AquaBOND
Chemistry for Tomorrow

AquaT™ Klear-Aid

AquaT™ Klear-Aid is an iron based coagulant that provides particulate co-precipitation, water clarity, and reduction of solid generation. AquaT™ Klear-Aid is an ideal coagulant where floc settling is difficult to accomplish because the range of heavy trace metals are so small; ≤ 500 mg/l, about 500 ppm or less. It was designed for removal of Cr, Ni, Cu, Fe, and Zn in the plating industry. AquaT™ Klear-Aid enables high efficiency removal, effectiveness in clarification, and improved settling of organics with excellent turbidity removal over a wide pH range. Bench studies have demonstrated at 40 mg/l AquaT™ Klear-Aid and 0.5 mg/l anionic polymer TSS removal efficiencies above 80% resulting with Cr removal as high as 92% and Pb at 95%. Important to note that synthetic chelating agents such as EDTA in wastewater can inhibit metals captured.

Features/Benefits

- Cost Reduction through reduced solid generation and caustic consumption.
- Used to co-precipitate in a multi-metal bearing waste stream.
- Reduces water turbidity, and improves Liquid-Solid separation.
- Concentrate: Lower dose rate needed than conventional coagulants
- Effective over a wide pH range.
- Balanced organic and inorganic coagulants to generate clarity and weight without excess solid salts.

Operating Conditions

Concentration:	100%
Effective pH range	4 - 11
Addition Rate:	20 ppm to 50 ppm by volume.
Applications:	Batch Tanks and Continuous Flow Systems.

AquaT™ Klear-Aid is an iron based precipitant that reduces the zeta potential of the colloidal system to a value sufficiently low that the colloidal particles will collide, and then coalesce. Experimental data is always required to determine the optimum doses of coagulants, which is added in proportion to incoming flow. Additions should be determined by jar testing and confirmed by field evaluation. Testing can be started at 20 - 50 ppm range. Example Calculation: 200,000 gallons per day x 35 (Average AquaT™ Klear-Aid dosage)/1,000,000 = 7 gallons per day AquaT™ Klear-Aid. AquaT™ Klear-Aid can be introduced into the wastewater stream before or after neutralization of the pH.