

# TRAMFLOC, INC.

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## Technical Information Bulletin TRAMFLOC® 909 PRECIPITANT

### ***Product Description***

Tramfloc® 909 is a proprietary formulation designed as a non-toxic precipitant of heavy metals from industrial process wastewaters, including metals from chelated/complexed environments. It is a powerful replacement for commonly used toxic DTC/carbamate-type products. When compared to such products, tests show that Tramfloc® 909 has more precipitating activity at a similar dosage.

### ***Principal Uses***

Tramfloc® 909 has been formulated to remove heavy metals from industrial process waters including effluents of plating baths, etching solutions, and rinses containing soluble metals. Tramfloc® 909 will reduce the concentration of the following metals to acceptable levels within regulatory requirements: Ag, Au, Cd, Co, Cu, Fe, Hg, Mn, Ni, Pb, and Zn

### ***Physical Data***

APPEARANCE:	Red Liquid
ODOR:	Slight
SPECIFIC GRAVITY:	1.04 – 1.05
pH	<12.5

### ***Handling and Storage***

As with any chemical, this product should be handled with reasonable care. See the Material Safety Data Sheet for complete handling information. Avoid contact with skin, eyes and clothing. Do not take internally.

### ***Dosage***

Bench scale jar testing will help determine the optimum dosage. Ask for our information bulletin on performing such testing. To optimize the dosage, oxidizers present in solution must be destroyed (reduced) prior to dosing Tramfloc® 909. In full-scale installations, the dosing of Tramfloc® 909 is most efficiently accomplished with an automatic feed control system. Your Tramfloc representative will make dosage recommendations to apply to your application.

### ***Feeding***

Adjust the solution pH to above 8.0 prior to adding Tramfloc® 909. The metal precipitation reaction is almost instantaneous. For some applications, the addition of an iron coagulant (ferrous sulfate or ferric chloride) will help the coagulation and clarification operations.

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