

GenFOS™

Liquid Coagulant Treatment Solution

Product Application Data Sheet

GWT GenFOS is a unique advanced liquid coagulant solution. This product is an environmentally safe treatment solution derived from rare earth technology for the specific flocculation of phosphorus and fluoride in industrial and domestic wastewater treatment applications.

This non hazardous treatment product is used in both municipal and commercial/industrial wastewater treatment due to its highly efficient affinity to reduce phosphate to low levels to meet discharge requirements. It can be used to efficiently reduce fluoride levels as well in relatively lower alkalinity water & wastewater sources.

GenFOS replaces aluminum sulfate (alum), and other synthetic polymer chemistry products, providing a solution that does not create excess salts or metal residuals in the treated water. In addition, the sludge production is dramatically reduced, sludge dewaterability is increased, and sludge disposal costs are significantly decreased.

PHYSICAL PROPERTIES:

- Color: Colorless to Pale Yellow
- Appearance: Liquid
- Odor: Slight odor
- pH: 2.5 - 4
- Specific Gravity: 1.51

TREATMENT PROCESS:

- Product is fed via chemical feed pump and mixed in wastewater using an inline static mixer or mechanical mixer. The typical product dosage introduction is based on bench testing using a dosage calculator. For example, 5 gallons (19L) removes 10 mg/L soluble phosphorus from 100,000 US gal. (378,000 L) of water.
- A review of the facilities water analysis and bench testing will confirm application applicability and reduction calculations. In these applications, the optimal amount of product can be adjusted via field operation at the specific facility to determine initial dosing and maintenance dosing.



Genesis Water Technologies, Inc.

"Using Innovation To Meet The Water Needs Of The World"



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Applications:

MUNICIPAL WASTE WATER TREATMENT:

- Highly efficient for phosphate removal to meet discharge permit standards.
- Reduction of eutrophication that leads to overgrowth of algae and death of marine life.
- Will not stain or discolor treatment equipment, piping or structures.

COMMERCIAL/INDUSTRIAL WASTE WATER TREATMENT:

- Safe, effective for the removal of phosphate/phosphorus.
- Capability for the removal of fluoride in wastewater sources.
- Will not stain or discolor equipment or structures.

BENEFITS & ADVANTAGES:

- Highly effective in a wide range of pH with soluble phosphate/phosphorus removal down to <0.01 mg/l for both industrial & domestic wastewater treatment applications.
- Sludge solids are stable in a wider pH range and are easier to dewater.
- Can remove phosphate even at very low concentrations without a loss in treatment efficiency, making it simpler to meet local, state and federal EPA discharge guidelines.
- Drastically reduced sludge generation versus comparable conventional treatment chemicals such as aluminum sulfate, ferric salts or lime.
- Can reduce fluoride levels in wastewater sources based on water alkalinity parameters.

PRODUCT PACKAGING:

- GenFOS coagulant solution is available to ship in 55 gal (200 L) drums and 275 gal (1000 L) totes.

For assistance or requests for bench testing services using GenFOS for your municipal or industrial wastewater treatment application please reach out to us by phone or email us at sales@genesishwatertech.com.