

# 2023 Buyers' Guide

For Service Providers and Suppliers of Raw Materials, Manufacturing Equipment, Instrumentation, Packaging, Environmental, Software, and More.

## I. RAW MATERIALS

### A. ADDITIVES

00150 ABRASION RESISTANCE IMPROVERS  
 00200 ABSORBENTS  
 00220 ACCELERATORS/HARDENERS  
 00250 ACID CATALYSTS  
 00300 ACID SCAVENGERS  
 00350 ADHESION PROMOTERS  
 00400 AMINE NEUTRALIZERS  
 00450 ANTI-BLOCKING AGENTS  
 00500 ANTI-CRATERING AGENTS  
 00550 ANTI-CRAWLING AGENTS  
 00600 ANTI-FLOAT AGENTS  
 00650 ANTI-FLOODING AGENTS  
 00700 ANTI-FOULING AGENTS  
 00750 ANTI-FREEZING AGENTS  
 00800 ANTI-GELLING AGENTS  
 00850 ANTI-LIVERING AGENTS  
 00900 ANTI-MARRING AGENTS  
**ANTI-MICROBIALS:**  
 00950 Algaecides  
 00975 Bactericides  
 01000 Biocides  
 01025 Cuprous Oxide  
 01050 Enzyme-Based Additives  
 01075 Fungicides  
 01100 In-Can Preservatives  
 01125 Insecticides  
 01150 Misc. Preservatives  
 01175 Non-Mercurial  
 01200 Silver-Based  
**01300 ANTI-OXIDANTS**  
**01350 ANTI-RUST AGENTS**  
**01400 ANTI-SAG AGENTS**  
**01450 ANTI-SETTLING AGENTS**  
**01500 ANTI-SILKING AGENTS**  
**01550 ANTI-SKINNING AGENTS**  
**01600 ANTI-SLIP/ANTI-SKID AGENTS**  
**01700 ANTI-STATIC AGENTS (Anti-Stats)**  
**01750 BIOBASED**  
**01800 BODYING AGENTS**  
**01850 BRIGHTENERS (Optical)**

**01900 BURNISH-RESISTANT ADDITIVES**  
**01950 CATALYSTS**  
**02050 CHELATING AGENTS**  
**02100 CLEANABILITY ADDITIVES**  
**02150 COAGULANTS**  
**02200 COALESCENTS (Coalescing Agents)**  
**02250 COLLOID STABILIZERS**  
**02300 CORROSION INHIBITORS**  
**02350 CORROSION-INHIBITIVE PIGMENTS**  
**02400 COUPLING AGENTS**  
**02450 CRAZE-RESISTANCE ADDITIVES**  
**02500 CROSSLINKING AGENTS**  
**02550 CURING AGENTS**  
**02600 DEAERATORS**  
**02650 DEFLOCCULANTS**  
**DEFOAMERS:**  
 02750 Misc. Defoamers  
 02800 Non-silicone  
 02850 Silicone  
**02900 DEGASSING AGENTS**  
**02950 DENATURANTS**  
**03000 DESICCANTS**  
**03050 DRIER STABILIZERS**  
**DRIERS:**  
 03150 Drying Salts  
 03200 Linoleates  
 03250 Misc. Driers  
 03300 Naphthenates  
 03350 Neodecanoates  
 03400 Octoates  
 03450 Tallates  
 03500 Water Dispersible  
 03550 Waterborne  
**03600 DYES (For Use in Stains)**  
**03650 ELECTROCONDUCTIVE ADDITIVES**  
**03675 ENCAPSULATION TECHNOLOGY**  
**03700 EXTENDERS**  
**03750 FILLERS - NATURAL, CELLULOSIC, POLYMERIC**  
**03800 FISH EYE PREVENTERS**  
**03850 FLAME RETARDANTS**  
**FLATTING AGENTS:**  
 03950 Dispersed  
 04000 Misc. Flattening Agents

04050 Non-Metallic  
**04100 FLOCCULANTS**  
**04150 FLOW & LEVELING AGENTS**  
**04200 FLUIDIZING ADDITIVES**  
**04250 FLUORESCENT ADDITIVES**  
**04300 FOAMING AGENTS**  
**04350 FREEZE-THAW STABILIZERS**  
**04400 GELLING AGENTS**  
**04450 GLOSS IMPROVERS**  
**04500 GLYCERINE**  
**04525 GREEN ADDITIVES**  
**04550 GRINDING AIDS**  
**04600 HALS (Hindered Amine Light Stabilizers)**  
**04650 HAMMER FINISH ADDITIVES**  
**04750 HASE THICKENERS**  
**04800 HEAT STABILIZERS**  
**04850 HEUR THICKENERS**  
**04900 HOMOGENIZERS**  
**04950 HUMECTANTS**  
**05000 HYDROPHILES**  
**05050 HYDROPHOBIC AGENTS**  
**05100 HYGIENIC COATING ADDITIVES**  
**05150 IMPACT RESISTANCE IMPROVERS**  
**05200 INK ADDITIVES**  
**05250 INTUMESCENT ADDITIVES**  
**05300 LEAFING AGENTS**  
**05320 LUBRICANTS (Solids)**  
**05340 LUBRICANTS (Surfaces)**  
**05350 LUMINESCENT ADDITIVES**  
**05400 LUSTRANTS**  
**05450 MASKING AGENTS**  
**05500 MICROSPHERES**  
**05550 MISC. OTHER ADDITIVES**  
**05600 MISC. OTHER CHEMICAL SPECIALTIES**  
**05650 MISC. POWDER COATING ADDITIVES**  
**05700 MISC. VISCOSITY & FLOW-CONTROL AGENTS**  
**MOISTURE SCAVENGERS:**  
 05775 Misc. Moisture Scavengers  
 05800 Molecular Sieves  
 05825 Zeolites  
**05850 NANOTECHNOLOGY ADDITIVES**  
**05900 ODORANTS**  
**05950 OILS**

