

Filtrex[®] Nutrient Agent

Phosphorus Reduction Technology

NUTRIENT AGENT

Description

Nutrient agent is a natural (alum based) anionic polymer flocculent that is used with Filtrex[®] *sediment control and pollution prevention* practices, such as Sediment control, Check dams, Concrete washouts, Slope interruption, and Filtration system baffles. It is specifically used to **reduce phosphorus loads in storm runoff**, particularly on fertilized soils, around sensitive watersheds and receiving waters, and near TMDL (303d) listed water bodies. Nutrient agent should not be used without one of these Filtrex[®] management practices. For optimum performance this Support Practice™ should be applied immediately upslope and/or along the inner circumference of the Filtrex[®] practice.

Function

Nutrient agent is a polymer that reduces soluble phosphorus in runoff when applied with Sediment control, Check dams, Concrete washouts, Slope interruption, and Filtration system baffles. Nutrient agent is a material that adsorbs positively charged soluble phosphorus ions to the surface of the Nutrient agent particle, thereby reducing the bioavailability of the phosphorus. By rendering the phosphorus unavailable to aquatic plants, particularly algae, algae blooms, eutrophication, and reductions in water dissolved oxygen levels that may lead to fish kills can be minimized. Nutrient agent is mildly cationic, which means it has a negative electrostatic charge that attracts positively charged phosphorus ions. As phosphorus ions attach to the

Nutrient agent exchange sites on each Nutrient agent particle, soluble phosphorus is taken out of the storm water runoff flow and rendered unavailable to algae for an indefinite time period. Nutrient agent can be applied in varying application rates to fit the phosphorus removal objective of the application. Nutrient agent is not a coagulant forming polymer. For more information on testing and research with Nutrient agent and Filtrex[®] products see research summaries in the Appendix.

Installation

1. Where required, Nutrient agent shall be surface applied manually, directly upslope, and along the entire length of the Filtrex[®] sediment control or filtration practice.
2. Nutrient agent shall be applied at a rate of 150 grams per linear ft (0.3 m) for optimum performance.
3. Nutrient agent may be applied at 50 grams and 25 grams per linear ft (0.3 m) for lower performance levels.

Inspection & Maintenance

1. Additional applications of Nutrient agent may be added after storm events to decrease phosphorus loading and contamination of water bodies resulting from future rainfall/runoff events.
2. If Sediment control, Check dams, Concrete washouts, Slope interruption, or Filtration system baffles exhibit significantly reduced hydraulic flow through rates or become clogged, they should be cleaned out or replaced.



Method of Measurement

Bid items shall show measurement as Filtrexx®
Nutrient agent + Filtrexx® BMP per linear ft or per
linear m installed.

ADDITIONAL INFORMATION

For other references on this topic, including trade
magazine and press coverage, visit the Filtrexx®
Website at: [http://www.filtrexx.com/resourcespress.
htm](http://www.filtrexx.com/resourcespress.htm).

For research reports not included in the Appendix,
visit: <http://www.filtrexx.com/resourcesreports.htm>.

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See website or call for complete list of international
installers.

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