OF FORMULATION @ 20 DEG. C, 1.15-1.25; Ph >13. CLEAR SOLUTION CONTAINING <0.5 INSOLUBLE MATTER AND SHALL BE PREPARED IN THE ABOVE ORDER.

COMMODITY NO: 2900-141-0251

PHOSPHATE-POLYMER BOILER BLEND

FOR USE IN STEAM BOILERS AS A DISPERSANT FOR WATER SUSPENDED IRON OXIDE AND OTHER SOLIDS AND AS A SOFTENING AGENT. SUPPLIED IN 5 AND 15 GALLON CORROSION RESISTANT CONTAINERS.

WATER, DEIONIZED	87.9%
MONOSODIUM PHOSPHATE (as 2900-141-0041)	8.0%
ACCUMER 2100 (as 2900-141-0205)	4.0%
ANTI-FOAM AGENT	0.1%
(as UCON 50-HB-5100 or approved equal)	

Ph - 4.2-4.6; THIS LIQUID SHOULD CONTAIN < 0.1% INSOLUBLE MATTER AND SHALL BE PREPARED IN THE ABOVE ORDER.

STANDARD HARDNESS TITRATING SOLN, QUART CONTAINERS.

CONTAINING SODIUM SALT OF ETHYLENEDIAMINE TETRAACETIC ACID (1 ml = 1 mg CaCO₃) FOR DETERMINATION OF HARDNESS. SOLUTION SHOULD RETAIN ITS STANDARD CONCENTRATION FOR A PERIOD OF ONE YEAR.

COMMODITY NO: 2900-141-5001

STANDARD HARDNESS TITRATING SOLN, GALLON CONTAINERS.

CONTAINING SODIUM SALT OF ETHYLENEDIAMINE TETRAACETIC ACID (1 ml = 1 mg $CaCO_3$) FOR DETERMINATION OF HARDNESS. SOLUTION SHOULD RETAIN ITS STANDARD CONCENTRATION FOR A PERIOD OF ONE YEAR.

COMMODITY NO: 2900-141-5002

HARDNESS BUFFER SOLUTION, PINT CONT.

FOR THE DETERMINATION OF HARDNESS CONTENT. THIS SOLUTION IS TO CONTAIN A BUFFER FOR MAINTENANCE OF PH 10 DURING TITRATION.

SOLUTION SHOULD BE OF SUCH STRENGTH THAT 1 ml. ADDED TO A 50 mlL. WATER SAMPLE PROVIDES SATISFACTORY ANALYTICAL RESULTS.

COMMODITY NO: 2900-141-5003

HARDNESS INDICATOR POWDER, 4 OZ. CONT.

FOR THE DETERMINATION OF HARDNESS CONTENT.

THIS POWDER IS TO CONTAIN ERIOCHROME BLACK T (F 241), OF SUCH CONCENTRATION THAT 0.15 GM. ADDED TO A 50 ML. WATER SAMPLE PROVIDES SATISFACTORY ANALYTICAL RESULTS.

COMMODITY NO: 2900-141-5004

STANDARD SULFURIC ACID SOLN, QUART CONT. N/50, (0.02N), FOR TITRATION OFALKALINITY.

COMMODITY NO: 2900-141-5005

STANDARD SULFURIC ACID SOLN, GAL. CONT. N/50, (0.02N), FOR TITRATION OF ALKALINITY.

COMMODITY NO: 2900-141-5006

METHYL ORANGE INDICATOR SOLN, PINT CONT.

APPROXIMATELY 0.05 TO 0.1% FOR DETERMINATION OF THE TOTAL ALKALINITY.

COMMODITY NO: 2900-141-5007

PMENOLPHTHALEIN INDICATOR SOLN, PINT CONTAINERS.

APPROXIMATELY 0.5 TO 1.0%, FOR DETERMINATION OF THE PHENOLPHTHALEIN ALKALINITY

COMMODITY NO: 2900-141-5008

STANDARD SILVER NITRATE SOLN, QUART CONTAINERS.