**06000 ORANGE PEEL PREVENTERS****06050 ORGANIC PEROXIDES****06100 ORGANOCLOYS****06150 pH-CONTROL AGENTS****06175 PHOTOCATALYSTS****06200 PHOTOINITIATORS****06250 PHOTOSENSITIZERS****06300 PINHOLE PREVENTATIVES****PLASTICIZERS:**

- 06400 Abietates
- 06450 Adipates
- 06500 Benzoates
- 06550 Castor Oil  
(Polymerized/Oxidized)
- 06600 Castor Oil (Raw/Refined)
- 06650 Epoxidized
- 06700 Misc. Plasticizers
- 06750 Oil-Modified
- 06800 Phosphates
- 06850 Phthalates
- 06900 Polymeric
- 06950 Sebacates
- 07000 Sulfonamides

**07050 POLYMERIC LIQUID CRYSTALS****07100 PRETREATMENT CHEMICALS****07150 PRINTING INK DISPERSANTS****AND VEHICLES****07200 PRINTING INK VARNISHES &****COMPOUNDS****07250 PROTECTIVE COLLOIDS****07300 PUFFING AGENTS****07350 REACTIVE DILUENTS****07375 REDUCING AGENTS****07385 RESIN MODIFIERS****07400 RETENTION AIDS****07450 SEAL/BARRIER COATING****ADDITIVES****07453 SELF-HEALING TECHNOLOGY****07475 SLIP AIDS****07485 SMART TECHNOLOGY****07500 SOIL REPELLANTS****07550 SPREADING AGENTS****STABILIZERS:**

- 07650 Lead
- 07700 Misc. Stabilizers
- 07750 Non-Metallic
- 07800 STAIN-RESISTANT ADDITIVES
- 07850 STEARATES
- 08150 SURFACE MODIFIERS
- 08200 SURFACE TENSION REDUCERS
- 08250 SURFACE-ACTIVE AGENTS

**SURFACTANTS AND****DISPERSING AGENTS:**

- 08350 Anionic
- 08400 Cationic
- 08450 Nonionic
- 08500 Detergents
- 08550 Dispersing Agents
- 08600 Emulsifiers
- 08650 Flow Modifiers
- 08700 Misc. Surfactants & Dispersing  
Agents
- 08750 Wetting Agents
- 08800 SUSPENSION AGENTS
- 08850 SYNERGISTS
- 08900 TACKIFIERS

**08950 TEXTURIZING AGENTS****08975 THERMAL CONDUCTIVITY****ADDITIVES****THICKENING AGENTS AND****RHEOLOGY MODIFIERS:**

- 09050 Associative Thickeners
- 09100 Cellulosics
- 09150 Clays
- 09200 Fumed Silica
- 09250 Misc. Thickeners
- 09300 Precipitated Silica
- 09350 Solvent
- 09400 Water
- 09450 TRIBO-CHARGING ADDITIVES
- 09500 UV ABSORBERS & LIGHT  
STABILIZERS
- 09550 VARNISHES
- 09600 VISCOSITY MODIFIERS
- 09650 WATER REPELLENTS
- 09700 WATER-REMOVAL  
AGENTS/SCAVENGERS
- 09750 WATER-TREATMENT  
CHEMICALS
- 09800 WAX EMULSIONS
- 09850 WAXES
- 09900 WET EDGE EXTENDERS
- 09950 WETTING AGENTS
- 10000 XANTHAN GUM

**09450 TRIBO-CHARGING ADDITIVES****09500 UV ABSORBERS & LIGHT****STABILIZERS****09550 VARNISHES****09600 VISCOSITY MODIFIERS****09650 WATER REPELLENTS****09700 WATER-REMOVAL****AGENTS/SCAVENGERS****09750 WATER-TREATMENT****CHEMICALS****09800 WAX EMULSIONS****09850 WAXES****09900 WET EDGE EXTENDERS****09950 WETTING AGENTS****10000 XANTHAN GUM****B. OILS AND FATTY ACIDS****10100 COCONUT OIL****10150 DEHYDRATED CASTOR OIL****10200 FATTY ACIDS****10250 HYDROCARBON INK OILS****LINSEED OIL:**

- 10350 Blown
- 10400 Boiled
- 10450 Misc. Linseed Oil
- 10500 Raw
- 10550 Refined
- 10600 Special
- 10650 MARINE OIL
- 10700 MISC. OTHERS
- 10750 OITICICA OIL
- 10775 PINE OIL
- 10800 SOYBEAN LECITHIN
- 10850 SOYBEAN OIL
- 10900 SUNFLOWER OIL
- 10950 SYNTHETIC & MODIFIED OILS
- 11000 TUNG OIL

**10650 MARINE OIL****10700 MISC. OTHERS****10750 OITICICA OIL****10775 PINE OIL****10800 SOYBEAN LECITHIN****10850 SOYBEAN OIL****10900 SUNFLOWER OIL****10950 SYNTHETIC & MODIFIED OILS****11000 TUNG OIL****C. POLYMERS/RESINS****ACRYLIC RESINS:**

