



Filtrexx® Flocculent Agent

Sediment Reduction Technology

FLOCCULENT AGENT

Description

Flocculent agent is a natural (chitosan based) anionic polymer flocculent that is used with Filtrexx® *sediment control and filtration* practices, such as Sediment control, Check dams, Concrete washouts, Slope interruption, and Filtration system baffles. It is specifically used to further **reduce suspended solids and turbidity in storm runoff**. Flocculent agent should not be used without one of these practices and should not be applied within 25 ft (7.6m) of natural waterways (KY TC, 2006). For optimum performance this Support Practice™ should be applied immediately upslope and/or along the inner circumference of the Filtrexx® management practice.

Function

Flocculent agent is an anionic, polymer flocculent that reduces suspended solids and turbidity when applied with Sediment control, Check dams, Concrete washouts, Slope interruption, and Filtration system baffles. Flocculent agent is a material that flocculates negatively charged eroded soil colloids together to form larger aggregates (or flocs) that reduce their propensity to be transported by sheet runoff. Flocculent agent is anionic, which means it has a positive electrostatic charge that attracts negatively charged clay colloids. As soil colloids floc together to form a larger mass and weight they eventually fall out from storm runoff, settle in retained runoff, and are more difficult to transport in sheet flows. Additionally, flocculants can create a surface coagulant which buffers the mobility of soil particulates, reducing their transportability in storm runoff. Due to the coagulation characteristic this product may reduce hydraulic flow through rate and permittivity of the Filtrexx® practices listed above.

For more information on testing and research with Flocculent agent and Filtrexx® products see research summaries in the Appendix.

Installation

- Where required, Flocculent agent shall be surface applied manually, directly upslope, and along the entire length of the Filtrexx® sediment control or filtration practice.
- 2. Flocculent agent shall be applied at a rate of 100 grams per linear ft (0.3 m)
- **3.** Flocculent agent shall not be applied within 25 ft (7.6 m) of receiving stream, river, lake, or wetland.

Inspection & Maintenance

- Additional applications of Flocculent agent may be added after storm events to decrease suspended solids and turbidity 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[®] Flocculent 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.

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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