(1 ML = 1 MG Cl), 0.0282 N., FOR TITRATION OF CHLORIDE.

COMMODITY NO: 2900-141-5009

STANDARD SILVER NITRATE SOLN, GALLON CONTAINER.

(1 ML = 1 MG CL), 0.0282 N., FOR TITRATION OF CHLORIDE.

COMMODITY NO: 2900-141-5011

POTASSIUM CHROMATE INDICATOR SOLN, PINT CONTAINERS.

APPROXIMATELY 5%, FOR DETERMINATION OF CHLORIDE.

COMMODITY NO: 2900-141-5012

POTASSIUM CHROMATE INDICATOR SOLN, QUART CONTAINERS.

APPROXIMATELY 5%, FOR DETERMINATION OF CHLORIDE.

COMMODITY NO: 2900-141-5013

GALLIC ACID, DRY, CRYSTALS, CP, 1 LB. CONTAINERS.

FOR NEUTRALIZING PHENOLPHTHALEIN ALKALINITY IN THE DETERMINATION OF DISSOLVED SOLIDS BY THE ELECTRICAL CONDUCTIVITY METHOD.

SULFURIC ACID SOLUTION, PINT BOTTLE.

1:1 DILUTION, REQUIRED FOR THE DETERMI-NATION OF SULFITE CONTENT WHEN ITEM 2900-141-5017 IS USED.

COMMODITY NO: 2900-141-5015

STANDARD POTASSIUM IODIDE IODATE SOLUTION. QT. CONTAINERS.

1 ML = 1.0 MG. S03, 0.025 N, FOR THE TITRATION OF SULFITE CONTENT.

COMMODITY NO: 2900-141-5016

STANDARD POTASSIUM IODIDE IODATE SOLUTION, GAL. CONTAINERS

 $1 \text{ ML} = 1 \text{ MG SO}_3, 0.025 \text{ N}, \text{ FOR THE}$ TITRATION OF SULFITE CONTENT.

COMMODITY NO: 2900-141-5018

DUAL PURPOSE SULFITE INDICATOR PWDR, LB. CONTAINERS.

ERICKSON CHEMICAL CO. HOLDS THE PATENT ON THIS REAGENT. THE REAGENT SHALL HAVE A MINIMUM SHELF LIFE OF 8 TO 12 MONTHS.

CONTAINING PREGALATINIZED WATER SOLUBLE STARCH AND SULFAMIC ACID. LESS THAN 1 GRAM OF THIS REAGENT SHALL BE SUFFICIENT TO PROVIDE ACCURATE ANALYTICAL RESULTS IN THE DETERMINATION OF THE SULFITE CONTENT OF BOILER WATER WHEN EMPLOYING POTASSIUM IODIDE-IODATE AS THE TITRANT.

COMMODITY NO: 2900-141-5019

PHOSPHATE INDICATOR POWDER, 2 OZ. CONT.

COMPOSED OF FINELY GROUND STANNOUS CHLORIDE POWDER, FINELY GROUND SALT TO PROVIDE BULK AND AN ANTI-CAKING AGENT. 0.2 GM. IS APPLIED WHEN USING THE (5-100 PPM PHOSPHATE (PO₄)) COMPARATOR, 0.1 GM. WHEN USING THE (0.25 PPM PHOSPHATE (PO₄)) COMPARATOR, THEN WHEN PROPERLY DISSOLVED IN A WATER SAMPLE, AND ITEM 2900-141-5021 IS APPLIED IN PROPER QUANTITIES, THE CORRECT PHOSPHATE RESULTS, SHALL BE OBTAINED.

THE COMPARATORS ARE DESCRIBED IN ITEM NUMBERS 2900-141-5059 AND 2900-141-5064. THE 2 OUNCES PROVIDED IN A CONTAINERS SHALL BE ADEQUATE FOR DETERMINING PHOSPHATE IN 280 BOILER WATER SAMPLES.

