



## FCT Removes Heavy Metals and Contaminants for Metal Finishers

FCT Water can help metal finishers meet discharge limits for zinc, chrome, and other heavy metals through our consulting and maintenance services that feature our own line of chemicals and customized solutions. With more than 25 different formulations designed to handle a wide range of chelated waste stream challenges, we are recognized as being a leader in formulation chemistry, providing:

- Precipitants
- Coagulants
- Flocculants
- Defoamers
- Bentonite Clays

We provide proprietary blends for flow-through, microfiltration, and batch systems, as well as operator training and system control and automation to help ensure efficient and cost-effective operations.

The precipitants and coagulants listed below are representative of products and solutions available from FCT. While we provide a variety of applications to address a wide range of metal contaminants, we can formulate customized products to meet specific customer requirements.

### Precipitants

Our precipitant blends are designed to meet discharge limits while matching system constraints. They are capable of effectively treating mixed metal-bearing waste streams that are made more challenging by the presence of chelating agents.

- WT-007 – Calcium polysulfide-based precipitant used for flow-through and microfiltration precipitation systems. Very cost effective, especially if you employ sludge recycling.
- WT-140 – A DTC-based precipitant best suited for batch treatment of wastes containing strongly chelated nickel (e.g., electroless nickel solutions).
- WT-660 – This product is suitable for flow-through precipitation. It provides an extremely wide operating window and can be used without a coagulant with optional sludge recycling.
- WT-676 – A concentrated proprietary blend for chelated or complexed heavy metals suitable for batch treatment and flow-through precipitation systems. A coagulant is normally needed in conjunction with this product.
- WT-680 – A blend of organic and inorganic sulfur-based chemistry that addresses a variety of mixed metal waste streams.
- WT-701 – An organic precipitant that does not out-gas at low pH levels and is not toxic to aquatic environments. Although it is a more expensive solution, it is very effective when hazard or environmental issues are of greater concern.
- WT-Fe – Iron powder suitable for batch treatment and treating chelated nickel solutions.



# M

## METAL

### Coagulants

Our coagulants are mixed metal coagulant and organic blends for charge neutralization resulting in optimal settling.

- WT-426 – A proprietary iron-based product that includes an organic cationic coagulant. It is effective as a replacement for ferrous sulfate.
- WT-300 – A calcium-based inorganic coagulant suited for general requirements. It is a detackifier suitable for solutions that are laden with organic solvents and is especially effective on dry film photoresist.
- WT-431 – An economical aluminum sulfate-based inorganic coagulant well suited for low-pH coagulation requirements.
- WT-470 – An aluminum chlorohydrate-based coagulant with organic water-soluble polymers that are well suited for a variety of coagulation requirements, especially in the presence of surfactants or organics.
- WT-500 – A series of organic coagulants including polyamines and DADMACs.

### Polymers

- WT-231 – An anionic emulsion suitable for batch treatment and flow-through precipitation.
- WT-235 – A cationic emulsion suitable for flow-through, batch treatment, and microfiltration applications.
- WT-50 FE (flow enhancer) – A densely charged polymer ideally suited for microfiltration applications to increase system flows.

