

Water Quality Specification for KINETICS UPW PRODUCTS



PARAMETER	KINETICS UPW 100 STANDARD PURITY	KINETICS UPW 200 HIGH PURITY	KINETICS UPW 300 ULTRA-HIGH PURITY
Applicable Industry Specification	<i>SEMI PV3-0310, Standard Purity</i>	<i>SEMI PV3-0310, High Purity</i>	<i>ASTM D 5127-07 Type E-1.2</i>
General Parameters			
Resistivity, On-line @25°C (MΩ-cm)	> 10	> 17.5	> 18.2
TOC, On-line (ppb)	< 200	< 20	< 1
Dissolved Oxygen, On-line (ppb)	No Spec	No Spec	< 3
Bacteria (CFU/L)	< 100	< 10	< 10
Silicia--Total (ppb)	< 50	< 20	< 1
Silicia--Dissolved (ppb as SiO ²)	< 50	< 20	< 0.5
Particles, On-line (per L)			
Size: 0.05 µm to 0.1 µm	No Spec	No Spec	< 200
Size: 0.1 µm to 0.2 µm	No Spec	< 1000	< 100
Size: 0.2 µm to 0.3 µm	< 10,000	< 100	< 10
Size: 0.3 µm to 0.5 µm	< 1000	< 10	< 10
Size: > 0.5 µm	< 100	< 1	< 5
Anionic Impurities (ppb)			
Ammonium (NH ₄ ⁺)	< 10	< 1	< 0.05
Bromide (Br ⁻)	< 10	< 1	< 0.02
Chloride (Cl ⁻)	< 10	< 1	< 0.02
Fluoride (F ⁻)	< 10	< 1	< 0.03
Nitrate (NO ₃ ⁻)	< 10	< 1	< 0.02
Nitrite (NO ₂ ⁻)	< 10	< 1	< 0.02
Phosphate (PO ₄ ⁻³)	< 10	< 1	< 0.02
Sulfate (SO ₄ ⁻²)	< 10	< 1	< 0.02
Metallic Impurities (ppb)			
Aluminum (Al)	< 10	< 1	< 0.005
Antimony (Sb)	< 10	< 1	No Spec
Arsenic (As)	< 10	< 1	No Spec
Barium (Ba)	< 10	< 1	< 0.001
Cadmium (Cd)	< 10	< 1	No Spec
Calcium (Ca)	< 10	< 1	< 0.002
Chromium (Cr)	< 10	< 1	< 0.002
Copper (Cu)	< 10	< 1	< 0.002
Iron (Fe)	< 10	< 1	< 0.002
Lead (Pb)	< 10	< 1	< 0.005
Lithium (Li)	< 10	< 1	< 0.003
Magnesium (Mg)	< 10	< 1	< 0.002
Manganese (Mn)	< 10	< 1	< 0.002
Nickel (Ni)	< 10	< 1	< 0.002
Potassium (K)	< 10	< 1	< 0.005
Sodium (Na)	< 10	< 1	< 0.005
Tin (Sn)	< 10	< 1	No Spec
Titanium (Ti)	< 10	< 1	No Spec
Vanadium (V)	< 10	< 1	No Spec
Zinc (Zn)	< 10	< 1	< 0.002