

WWIX media product guide

Environmental solutions: wastewater ion exchange

WWIX media cross-reference listing for contaminant

Contaminant	Applications	Media
Aluminum (Al)	Anodizing	CAT, SCU
Arsenic (As)	Microelectronics, groundwater	ASG
Barium (Ba)	Groundwater	CAT, CSO
Boron (B)	Groundwater, industrial wastewater, cooling water	ANB
Cadmium (Cd)	Cyanide-cadmium plating solar manufacturing, groundwater	CAT, CSO, SCU
Calcium (Ca)	Industrial wastewater, groundwater	CAT, CSO, MB1
Chromium (Trivalent Cr ⁺³)	Chrome plating, electropolishing, conversion coating	CAT, SCU
Chromium (Hexavalent Cr ⁺⁶)	Chrome plating, chromate conversion coating, cooling loops/towers, groundwater	ACR, AGW AGW
Cobalt (Co)	Metal working, microelectronics, groundwater	CAT, CSO, SCU
Copper (Cu)	Electroplating, microelectronics, cooling loops, stormwater, cyanide-copper plating	CAT, CSO, SCC, SCH, SCN, SCU, ACN, MBC
Cyanide (CN)	Metal finishing, electroplating	ACN, MBC
Iron Cyanide (Fe[CN] ₆)	Industrial wastewater, groundwater remediation	ASC
Fluoride (F)	Industrial wastewater	ACT
Gold (Au)	Cyanide-gold plating, acid-gold plating	ACN, ASC, MBC
Hydrogen Peroxide (H ₂ O ₂)	Microelectronics	CEN
Hydrogen Sulfide (H ₂ S)	Industrial wastewater	CEN
Iron (Fe)	Cooling water, groundwater, metal working	CSO, IRN
Lead (Pb)	Pcb manufacturing & cleaning, metal finishing, stormwater, groundwater	CSO, MB1, SCU
Magnesium (Mg)	Industrial wastewater, groundwater	CAT, CSO, MB1
Manganese (Mn)	Industrial wastewater, groundwater	IRN, SCC, SCN, SCU
Mercury (Hg)	Groundwater, power, refining, pharmaceutical	CWH, SCU
Molybdenum (Mo)	Groundwater, parts cleaning, cooling water	ASC
Nickel (Ni)	Electroplating, electropolishing, groundwater, stormwater	CAT, CSO, SCC, SCN, SCU
Nitrate (NO ₃)	Groundwater	ASC
Perchlorate (ClO ₄)	Groundwater, aerospace, medical	APH, APP
Palladium (Pd)	Microelectronics	ASC, CSO
Phosphate (PO ₄)	Metal finishing, wwt effluent	AN1, ASG, MB1
Platinum (Pt)	Electronic, automotive	ASC
Selenium (Selenite, Se ⁺⁴)	Metal coloring	AN1, MB1
Silver (Ag)	Photo developing, cyanide-silver plating	ASC, MB1 ACN, ASC, MBC
Total dissolved solids (TDS)	Industrial wastewater, groundwater	CAT-AN1, MB1
Zinc (Zn)	Metal finishing, groundwater, stormwater cyanide-zinc plating	CAT, CSO, SCN, SCC, SCU, ACN, MBC

Media	Contaminant	Applications
ACT	F	Industrial wastewater
ACN	CN/metal-CN complexes	Cyanide electroplating wastewater (Ag, Au, Cd, Cu, Zn)
ACR	Hexavalent chromium (Cr ⁺⁶)	Chrome plating, chromic acid anodizing, chromate conversion coating
AGW	Hexavalent chromium (Cr ⁺⁶)	Groundwater, cooling water
AN1	Cl, CO ₃ , HCO ₃ , NO ₃ , PO ₄ , SO ₄	Industrial wastewater (for discharge or reuse)
ASC	Ag, Au, FeCN, Mo, Pd, Pt	Photographic developing, groundwater, parts washing, electroplating (gold), cooling water
ASG	As	Microelectronics, groundwater
CEN	Hydrogen peroxide (H ₂ O ₂), hydrogen sulfide (H ₂ S)	Microelectronics
CAL	Acidity	pH adjustment of waste streams from pH 4/5 to 6/8
CAR	Oxidizers (Cl ₂), organics (TOC, O&G)	General protection of metal-removal media
CAT	Al, Ca, Cd, Co, Cr ⁺³ , Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Zn (pH decrease)	Industrial wastewater for discharge or reuse
COC	Oxidizers/organics (TOC)	Remove low-MW organics and surfactant
CSO	Al, Ca, Cd, Co, Cr ⁺³ , Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Pd, Zn (minimal pH change)	Industrial wastewater
CWH	Ag, Hg	Industrial wastewater
IRN	Fe, Mn	Groundwater, industrial wastewater
MB1	Total dissolved solids (≤8 MΩ-cm)	Industrial wastewater for reuse
MBC	CN/metal-CN complexes	Cyanide electroplating wastewater (Ag, Au, Cd, Cu, Zn) for reuse
MBE	TDS from EDM wastewater (≤4 MΩ-cm)	Industrial wastewater for reuse
MBV	TDS from industrial wastewater (>8 MΩ-cm)	CAT, CSO, MB1
ORC	Hydrocarbons, oil and grease	General protection of metal-removal media
SCC	Co, Cu, Mn, Ni, Zn (high TDS/hardness, minimal pH change)	Industrial wastewater
SCH	Cu (high TDS/hardness, pH decrease)	Industrial wastewater
SCN	Co, Cu, Mn, Ni, Zn (high TDS/hardness, pH increase)	Industrial wastewater
SCU	Cd, Co, Cu, Cr ⁺³ , Hg, Mn, Ni, Pb, Zn (minimal pH change)	Industrial wastewater (removal of metals to <10ppb, Hg to ppt levels)