COMMODITY NO: 2900-141-5020

MOLYBDATE REAGENT, 1 QT. CONTAINERS.

A NECESSARY REAGENT REQUIRED IN THE DETERMINATION OF THE PHOSPHATE CONTENT EMPLOYING TAYLOR CHEMICALS, INC. (BALTIMORE, MD 21204) COMPARATOR.

COMMODITY NO: 2900-141-5021

MOLYBDATE REAGENT, 1 GAL. CONTAINERS.

A NECESSARY REAGENT REQUIRED IN THE DETERMINATION OF THE PHOSPHATE CONTENT EMPLOYING TAYLOR CHEMICALS, INC.

COMMODITY NO: 2900-141-5022

SODIUM HYDROXIDE SOLUTION, PT. CONTAINER

1.0 NORMAL, FOR THE DETERMINATION OF CALCIUM CONTENT, EMPLOYING CALCIUM INDICATOR POWDER.

COMMODITY NO: 2900-141-5023

CALCIUM INDICATOR POWDER, 4 OZ. CONT.

COMPOSED OF AMMONIUM PURPURATE (MUREX-IDE) AND INERT INGREDIENTS, FOR THE DETERMINATION OF CALCIUM CONTENT.

WHEN 0.15 GMS. OF THIS POWDER, 2 ML. 1 N SODIUM HYDROXIDE ARE APPLIED TO A 50 ML WATER SAMPLE AND TITRATION WITH STANDARD HARDNESS TITRATING SOLUTION ITEM 2900-141-5000 & 2900-141-5001 IS CONDUCTED, SATISFACTORY ANALYTICAL RESULTS SHOULD BE OBTAINED.

COMMODITY NO: 2900-141-5027

THYMOL RED INDICATOR SOLN. 4 OZ. CONT.

FOR THE PH DETERMINATION IN THE RANGE OF 8.0-11.2 (pH ADJUSTED TO 9.6) IN TAYLOR CHEMICALS, INC. (BALTIMORE, MD. 21204) COMPARATORS, (AS TAYLOR CODE 1003-T).

COMMODITY NO: 2900-141-5028

PAPER, FILTER, 12.5 CM., SLOW FILTER, RETENTION, 2.5UPM.

WHATMAN 5 OR ACCEPTABLE ALTERNATE FOR FILTRATION OF BOILER WATER PREVIOUS TO PHOSPHATE DETERMINATION.

STANDARD SODIUM HYDROXIDE SOLUTION, PINT PLASTIC CONTAINERS, N/50.

0.02N, FOR THE TITRATRON OF ACIDITY.

COMMODITY NO: 2900-141-5032

MIXED INDICATOR SOLUTION, PINT CONTAINER

BROMCRESOL GREEN - METHYL RED, SOLUTION IS PREPARED BY DISSOLVING 0.02 G METHYL RED AND 0.1 G BROMCRESOL GREEN IN IOOML OF 95% ETHYL ALCOHOL OR ISOPROPYL ALCOHOL.

COMMODITY NO: 2900-141-5037

CONCENTRATED SOAP SOLN, 8 OZ CONTAINERS, OR B & B SOAP SOLUTION.

FOR TESTING ZEOLITE SOFTENER EFFLUENT FOR HARDNESS CONTENT. 3 DROPS ADDED TO 25 ML WATER SAMPLE IS EQUIVALENT TO 30 PPM HARDNESS (AS CAC03). ITEMS 2900-141-5087 AND 2900-141-5088, SOAP SHAKING BOTTLE AND PIPETTE ARE REQUIRED FOR CONDUCTING THIS TEST.

COMMODITY NO: 2900-141-5038

SODIUM THIOSULFATE, N/40, OT. CONTAINERS

STABILIZED, 1 ML = 20 PPM CHROMATE (AS CF04) WHEN TITRATING A 50 ML SAMPLE IN CIRCULATING WATERS.