- 11150 Misc. Acrylic
- 11200 Polymer Emulsion
- 11250 Solid
- 11300 Solution
- 11350 Styrene Acrylic Emulsions
- 11400 Vinyl Acrylic
- 11450 Water-Reducible
- 11550 Alkyd and Oil Copolymers
- 11600 Drying Oil-Modified
- 11650 Misc. Alkyd

**ALKYD RESIN:**

- 11550 Alkyd and Oil Copolymers
- 11600 Drying Oil-Modified
- 11650 Misc. Alkyd

**11700 Nondrying & Semi-Oxidizing, Oil-  
Modified****11750 Thixotropic****11800 Water-Reducible****11850 AMINO RESINS****11875 BIOBASED****11900 BITUMENS****11925 BUILDING BLOCKS****11950 CELLULOSE RESINS****12000 CROSSLINKING RESINS****12050 EPOXY HARDENERS****EPOXY RESINS:**

- 12150 Epoxy UV-Curing
- 12200 Ester
- 12250 Liquid Solution
- 12300 Misc. Epoxy
- 12350 Solid
- 12400 Waterborne
- 12450 ESTER GUMS

**FLUOROPOLYMERS:****12457 FEVE Resins****12460 PVDF Resins****12475 GREEN RESINS****12500 HIGH-SOLID RESINS****HYDROCARBON RESINS:**

- 12600 Coumarone-Indene
- 12650 Emulsion
- 12700 Liquid/Solution
- 12750 Misc. Hydrocarbon
- 12800 Polybutadiene
- 12850 Solid
- 12900 Terpene
- 12950 MALEIC RESINS
- 13000 MELAMINE AND MELAMINE-  
TYPE RESINS
- 13050 MISC. RESINS
- 13075 MONOMERS
- 13100 NATURAL RESINS
- 13150 NITROCELLULOSE
- 13200 OLEORESINOUS VARNISHES
- 13225 ORGANOMETALLIC RESINS

**12950 MALEIC RESINS****13000 MELAMINE AND MELAMINE-  
TYPE RESINS****13050 MISC. RESINS****13075 MONOMERS****13100 NATURAL RESINS****13150 NITROCELLULOSE****13200 OLEORESINOUS VARNISHES****13225 ORGANOMETALLIC RESINS****PHENOLIC RESINS:**

- 13300 Misc. Phenolic
- 13350 Modified for Powder Coatings
- 13400 Polyamide
- 13450 Solid
- 13500 Solution 915
- 13550 Waterborne
- 13600 POLYAMIDE RESINS
- 13650 POLYBUTENES

**13600 POLYAMIDE RESINS****13650 POLYBUTENES****POLYESTER RESINS:**

- 13800 Misc. Polyester
- 13850 Saturated
- 13900 Unsaturated
- 13950 Water-Reducible
- 13975 POLYOLS
- 14000 POLYSACCHARIDE RESINS
- 14050 ROSIN ESTERS
- 14100 SILICONE RESINS
- 14125 SMART TECHNOLOGY

**13975 POLYOLS****14000 POLYSACCHARIDE RESINS****14050 ROSIN ESTERS****14100 SILICONE RESINS****14125 SMART TECHNOLOGY****STYRENE RESINS:**

- 14200 Misc. Styrene
- 14250 Styrene/Vinyl Toluene-Polymer &  
Copolymer Solid
- 14300 Styrene/Vinyl Toluene-Polymer &  
Copolymer Solution

14350 Styrene-Butadiene Emulsions

14400 ULTRAVIOLET-CURING RESINS

14450 UREA RESINS

URETHANE AND

POLYURETHANE RESINS:

14550 Oil-Modified (ASTM Type 1)

14600 ASTM Type II

14650 ASTM Type IV

14700 ASTM Type V

14750 Misc. Urethane and Polyurethane

14800 Waterborne

VINYL RESINS:

14900 Misc. Vinyl

14950 Polyvinyl Acetate

15000 Polyvinyl Butyral

15050 Polyvinyl Chloride and

Polyvinylidene Chloride

15100 Vinyl Acetate Polymer Emulsions

## D. PIGMENTS, DISPERSIONS

**BLACK, BROWN, AND GRAY**

**PIGMENTS:**

15250 Black Iron Oxide

15300 Brown and Gray

15350 Carbon Black

15400 Drop and Bone Blacks

15425 IR-Reflective/Cool Black

15450 Lampblack

15500 Misc. Black

**BLUE PIGMENTS:**

15600 Blue, Purple and Violet PMA and  
PTA Toners and Lakes

15650 Indanthrone Blue

15700 Iron Blue

15750 Misc. Blue, Purple and Violet

15800 Phthalocyanine Blue

15850 Ultramarine Blue

15900 COMPLEX INORGANIC COLOR

**PIGMENTS**

**CORROSION-INHIBITING**

**PIGMENTS:**

16000 Misc. Corrosion-Inhibiting

16050 Zinc Dust and Flakes

16100 Zinc Phosphate

16150 Zinc Yellow

**DYES:**

16250 Misc. Dyes

16300 Organic

16350 Solvent Soluble

16400 Water-Soluble

**EXTENDER PIGMENTS:**

16500 Alumina Trihydrate

16550 Barium Sulfate (Barytes, Blanc  
Fixe)

16600 Bentonite

16650 Calcium Carbonate (Natural  
Ground, Precipitated)

16700 China Clay and Aluminum  
Silicate

16750 Feldspar

16800 Fillers/Fiber

16850 Glass Spheres

16900 Mica

16950 Microspheres

17000 Misc. Extenders

17050 Nepheline Syenite

17100 Silica - Amorphous-Naturally  
Occurring

17150 Silica - Amorphous-Synthetic

17200 Silica - Quartz and Diatomaceous

17250 Talc or Magnesium Silicate

17300 Wollastonite

**GREEN PIGMENTS:**

17400 Chrome Green

17450 Chromium Oxide

17500 Green PMA and PTA Toners and  
Lakes

17550 Hydrated Chromium Oxide

17600 Misc. Green

17650 Phthalocyanine Green

17700 Pigment Green B

**IRON OXIDE PIGMENTS:**

17800 Black Iron Oxide

17850 Burnt Sienna

17900 Burnt Umber

17950 Indian Red

18000 Metallic Brown

18050 Mineral Black

18100 Ochre

18150 Raw Sienna

18200 Raw Umber

18250 Red and Brown Iron Oxide -  
Natural

18300 Red and Brown Iron Oxide -  
Synthetic

18350 Spanish-Type Oxide

18400 Transparent Iron Oxides

18450 Van Dyke Brown

18500 Yellow Iron Oxide-Synthetic

18550 LIGHT-INTERFERENCE

**PIGMENTS**

**METALLIC FLAKES AND**

**POWDERED PIGMENTS:**

18650 Aluminum Pastes - Leafing

18700 Aluminum Pastes - Non-Leafing

18750 Aluminum Powders - Leafing

18800 Aluminum Powders - Non-Leafing

18850 Gold Bronze Powders

18900 Leafing Aluminum Enhancer

18950 Other Metallic Flakes and  
Powders

18975 **OPACITY PIGMENTS**

**OTHER PIGMENTS:**

19050 High-Performance

19100 Holographic

19150 Iridescent

19200 Luminescent and Fluorescent

19250 Misc. Other

19300 Pearlescent

19350 Pearlescent Pigment Dispersions

19400 Special-Effect

**PIGMENT DISPERSIONS**

**(AQUEOUS):**

19500 Color Concentrates

19550 Machine Colorants

19600 Presscakes

19650 Solvent-Soluble Dyes

19700 Tube Colorants

19750 Universal Colorants

19800 Water-Soluble

**PIGMENT DISPERSIONS (NON-  
AQUEOUS):**

19900 Acrylic Vehicle

19950 Alkyd Vehicle

20000 Epoxy Vehicle

20050 Nitrocellulose Vehicle

20100 Polyester Vehicle

20150 Universal Solvent Vehicle  
Dispersion

20200 Urethane Vehicle

**RED PIGMENTS:**

20300 Alizarine or Madder Lake

20350 Arylide Red and Maroon

20400 BON Red and Maroon

20450 Cadmium Red

20500 Cadmium-Mercury Red, Maroon,  
and Orange

20600 Diketopyrrolo Pyrrole (DPP)

20650 Lithol Rubine

20700 Misc. Red and Maroon Toners  
and Lakes

20725 Naphthol Red

20750 Para Red, Chlorinated

Paranitraniline Toner

20800 Perylene Red and Maroon

20850 Pigment Scarlet

20900 Pyrazolone Red and Maroon

20950 Quinacridone Pigment

21000 Red Lake C

21050 Rhodamine

21100 Sodium Lithol, Calcium Lithol,  
and Barium Lithol Toner

21150 Thioindigold Red and Maroon

21200 Toluidine Red

**WHITE PIGMENTS:**

21300 Aluminum Phosphate

21350 Antimony Oxide

21375 TiO<sub>2</sub> Replacement Technology

21400 Titanium Dioxide - Anatase

21450 Titanium Dioxide - Rutile

21500 Zinc Oxide

21550 Zinc Sulfide

**YELLOW AND ORANGE**

**PIGMENTS:**

21625 Bismuth Vanadate

21650 Cadmium Yellow and Orange

21700 Chrome Orange

21750 Chrome Yellow

21800 Diarylide Orange Toner

21850 Diarylide Yellow Toner

21900 Hansa Yellow

21950 Misc. Yellow and Orange Toners  
and Lakes

22000 Misc. Yellow Pigments

22050 Molybdate Orange

22100 Orthonitraniline Orange,  
Dinitraniline Orange

## E. SOLVENTS

**22200 ALCOHOLS**

**22250 ALIPHATIC HYDROCARBONS**

**22300 AROMATIC HYDROCARBONS**

**22350 CHLORINATED SOLVENTS**

**22400 COMPLIANT SOLVENTS**

**22450 CUSTOM SOLVENT BLENDING**

22500 DENATURED ALCOHOLS  
22550 ESTERS  
22600 GLYCOL ETHERS  
22650 GLYCOLS  
22700 KETONES  
22750 MISC. SOLVENTS  
22800 NITROPARAFFINS  
22850 NON-HAP SOLVENTS  
22900 RECLAIMED SOLVENTS

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## II. MANUFACTURING EQUIPMENT

