



SOILFLOC™ Erosion Control Products

**Application Guide for Urban and Stormwater Runoff,
Construction Sites and Landscaping Projects**

Reduces soil loss 80% - 98%

Reduces turbidity and sediment runoff

Increases water infiltration

- ◆ **Lowers concentration of nitrogen, phosphorus, pathogens & pesticides, & decreases biological oxygen demand in runoff water**
- ◆ **Soil stabilization**
- ◆ **Aids in plant growth on high-grade slopes**
- ◆ **Reduces hardening and crusting of soils**
- ◆ **Cost effective and time saving**
- ◆ **Environmentally safe! Biodegradable!**
- ◆ **Augments and improves other BMP practices**



Water pollution prevention and erosion control

are two of the most serious environmental problems facing municipalities, industries, construction and urban residents. With the continuing development of TMDLs, enforcement of the Clean Water Act, and the issuance of state regulatory agency orders, regulations and mandates we are on the brink of a dramatic shift in approach to pollution control. Before, efforts were centered on treatment of waste in receiving waters; they are now geared to preventing runoff from reaching receiving waters via storm drain discharges so that waters can meet beneficial use standards.



Today, one of the fastest growing and most successful BMP technologies available to address changing environmental standards is the use of polyacrylamides. They improve runoff water quality by reducing the amount of sediment, nitrogen, phosphorus, COD, BOD, and pesticides in the water. Note: by decreasing sediment runoff, construction seasons can be lengthened into the wet season.

SOILFLOC™ Products are water-soluble, linear polyacrylamide polymers designed to be used to improve **erosion control, water infiltration and dust abatement**. They work by aggregating soil particles, increasing pore space and infiltration capacity, resulting in soils that are less susceptible to raindrop and irrigation-induced erosion. SOILFLOC™ products are **environmentally safe** with a variety of these products approved by NSF International for potable water clarification. They have also been approval by the FDA under several 21CFR regulations that allow their use as both direct and indirect food additives. SOILFLOC™ products will naturally degrade with UV light and are slowly biodegradable. SOILFLOC™ products are compatible with most irrigation systems.

In July 2000 the NRCS (Natural Resource Conservation Service) adopted the National Conservation Standard for polyacrylamide use as part of a conservation management BMP system.

Directions for surface application:

• Slopes & Hillside

Apply dry (granular) **SOILFLOC™ DryTack** at the rate of 10-30 lb. per acre with either a hand or mechanical fertilizer spreader. This will reduce sediment runoff and improve water infiltration into the soil, keeping the soil on the hills and slopes where it belongs. **SOILFLOC™ LiquaTack** is recommended for steeper slopes and should be used in combination with seeds and mulches. See our Application Guide for Hydroseeding.

• Industrial, commercial & construction sites

For sites with areas of exposed soil, **SOILFLOC™** products can be applied to reduce erosion and settle suspended soil particles in runoff water and should be used on slopes 2.5:1 or flatter. These products are effective in clarifying water before it enters the storm drainage system, thus putting less stress on other BMP methods. The NRCS limit is 100 lb./acre in construction.

Particularly effective:

- During rough grading application
- After final grading and before pavings, seeding & plantings
- Sites receiving final landscaping
- Stockpiles
- Phased construction projects
- Sites with winter shutdown

referenced from Wisconsin DOT Guide for Erosion Control Land Application of Anionic Polyacrylamide



- **Catch basins & sediment ponds:**
Add **SOILFLOC™ 100D, 300E, or Clearwater Tablets** to feed waters at the rate of up to 10 ppm to cause suspended solids and sediment to settle into ponds and basins instantly, thus creating clean water for discharge into receiving waterways.

Directions for sub-surface application:

- **Planting beds in landscaping**
By tilling dry **SOILFLOC™ 100D** into planting beds at the rate of 10-30 lb. per acre soil structure is improved, thus reducing the chance of water containing suspended solids and sediment pooling and running out of the beds.



Application Techniques

SOILFLOC™ needs to be reapplied as runoff water quality degrades. Frequency of application will vary according to climate, soil type, and slope. The higher the sediment content in water runoff, the higher the polymer dosage.

All **SOILFLOC™** polymers dissolve faster in warm water.

Always add **SOILFLOC™** to water; **never add water to SOILFLOC™**.

SOILFLOC™ can be used alone or to augment other cover practice BMPs.

SOILFLOC™ application rates, methods, and concentrations should be adjusted to maintain optimal performance, which may vary from location to location. **CAUTION:** because of product benefits, normal irrigation and cultivation practices may need to be altered to adjust for changes brought on by product use.

Do not over-apply. Over-application of **SOILFLOC™** may actually decrease effectiveness.

Safety Caution: Very slippery when wet - avoid spilling **SOILFLOC™** on pavement.

Consultation & Product Recommendation

Our technical staff is available for consultation to determine the correct application of **SOILFLOC™** to suit your specific needs. We are here to help cities and industry in their pollution control and compliance efforts.

Hydrosorb, inc.™ is involved in ongoing testing with the University of California, Riverside's Cooperative Extension, as well as several commercial growers and businesses.

*Research, test information, MSDS and TDS, and complete product application guides available upon request.



Frequently Asked Questions

1. Q. Where have polyacrylamides been tested and by whom?

A. These products have been tested and researched by many Universities and organizations among them: the University of Georgia, University of Idaho Coop. Ext., Washington Department of Ecology, and the University of California Coop. Ext., USDA ARS scientists at Kimberly, Idaho.

2. Q. How long have polyacrylamides been used?

A. After great success in Europe, commercial use of these products began in the US in 1995 and has increased steadily ever since. Worldwide studies on this chemistry are ongoing.

3. Q. How long does each application of SOILFLOC™ last?

A. Each application will last for up to 8 weeks or more. Reapply SOILFLOC™ to the soil if significantly disturbed, in high traffic areas, or if runoff becomes cloudy. SOILFLOC™ will slowly degrade naturally by UV light and microbiological attack, leaving no chemical residue. SOILFLOC™, however, is not recommended for ingestion or inhalation, and therefore should be kept out of the reach of children.

4. Q. How is SOILFLOC™ stored?

A. SOILFLOC™ in the dry form can be stored for up to 2 years in a dry area at a temperature of 32°F to 95°F. SOILFLOC™ in an emulsion form can be stored for up to 6 months for optimum potency, but should not be stored in direct sunlight, extreme heat, or freezing temperatures. Insulated blankets can be wrapped around drums for added protection.

5. Q. Can I use too much SOILFLOC™?

A. Yes. Too much SOILFLOC™ can stabilize suspended particles rather than flocculate them.

6. Q. Is SOILFLOC™ easy to apply?

A. Yes. SOILFLOC™ is well suited for erosion prevention and can be used alone or to augment other cover practice BMPs.

7. Q. Why use SOILFLOC™ over other erosion control practices?

A. SOILFLOC™ is more cost effective, easier to apply, and is less labor intensive than other water management strategies. SOILFLOC™ assists in reducing sediment runoff, thus helping you avoid costly fines associated with non-TMDL compliance.

8. Q. Can SOILFLOC™ be applied as a dry powder?

A. Yes. SOILFLOC™ can be sprinkled on the ground as a dry powder.

9. Q. Why buy from Hydrosorb, inc.™?

A. Hydrosorb, inc.™ provides dependable, personalized service and technical expertise. We offer person-to-person communication and always return your calls. Our specialty is quality products at competitive prices.

To place an order, for consulting, or for more information:

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