COMMODITY NO: 2900-141-5039

POTASSIUM IODIDE, CRYSTALS, ACS, 4 OZ. CONTAINER

COMMODITY NO: 2900-141-5041

STANDARD CERIC SULFATE IN QT. CONT.

0.110N, 1 ML = 100 PPM NITRITE (AS N02) WHEN TITRATING A 25 ML SAMPLE IN THE DETERMINATION OF NITRITE IN HEATING AND CHILLED WATER SYSTEMS.

COMMODITY NO: 2900-141-5042

NITRITE INDICATOR SOLUTION IN 4 OZ. CONTAINERS.

TO BE USED WITH STANDARD CERIC SULFATE SULFATE SOLUTION (ITEM 2899-141-5041) IN THE DETERMINATION OF NITRITE. THIS INDICATOR IS TO CONTAIN 0.70 GM FERROUS SULFATE (FeSO₄.7H₂0) AND 1.50 GM 0PHENANTHROLINE ($C_{12}H_8N_2.H_20$) DISSOLVED IN DISTILLED WATER AND DILUTED TO 100 ML.

COMMODITY NO: 2900-141-5045

WHITE, NO HANDLE, FLAT BOTTOM, EXTRA HEAVY CASSEROLE, PORCELAIN, 200 ML. CAPACITY, 90MM DIA., 50MM HEIGHT

COMMODITY NO: 2900-141-5048

DILUTE SODIUM SULFATE SOLN, GAL. BT.

 Na_2SO_4 , TO BE USED TO CHECK 0.1 CELL CONSTANT CONDUCTIVITY CELL FOR TESTING CONDENSATE. SOLUTION SHALL BE 0.00038N Na_2SO_4 AND SHALL READ 50 μ S/cm AT 25 DEG. C.

COMMODITY NO: 2900-141-5049

SODIUM SULFATE SOLUTION, GALLON BOTTLE.

 Na_2SO_4 , TO BE USED TO CHECK 2.0 CELL CONSTANT CONDUCTIVITY CELL FOR TESTING BOILER OR COOLING TOWER WATER. SOLUTION SHALL BE 0.0093N Na_2SO_4 , AND SHALL READ 1000 μ S/cm AT 25 DEG. C.

COMMODITY NO: 2900-141-5050

CYLINDER, GRADUATED, 50 ML CAPACITY, POLYMETHYLPENTANE OR SUITABLE EQUIVA-LENT FOR MAXIMUM CLARITY, 1% ACCURACY, IN 2 ML SUBDIVISION.

COMMODITY NO: 2900-141-5051

CYLINDER, GRADUATED, 100 ML. CAPACITY, POLYMETHYLPENTANE OR SUITABLE EQUIVA-LENT FOR MAXIMUM CLARITY, 1% ACCURACY, IN 5 ML SUBDIVISIONS.

COMMODITY NO: 2900-141-5052

CASSEROLE, PORCELAIN, 140 ML. CAPACITY

PORCELAIN 140 ML. CAPACITY, 85 MM DIA. 45 MM HEIGHT (AS COORS SIZE # 3)

ROD, STIRRING, PLASTIC, APPROX. 5 MM DIA 150 MM LENGTH, 1 DOZEN/PACKAGE.

COMMODITY NO:2900-141-5054

BOTTLE, DROPPING, 1 OZ.

INCLUDES RUBBER BULB AND PLASTIC SCREW CAP, WITH CALIBRATED 0.5 ML DROPPER FOR INDICATOR SOLUTIONS AND REAGENTS.

COMMODITY NO: 2900-141-5055

BURETTE, AUTOMATIC, 10 ML. GRADUATED TO 0.1 ML. 1 PT. SIZE.

PINT SIZE POLYETHYLENE (OR EQUIVALENT PLASTIC) BOTTLE, GLASS BEAD VALVE, CLAMP, GLASS TUBING AND RUBBER CON-NECTIONS, TO BE USED IN ANALYSIS OF WATER SAMPLES.