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23000 AGITATORS  
23050 BATCH CONTROLLERS  
23100 BATCH-WEIGHING EQUIPMENT  
23150 BEADS, CERAMIC  
23200 BEADS, GLASS, SMALL MEDIA  
MILL  
23250 BLENDERS  
23300 BLENDERS, CONICAL  
23350 BLENDERS, CYLINDER  
23400 BLENDERS, PORTABLE  
23450 BLENDERS, RIBBON  
23500 BLENDING TANKS  
23550 BLUNGER  
23600 CENTRIFUGES (also in  
Test/Measurement section)  
**CLEANING:**  
23620 Blasting/Supplies  
23625 Cleaners/Solvents  
23650 Cleaning Equipment (Systems,  
Tub, Etc.)  
23670 Industrial Vacuum Cleaners  
23680 Ultrasonic Cleaners  
23700 COLOR CARDS  
23750 COLOR CONTROL SYSTEMS  
23800 COLOR DISPLAYS  
23850 COLOR FLUSHING EQUIPMENT  
23900 COLOR MERCHANDISING AIDS  
23950 COLOR METERS, COLOR-  
MATCH INSTRUMENTS  
24000 CONTROL SYSTEMS  
24050 CRUSHERS (Can, Drum, Etc.)  
24100 CURING SYSTEMS  
24150 DISPERSAL BLADES  
24200 DISPERSAL MEDIA  
24250 DISPERSERS  
24300 DISTILLATION EQUIPMENT  
24350 DUST-COLLECTION EQUIPMENT  
24400 FILM APPLICATORS  
24500 FILMS  
24550 FILTER PRESSES  
24600 FILTER/PRESSURE VESSELS  
24650 FILTERING BAGS/STRAINERS  
24700 FILTERING CARTRIDGES  
24750 FLEXIBLE SCREW CONVEYORS  
24800 FORK LIFTS  
24850 GAUGES - PRESSURE  
24900 GLOSSMETERS  
24950 GLUING MACHINES  
25000 GRINDING EQUIPMENT  
25050 GRINDING MEDIA  
25100 HEAT BOILERS - WASTE  
25150 HEAT EXCHANGERS

25200 HEAT-RECOVERY SYSTEMS -  
WASTE  
25250 HEAT-TRANSFER FLUIDS  
25300 HOLDING, MIXING TANKS  
25350 HOLIDAY DETECTORS (also in  
Test/Measurement section)  
25375 HOSES  
25400 HUMIDITY CHAMBERS  
25450 IMPELLERS  
25500 INFRARED-CURING EQUIPMENT  
25550 LEVEL CONTROLS  
25600 LEVEL SENSORS  
25650 LEVEL SENSORS, ULTRASONIC  
25700 LIGHT BOOTH  
25750 LIQUID LEVEL INDICATORS  
25800 MACHINES  
25850 MECHANICAL CONVEYORS  
25900 METERING EQUIPMENT -  
ELECTRONIC  
25950 METERS  
26000 METERS, pH  
26050 MICROPROCESSORS  
**MILLS:**  
26150 Attrition  
26200 Ball  
26225 Basket  
26250 Bead  
26300 Centrifugal Mills  
26350 Colloid  
26400 Horizontal  
26450 Impact  
26500 Jar and Jar Rolling  
26550 Laboratory  
26600 Misc. Mills  
26650 Pebble  
26700 Peg  
26750 Roller  
26800 Sand  
26850 Shot  
26900 Small Media  
26950 Vertical  
**MIXERS:**  
27050 Bottom-Entry  
27100 Change-Can  
27150 Cone Screw  
27200 Counter-Rotating  
27250 Direct-Drive Agitators  
27300 Double-Planetary  
27350 Drum  
27400 Dual-Shaft  
27450 High-Shear Batch  
27500 High-Speed  
27550 High-Speed Dispensers  
27600 High-Speed Rotor Stator  
27650 High-Viscosity  
27700 Homogenizers  
27750 Horizontal Paddle-Type  
27800 IBC  
27850 In-Line Mechanical  
27900 In-Line Motionless  
27950 Jacketed Half Pipe or Dimple  
28000 Jet (Powder Dissolving)  
28050 Kneader Extruder  
28075 Laboratory  
28100 Low-Shear  
28150 Misc. Mixers

28200 Pipe Line  
28250 Reactor  
28300 Rotary Batch  
28350 Rotor Blade  
28400 Side-Entry  
28450 Spiral Blade  
28500 Static  
28550 Top-Entry  
28600 Triple-Shaft  
28650 MIXING EQUIPMENT  
28700 MIXING EQUIPMENT - AIR  
POWERED  
28750 MIXING/DISPERSION BLADES  
OVENS:  
28850 Microwave  
28900 Misc. Ovens  
28950 Thermal  
29000 Vacuum  
29050 OXIDIZERS, CATALYTIC  
29100 OXIDIZERS, THERMAL  
29150 PAINT SHAKERS  
29175 PAINT STRIPPERS  
29200 PALLET CONVEYOR  
29250 PALLET DISPENSERS  
29300 PALLETIZERS  
29350 PARTICLE CHARACTERIZATION  
29400 PASTE MIXERS, HORIZONTAL  
29450 PIGGING SYSTEMS  
29500 PNEUMATIC CONVEYORS  
29550 PORTABLE DISPLAY SYSTEM  
POWDER COATING EQUIPMENT:  
29640 Cleaners/Strippers  
29650 Curing Systems  
29700 Extruders  
29750 Filter Belts  
29800 Fluidized Beds  
29850 Mills  
29900 Misc. Powder Equipment  
29950 PROPORTIONING SYSTEMS  
AND COMPONENTS  
**PUMPS:**  
30050 Air-Operated  
30100 Carboy  
30150 Centrifugal  
30200 Diaphragm  
30250 Drum  
30300 Hand  
30350 High-Pressure  
30400 Metering  
30450 Misc. Pumps  
30500 Positive-Displacement Rotary  
30550 Proportional  
30600 Pulsation Dampeners  
30650 Reciprocating  
30700 Turbine Rotary  
30750 Vacuum  
30800 RAM DISCHARGE  
30850 REACTOR & RECOVERY  
SYSTEMS  
30900 REDUCTION EQUIPMENT  
30950 REFLECTOMETERS  
31000 REGISTERS - ELECTRONIC &  
MECHANICAL  
31025 ROBOTS  
31050 ROLLS - SETS  
31075 SAFETY EQUIPMENT

