AIRTROL™
Geobinder

"Despite steep slopes and heavy rainfall, AIRTROL is effective in preventing soil erosion."

Duke Power Company



It's more than

erosion control.

It's "Erosion Prevention."

USG

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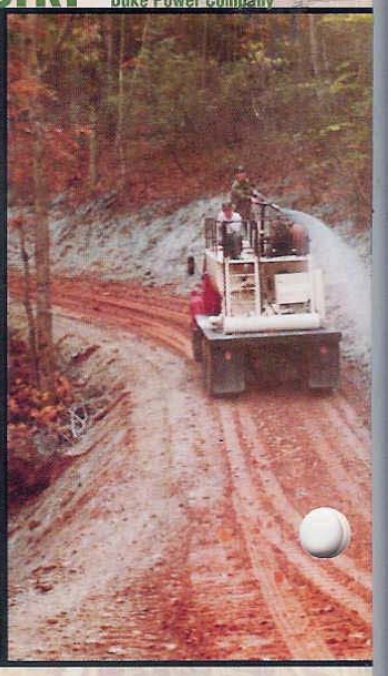
What is AIRTROL™ Geobinder?

AIRTROL Geobinder is a low cost, cementitious binder which, when mixed with water and mulch, sets in a controlled, predictable way to form an erosion-resistant crust. Produced from high purity gypsum, it is safe to use and easily applied with a HYDROSEEDER®. AIRTROL Geobinder is nontoxic, noncombustible, and harmless to fish, birds, plants and animals.

"We can shoot a steep slope with AIRTROL, and it'll withstand a heavy rainfall. It really does work." Duke Power Company



AIRTROL Geobinder applies evenly with just one operator using conventional hydroseeding equipment.



Areas with rugged terrain can be easily treated with AIRTROL Geobinder.

AIRTROL Geobinder Prevents Soil Erosion, Promotes Plant Growth

For landscapers and contractors, AIRTROL Geobinder promotes plant growth on inclined surfaces where other erosion control products might be required. Easier to apply and more cost effective than erosion control netting or blankets. AIRTROL Geobinder helps grass grow in the steeply graded soil found around water retention ponds, utility installations, on highway embankments and in landfill final covers. It is also **ideal for areas where dust control is critical**. AIRTROL Geobinder and mulch coats the soil surface, forming a protective crust-like barrier that:

- Prevents water- and wind-induced erosion
- Can be used with a wide range of mulches
- Holds seed and fertilizer in place
- Dissolves slowly, supplying calcium and sulfur to the soil
- Retains moisture in the soil
- Buffers soil pH
- Improves the structure of heavy clay soils
- Requires only the normal surface preparation used for seeding.

"Despite these difficult conditions, we're applying the AIRTROL and getting grass in a week." Duke Power Company



AIRTROL Geobinder applies easily around tree stumps and other obstructions.

AIRTROL Geobinder helps prevent rill erosion on steep slopes, resulting in superior vegetation coverage.

Applying AIRTROL Geobinder to Prevent Erosion

First, test the site for soil pH. For best results, soil pH should be between 5 and 7. Unlike bulky erosion control blankets and netting, applicators can combine AIRTROL Geobinder, seed, fertilizer and mulch in one mix and spray apply it in a **single application using conventional hydroseeding equipment.** AIRTROL Geobinder is flexible to use since it can be used with a wide variety of mulches. This allows the applicator to maximize the cost effectiveness of the blend. Depending upon local specifications, seed may be applied, rolled or drilled, and the AIRTROL Geobinder mixture applied over it. When applied as directed, coverage is approximately ten acres per day with a 200-foot spraying radius. Hoses can be used to extend the range if necessary. For best results seeding should closely follow soil preparation and should occur during the normal planting season.

AIRTROL Geobinder has a long set time to provide ample time (4 to 6 hours) for application. Spray equipment should be emptied and flushed as quickly as possible after use or the material will set up and solidify.

Applications

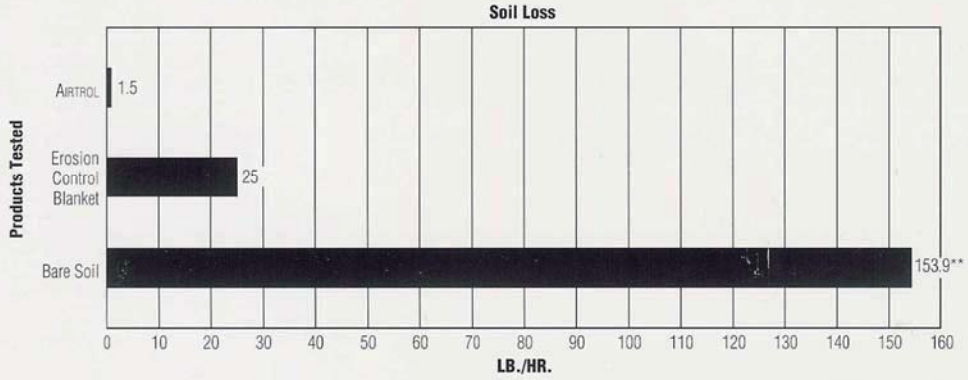
Soil and weather conditions vary greatly across the country. Listed below is a soil application table for selecting the AIRTROL Geobinder system that addresses your surface soil stabilization situation.