COMMODITY NO: 2900-141-5056

FUNNEL, ANALYTICAL, TOP I.D. 75 MM, STEM LENGTH 75 MM, MAXIMUM STEM O.D. 12 MM, FOR 125 MM DIAMETER FILTER PAPER.

CONSTRUCTED OF POLYETHYLENE OR SUITABLE PLASTIC MATERIAL, TO BE USED FOR FILTER-ING BOILER WATER SAMPLES.

COMMODITY NO: 2900-141-5057

FLASK. ERLENMEYER, WIDE MOUTH, 250 ML. CAPACITY, INCLUDING #8 RUBBER STOPPER, GRADUATED, PYREX.

COMMODITY NO: 2900-141-5058

BOTTLE, WASH OR DISPENSING, 16 OZ. WITH SCREW CAP.

WITH TUBING DRAWN TO A FINE TIP, CON-STRUCTED OF POLYETHYLENE OR SUITABLE PLASTIC MATERIAL. TO BE USED FOR DIS-PENSING MOLYBDATE REAGENT OR DISTILLED WATER.

COMMODITY NO: 2900-141-5059

COLORIMETRIC SLIDE COMPARATOR, HIGH PHOSPHATE, 0-100 PPM $P0_4$ INCLUDING COMPARATOR AND SLIDE AS TAYLOR CODE NO. 1100, SLIDE NO. 1100B.

COMMODITY NO: 2900-141-5067

COLORIMETRIC COMPARATOR SLIDES, ONLY, FOR W.A. TAYLOR SLIDE COMPARATOR, HIGH PHOSPHATE SLIDE, 0-100 PPM PO_4 . TAYLOR 1100B.

COMMODITY NO: 2900-141-5075

TEST TUBE, 5 ML. FOR W.A. TAYLOR COMPARATORS TAYLOR 500

COMMODITY NO: 2900-141-5076

VIAL, REAGENT, 20 ML. CAPACITY, HIGH DENSITY POLYETHYLENE, WITH SCREW CAP AND BULB, 0.5 ML PIPET, FOR TAYLOR COMPARATOR.

TAYLOR 519A OR APPROVED EQUAL.

COMMODITY NO: 2900-141-5077

LAMP, DALITE, MIDGET, 10 ½ IN. LONG, 7 ½ IN. WIDE, 4 ½ IN. HIGH WITH DALITE GLASS, SPECIAL BULB, CORD, PLUG, 110 VOLT A.C. INCLUDING SPARE LAMP. TAYLOR CODE NO. 1070.

COMMODITY NO: 2900-141-5078

TUBE, MIXING, 10MM BOTTOM DIA., 20MM TOP DIA., GRADUATED AT 5, 15, 17.5 ML.

FOR USE IN TAYLOR COMPARATORS FOR DETER-MINING PHOSPHATE IN BOILER WATER.

TAYLOR NO. 558.

COMMODITY NO: 2900-141-5085

CYLINDER, UNGRADUATED, FOOTED, FOR HOLDING CONDUCTIVITY CELLS, HEIGHT AT LEAST 5 IN., I.D. AT LEAST 1 ½ IN. PLEXIGLAS OR EQUIVALENT MATERIAL.

COMMODITY NO: 2900-141-5086

THERMOMETER, DIAL, DUAL RANGE

COMMODITY NO: 2900-141-5087

BOTTLE, SOAP SHAKING, 2 OZ., MARKED 25ML AT PROPER LEVEL, SCREW OR POLYETHYLENE CAP, FOR TESTING HARDNESS OF ZEOLITE SOFTENER EFFLUENT.

BOTTLE, DROPPER, 1 OZ., UNGRADUATED PIPET, FOR APPLYING ITEM 2900-141-5037 SOAP SOLUTION TO ZEOLITE SOFTENER EFFLUENT IN SOAP SHAKING BOTTLE.