**31100 SCREENING**  
**31150 SEPARATORS**  
**31200 SEPARATORS - MAGNETIC**  
**31250 SHAKERS**  
**31300 SIEVING EQUIPMENT**  
**31350 SIZE REDUCERS**  
**31400 SOLVENT-RECOVERY EQUIPMENT (also in Environmental section)**  
**31450 SPECIAL DESIGN MACHINERY**  
**31500 SPRAY BOOTH**  
**31550 SPRAYING EQUIPMENT**  
**31575 STATIC CONTROL**  
**31600 STRAINING EQUIPMENT**  
**31650 TEMPERATURE COMPENSATORS**  
**31700 TEMPERATURE EQUIPMENT/CONTROLS**  
**31725 THICKNESS GAUGES (also in Test section)**  
**31750 TUBULAR CONVEYORS**  
**31800 TURN-KEY PROCESSES**  
**31875 USED EQUIPMENT (Buying/Selling)**  
**31900 UV-CURE SYSTEMS**  
**31950 UV LAMPS**  
**32000 VALVES**  
**32050 VISCOMETERS**  
**32100 WASTE COMBUSTION EQUIPMENT**

### III. TEST/MEASUREMENT INSTRUMENTATION AND SERVICES

**32200 ACCELERATED WEATHERING**  
**32250 ADSORPTION EQUIPMENT**  
**32300 AIR MAKEUP/EXHAUST**  
**32350 AIR POLLUTION/EFFLUENT CONTROL**  
**32400 AIR QUALITY MONITORING EQUIPMENT**  
**32450 AIR SAMPLING AND ANALYSIS EQUIPMENT**  
**ANALYZERS:**  
 32550 Biochemical Oxygen Demand (BOD)  
 32600 Chemical Oxygen Demand (COD)  
 32650 Elemental (CHN)  
 32700 Film Formation  
 32750 Headspace  
 32800 Kjeldahl Nitrogen  
 32850 Misc. Analyzers  
 32900 Moisture  
 32950 Particle  
 33000 Stability  
 33050 Suspended Solids  
 33100 Total Nitrogen  
 33150 Total Organic Carbon (TOC)  
**BALANCES:**  
 33250 Analytical  
 33300 Misc. Balances/Scales  
 33350 Moisture  
 33400 Top-Loading

**33450 BATHS, CONSTANT TEMPERATURE**  
**33500 BUILDING/CLEAN ROOMS**  
**33550 CALORIMETERS, DIFFERENTIAL SCANNING CENTRIFUGES:**  
 33650 Misc. Centrifuges  
 33700 Table Top  
**CHROMATOGRAPHY, GC:**  
 33800 GC/MS Systems  
 33850 Pyrolysis  
**33900 CHROMATOGRAPHY, GEL PERMEATION**  
**33950 CHROMATOGRAPHY, LC**  
**34000 CLEANING EQUIPMENT**  
**34050 CLEANING SUPPLIES, LABORATORY**  
**34100 COATING APPLICATION**  
**34150 COLOR CARDS**  
**34200 COLOR CONTROL SYSTEMS**  
**34250 COLOR MATCHING/MEASURING CONSULTING:**  
 34350 Analytical Services  
 34400 Misc. Consulting  
 34450 Technical Consulting  
**CONTRACT SERVICES:**  
 34550 AFM Surface Analysis  
 34600 Independent Test Labs  
 34650 Misc. Other Contract Services  
 34700 Solvent Reclamation  
**34750 DENSITY CUPS**  
**34800 DESICCATORS**  
**34850 DIFFERENTIAL SCANNING CALORIMETRY (DSC)**  
**34900 DIFFERENTIAL THERMAL ANALYSIS (DTA)**  
**34950 DRYING TIME RECORDERS**  
**35000 DUST COLLECTORS**  
**35050 DYNAMIC MECHANICAL ANALYSIS (DMA)**  
**ELECTRODES:**  
 35150 Glassy Carbon  
 35200 Graphite  
 35250 Ion-Selective  
 35300 Karl Fischer  
 35350 Misc. Electrodes  
 35400 pH  
**35450 ENVIRONMENTAL CONTROLS**  
**35500 ENVIRONMENTAL TEST EQUIPMENT**  
**35550 EXPLOSION PROTECTION SYSTEMS**  
**35600 EXPOSURE TESTING**  
**35650 FILM APPLICATORS**  
**35800 FILTERS**  
**35850 FLAME HOODS**  
**35900 FLAMMABILITY TESTING INSTRUMENTS**  
**36000 FLOW METERS**  
**36050 FUNNELS**  
**FURNACES:**  
 36150 Misc. Furnaces  
 36200 Muffle  
 36250 Vacuum