COMMODITY NO: 2900-141-5089

CUP, MEASURING, PLASTIC, TO HOLD 0.1 GRAM, WITH HANDLE.

COMMODITY NO: 2900-141-5090

CUP, MEASURING, PLASTIC TO HOLD 1.0 GRAM WITH HANDLE.

COMMODITY NO: 2900-141-5098

CHLORINE COMPARATOR, FOR DETERMINING FREE AND TOTAL CHLORINE BY THE DPD METHOD USING INDIVIDUALLY PACKAGED TABLETS, COMPLETE WITH NON-FADING COMPARATOR AND TUBES AS HELLIGE MOD. 605HT WITH 442-D26 DISC., 0.1-2.0 MG/L CHLORINE OR LAMOTTE CHEMICAL MOD. LP-16 OCTET COMPARATOR KIT 0.1-6.0 MB/L CHLORINE OR EQUIVALENT.

COMMODITY NO: 2900-141-5099

RAPID TABLETS FOR FREE AVAILABLE CHLORINE BY DPD METHOD, RAPID. 50/PKG.

LAMOTTE CAT. NO. 6999-H OR APPROVED EQUAL.

COMMODITY NO: 2900-141-5101

RAPID TABLETS FOR TOTAL CHLORINE BY DPD METHOD, RAPID. 50/PKG.

LAMOTTE NO. 6899-H OR APPROVED EQUAL.

COMMODITY NO: 2900-141-5134

CONTAINER, SAMPLE, 1000 ML, TALL-FORM POLYPROPYLENE BEAKER, WITH HANDLE, GRADUATED IN LITERS AND MILLILITERS.

COMMODITY NO: 2900-141-5136

SOLUTION, pH BUFFER, CERTIFIED 7.00 +/- 0.02 pH UNITS AT 25 DEG. C, POTASSIUM PHOSPHATE, MONOBASIC--SODIUM HYDROXIDE BUFFER COMBINATION, 500 ML POLYETHYLENE BOTTLES.

COMMODITY NO: 2900-141-5137

SOLUTION, pH BUFFER, CERTIFIED 10.00 +/-0.02 pH UNITS AT 25 DEG. C, BORIC ACID-POTASSIUM CHLORIDE-SODIUM HYDROXIDE BUFFER COMBINATION, 500 ML POLYETHYLENE BOTTLE.

COMMODITY NO: 2900-141-5138

SOLUTION, pH BUFFER, CERTIFIED 4.00 +/- 0.02 pH UNITS AT 25 DEG. C, POTASSIUM ACID PHTHALATE BUFFER, 500 ML POLYETHYLENE BOTTLE.

COMMODITY NO: 2900-141-5142

KIT, MOLYBDENUM TEST, THIOGLYCOLATE METHOD, WITH COMPARATOR, AXIAL READER, TEST TUBES, AND SUFFICIENT REAGENTS FOR 50 TESTS.

LAMOTTE CHEMICAL COMPANY MODEL 3160/MBD OR APPROVED EQUAL.

COMMODITY NO: 2900-141-5143

PACKAGE, MOLYBDENUM REAGENT REFILL, THIOGLYCOLATE METHOD, CONTAINING ALL REAGENTS FOR MAKING 50 TESTS.

LAMOTTE CHEMICAL COMPANY CODE R-3160 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-5144

TESTER, CONDUCTIV ITY, BATTERY-POWERED, INCLUDING ELECTRODE BUILT INTO INSTRUMENT HOUSING, EASILY PORTABLE, MINIMUM SIZE, AUTOMATIC TEMPERATURE COMPENSATION FOR 50-160 DEG F, FOR COOLING TOWER WATER TESTING.

MYRON L CAT NO. 512M5, SINGLE RANGE, 0-5000 MICHROMHOS/CM OR APPROVED EQUAL NO.

COMMODITY NO: 2900-141-5145

CONDUCTIVITY CELL, 1.0 CM-1 CONSTANT, WITH AUTOMATIC TEMPERATURE COMPENSATOR, FOR USE WITH BECKMAN SOLU-BRIDGE MODEL SD-123 X 10 CONDUCTIVITY METER. BECKMAN MODEL 423 DIP CELL OR APPROVED EQUAL.

COMMODITY NO: 2900-141-5152

TUBING, PURE GUM RUBBER, 3/16" X 1/16" WALL THICKNESS, 12 FOOT SECTIONS. FOR AUTOMATIC BURETTE TUBING REPLACEMENT.

KIT, HIGH RANGE MOLYBDENUM TEST, THIOGLYCOLATE METHOD, WITH OCTA-SLIDE, TEST TUBES, AND SUFFICIENT REAGENTS FOR 50 TESTS.

LAMOTTE CHEMICAL COMPANY MODEL 3346/SL-MHR OR APPROVED EQUAL.

COMMODITY NO: 2900-141-5154

PACKAGE, HIGH RANGE MOLYBDENUM REAGENT REFILL, CONTAINS ALL REAGENTS NEEDED FOR MAKING 50 TESTS.

LAMOTTE CHEMICAL COMPANY MODEL R-3346 OR APPROVED EQUAL.

COMMODITY NO: 2900-141-5155

CONDUCTIVITY METER, FOR DETERMINING BOILER WATER AND CONDENSATE CONDUCTIV-ITY, WATERPROOF, 0 TO 199,999 MICROMHOS/ CM IN 4 RANGES, AUTOMATIC TEMPERATURE COMPENSATION FROM-5.0 TO 99.9 DEG. C WITH NON-LINEAR (NATURAL WATERS) COEFFICIENT, BATTERY POWERED, CARRYING CASE, 3-YEAR WARRANTY, INCLUDING AN EPOXY 4 ELECTRODE GRAPHITE CELL WITH 0.475 CM-1 CELL CONSTANT.

ORION MODEL 128 (#12800, #12802, METER ONLY) OR APPROVED EQUAL.

COMMODITY NO: 2900-141-5156

CONDUCTIVITY ELECTRODE, EPOXY 4-ELECT-RODE GRAPHITE CELL WITH 0.475 CM-1 CELL CONSTANT, TEMPERATURE COMPENSATED, 8 PIN WATERPROOF DIN CABLE CONNECTION, FOR CONDUCTIVITY METER ORION MODEL 128, ITEM 2899-141-5155.

ORION CATALOG #013005 OR APPROVED EQUAL.

COMMODITY #2900-141-5160

LIQUID GALLIC ACID, PINT CONTAINER FOR NEUTRALIZING PHENOLPHTHALEIN ALKALINITY IN THE DETERMINATION OF DISSOLVED SOLIDS BY THE ELECTRICAL/BATTERY CONDUCTIVITY METHOD.

COMMODITY #2900-141-5161

CONDUCTIVITY TESTER, BATTERY POWERED, INCLUDING ELECTRODE

TESTER, CONDUCTIVITY, BATTERY POWERED, INCLUDING INTERNAL ELECTRODE, PORTABLE, AUTOMATIC TEMPERATURE COMPENSATION FOR 32-160° F.

MYRON L TECHPRO MODEL AR1 OR APPROVED EQUAL.

COMMODITY #2900-141-5162

KIT, SILICA TEST, COLOR DISC / FAST HETEROPOLY BLUE, AMINO ACID, WITH SUFFICIENT REAGENTS FOR 100 TESTS.

HACH MODEL SI-5, HACH CAT. NO. 145554-00 OR APPROVED EQUAL.

COMMODITY #2900-141-5163

REAGENT SET FOR SILICA TEST, CONTAINING ALL REAGENTS FOR 100 TESTS.

HACH CAT. NO. 24623-00 OR APPROVED EQUAL.