**36300 FURNITURE, LABORATORY, BENCHES, TABLES, AND DESKS**  
**GAUGES:**  
 36400 Fineness of Grind  
 36450 Grind  
 36500 Misc. Gauges  
 36550 Pressure  
**36650 GENERAL LABORATORY EQUIPMENT**  
**36700 GLOVE BOXES**  
**36750 HAZARDOUS MATERIALS HANDLING EQUIPMENT**  
**36800 HIGH-SPEED MIXERS**  
**36850 HOLIDAY DETECTORS**  
**36900 HOODS, FUME**  
**36950 HOT PLATES**  
**37000 HUMIDITY/CONDENSATION CHAMBERS**  
**37050 ICP**  
**37100 IMAGE ANALYZERS**  
**37200 LAB CARTS**  
**LABWARE:**  
 37300 Glass  
 37350 Misc. Other Labware  
 37400 Plastic  
**37450 LIGHT BOOTHS**  
**37500 MECHANICAL TESTING EQUIPMENT**  
**METERS:**  
 37600 Conductivity  
 37650 Contact Angle  
 37750 Micro Wave Scan  
 37800 Misc. Meters  
 37850 Moisture  
 37900 pH  
 37950 Wave Scan  
 38000 Wood Moisture  
**MICROSCOPES:**  
 38100 Atomic Force  
 38150 Infrared  
 38200 Misc. Microscopes  
 38250 Optical  
 38300 Polarizing  
**38350 MICROWAVE DIGESTERS**  
**38400 MIXERS/MILLS/GRINDERS**  
**38450 MOLECULAR WEIGHT DETERMINATION**  
**38500 ODOR-CONTROL EQUIPMENT**  
**38550 OUTDOOR-EXPOSURE TEST EQUIPMENT**  
**OVENS-LABORATORY:**  
 38650 Microwave Ovens  
 38700 Misc. Ovens  
 38750 Thermal  
 38800 Vacuum  
**38850 PAINT OVERSPRAY RECOVERY/RECYCLING**  
**38900 PARTICLE MEASUREMENT**  
**38950 PARTICLE SIZE CHARACTERIZATION**  
**39000 PH METERS**  
**39050 PSYCHROMETERS**  
**PUMPS:**  
 39150 Misc. Pumps  
 39200 Vacuum

**39225 REAGENTS****39250 RESPIRATORS, CHEMICAL  
CARTRIDGE/FILTER/  
DISPOSABLE****39300 RHEOMETERS, LIQUID****39350 RHEOMETERS, POWDER  
SAFETY EQUIPMENT:**

- 39435 Anti-Fatigue Floor Mats
- 39450 Cans
- 39500 Eyeglasses and Goggles
- 39550 Eyewash Fountains
- 39600 Flammable Materials, Storage Cabinets
- 39650 Gloves
- 39700 Misc. Safety Equipment
- 39750 Protective Clothing
- 39800 Spill Cleanup

**39850 SAFETY/HEALTH SERVICES****39900 SAMPLE PREPARATION****39950 SEM****40000 SHAKERS, PAINT****40050 SIFTERS****40100 SLUDGE TREATMENT****40150 SLUDGE-HANDLING  
EQUIPMENT****40200 SOFTWARE, LABORATORY  
INFORMATION MANAGEMENT  
SYSTEMS (LIMS)****40250 SOLIDS ANALYZERS****40300 SOLVENT-RECOVERY  
EQUIPMENT****40350 SPATULA, SS****40400 SPECIFIC GRAVITY CUPS  
(PYKNOMETER)  
SPECTROMETERS:**

- 40500 AA
- 40550 GC/MS
- 40600 ICP
- 40650 IR, FT-IR
- 40700 Mass
- 40750 Misc. Spectrometers
- 40800 Raman
- 40850 UV-VIS
- 40900 X-Ray

**SPECTROPHOTOMETERS:**

- 41000 Color-Measuring
- 41050 Fluorescence
- 41100 Infrared
- 41150 Misc. Spectrophotometers
- 41200 Ultraviolet

**41250 STIRRERS****SURFACE ANALYSIS:**

- 41350 Atomic Force Microscopy
- 41400 Auger Spectroscopy
- 41450 Electron Microprobe
- 41500 ESCA
- 41550 Ion-Scattering Spectrometry
- 41600 Misc. Surface Analysis
- 41650 Scanning Tunneling Microscopy
- 41700 Sims
- 41750 Surface Area

**41800 TEMPERATURE  
INSTRUMENTATION****41850 TENSOMETERS****41900 TEST CHARTS****TESTING INSTRUMENTS:**

- 42000 Abrasion
- 42050 Adhesion
- 42100 Chromatographic Support
- 42150 Chromatographs
- 42200 Coefficient of Friction
- 42250 Contact Angle
- 42300 Cross Hatch Cutter
- 42350 Densitometers
- 42400 Distinctness of Image Meters
- 42450 Flashpoint
- 42500 Glossmeters (also in Manufacturing Equipment)
- 42550 Hardness
- 42600 Hazemeters
- 42650 Holiday Detectors
- 42700 Hygrometers
- 42750 Impact Testers
- 42800 Mandrel Bend
- 42850 Microbial/Bacteria/Fungi
- 42900 Misc. Testing Instruments
- 42950 Particle-Size Analyzers
- 43000 Pencil Hardness
- 43050 Permeability Cups
- 43100 pH Meters
- 43150 Pinhole Detector
- 43200 Reflectometers
- 43250 Refractometers
- 43300 Specific Gravity
- 43350 Surface-Tension
- 43400 Taber Abrasion
- 43450 Tensile Strength and Elongation
- 43500 Viscosity
- 43550 Wet Abrasion
- 43600 THERMOMETERS**
- 43650 TESTING PANELS**
- 43675 THICKNESS GAUGES (also in Manufacturing Equip. section)**

**43700 TITRATORS****43750 ULTRASONIC CLEANERS****43775 UV-CURING SYSTEMS****43800 UV MEASUREMENT****43850 VISCOMETERS****43900 WATERBATH****43950 WASTE COMBUSTION  
EQUIPMENT****WASTE DISPOSAL:**

- 44050 Misc. Waste Disposal
- 44100 Recycling
- 44150 WASTEWATER TREATMENT**
- 44200 WEATHERING CHAMBERS**
- 44250 WEIGHING DISHES**
- 44300 WEIGHT PER GALLON CUPS**
- 44350 WOOD TONGUE DEPRESSORS**
- 44400 X-RAY DIFFRACTION SYSTEMS**

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**IV. ENVIRONMENTAL  
EQUIPMENT AND SERVICES**

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**44500 ADSORPTION EQUIPMENT****44550 AIR MAKEUP/EXHAUST****44600 AIR POLLUTION/EFFLUENT  
CONTROL****44650 AIR SCRUBBERS****44700 BUILDING/CLEAN ROOMS****44750 CONSULTING****CONTRACT SERVICES:**

- 44850 Hazardous Waste Cleanup
- 44900 Inspection
- 44950 Monitoring
- 45000 Permit Assistance
- 45050 Solvent Reclamation
- 45100 Waste Testing
- 45150 DUST COLLECTORS**
- 45200 ENGINEERING**
- 45250 ENVIRONMENTAL CONTROLS**
- 45300 ENVIRONMENTAL TEST  
EQUIPMENT**
- 45350 EXPLOSION PROTECTION  
SYSTEMS**
- 45400 EXPLOSION RELIEF VENTING**
- 45450 EXPOSURE TESTING**
- 45500 HAZARDOUS MATERIALS  
HANDLING EQUIPMENT**
- 45525 HAZARDOUS MATERIALS  
TESTING**
- 45550 INDUSTRIAL VACUUM  
CLEANERS**
- 45600 ODOR-CONTROL EQUIPMENT**
- 45650 PAINT OVERSPRAY  
RECOVERY/RECYCLING**
- 45700 SAFETY/HEALTH SERVICES**
- 45750 SLUDGE-HANDLING  
EQUIPMENT**
- 45800 SLUDGE TREATMENT**
- 45850 SOLVENT-RECOVERY  
EQUIPMENT (also in  
Manufacturing Equipment)**
- 45900 VENTILATION  
WASTE DISPOSAL:**
- 46000 Recycled
- 46050 WASTEWATER TREATMENT**

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**V. COMPUTER SOFTWARE**

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**46150 COLOR MEASURING****46200 FORMULATION****46250 INTERNET COMPANIES****46300 LAB ANALYSIS****46350 MISC.****46450 ONLINE INFORMATION  
SERVICES****46500 ONLINE MARKETING SERVICES****46550 PRODUCTION****46570 REGULATORY COMPLIANCE****46580 SDS-SAFETY DATA SHEETS**

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**VI. PACKAGING AND  
MATERIAL HANDLING**

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**46645 BARCODE  
SCANNERS/PRINTERS****46650 CAN CLIPS****46700 CAN/LABEL ORIENTORS****46750 CAN & PAIL CLOSERS****CONTAINERS/CANS:**

## 46850 Aerosol Packaging

## 46900 Aluminum/Shipping

## 46950 Bags, Bulk

## 47000 Bags, Multiwall

47050 Bags, Polypropylene  
47075 Cartridges  
47100 Composite (Fiber)  
47150 Corrugated  
47200 Disposable, Paperboard  
47250 Intermediate Bulk  
47300 Metal  
47350 Misc. Containers/Cans  
47400 Plastic  
47450 Reconditioned and Repaired  
47475 Recyclable  
47500 Stainless Steel  
47550 Steel  
47600 Steel Shipping

**47650 DEPALLETIZERS**

**DISPENSING:**

47750 Colorant  
47800 Computerized  
47825 Equipment  
47850 Nozzles  
47875 Pneumatic

**DRUMS:**

47950 Fiber  
48000 Interior Linings  
48050 Misc. Drums  
48100 Plastic  
48150 Reconditioned  
48200 Removable Liners

48250 Steel  
**48300 DRUM CONVEYOR**  
**48350 DRUM-HANDLING EQUIPMENT**  
**48400 DRUM POURING EQUIPMENT**  
**FILLING EQUIPMENT:**  
48500 Feeders  
48550 Fillers  
48600 Lid-Closing Machines  
48650 Lid Openers  
48700 Lid Punch Closures  
48750 Lid Punch - 5-Gallon Containers  
48800 Misc. Filling Equipment

**48850 HAZARDOUS MATERIAL  
CONTAINERS**

**48950 LABEL MACHINES**

**49000 LABEL PRINTING**

**49050 LABELS**

**49150 PACKAGE SERVICES - CUSTOM**

**49200 PACKAGING DENESTERS**

**49250 PAIL CONVEYORS**

**49275 ROBOTS**

**49300 SEALING EQUIPMENT**

**49350 SHRINK WRAP**

**TANKS:**

49450 Cleaning Equipment  
49500 Cleaning Services  
49550 Fiberglass  
49600 Metal

49650 Misc. Tanks  
49700 Plastic  
49750 Polyurethane  
49800 Portable  
49850 Process  
49900 Shipping  
49950 Storage  
50000 Thinning/Tinting  
50050 Tote

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**VII. CONSULTING AND  
SERVICES**

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**CONSULTING:**

50200 Analytical Services  
50250 Business  
50300 Job Search  
50350 Process Engineering  
50400 Product Development  
50450 Technical

**50500 PRINTING SERVICES**

**50525 REGULATORY COMPLIANCE**

**50550 TESTING SERVICES/**

**LABORATORIES**

**50600 TOLL MANUFACTURING**

**50650 TOUCH-UP PAINT**

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