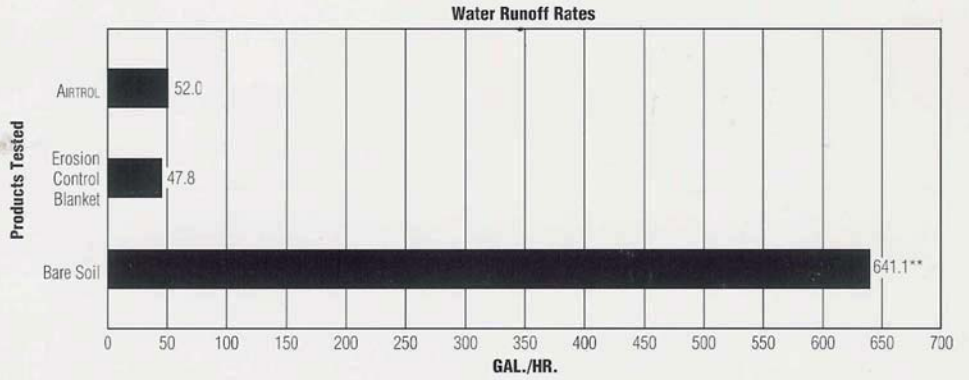
Application	Condition	Average monthly rainfall	AIRTROL System
Soil cover	Friable soil stabilization	less than 2"	AIRTROL SC
Soil cover	Temporary dust control	greater than 2"	AIRTROL SC

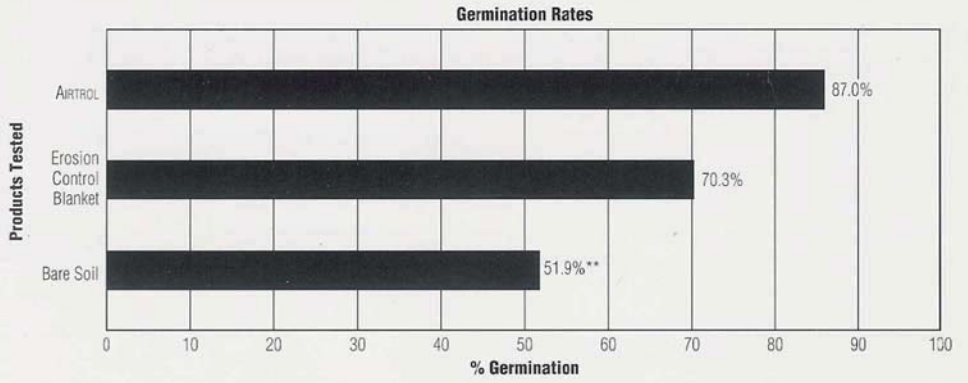
Application	Condition	Slopes	AIRTROL System
Vegetative cover	Seed germination	flat to 2.5:1	AIRTROL VC
Vegetative cover	Surface soil stabilization	greater than 2.5:1	AIRTROL SS

Consult your local United States Gypsum Company representative for the recommended application rates of AIRTROL Geobinder and mulch for your area.

AIRTROL Geobinder Erosion Control Tests*







* Tested at an independent laboratory (1994).
**Hand seeded, rolled, bare soil plot.

Testing Methodology

Rainfall Simulator A device that forms raindrops by discharging water from small diameter brass tubes. The size of the raindrops is similar to those in high intensity storms. The raindrops are distributed evenly and the control of application rates is within the accuracy required for these tests.

Test Flume This device can be tilted from horizontal to an angle approximately 2½:1 slope. The flume is located under the rainfall simulator so that moisture falls directly onto the test plots.

Sunlight Simulator The sunlight simulator is used for germinating and growing plants.

Product Installation
Mulch, barley seed and AIRTROL Geobinder were applied together at the following rates: mulch: 1,675 lbs. per acre; barley seed: 200 lbs. per acre; AIRTROL Geobinder: 6,000 lbs. per acre. Three other test plots were covered with 200 lbs. of barley seed per acre and erosion control blankets. Blanket edges were stapled at 6 ft. intervals according to manufacturer's specifications.

Rain Application During these tests, rain was applied on a slope of 2½:1, at a rate of 6 inches per hour, for a period of 30 minutes.

Sunlight Application Sunlight was applied at a continuous rate for seven days after planting.

WARNING
When mixed with water, this material hardens and then slowly becomes hot. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions can cause severe burns that may require surgical removal of affected tissue. Avoid dust. Dust may cause irritation to the eyes, nose, throat or upper respiratory system. Wear eye and respiratory protection to avoid irritation. If eye contact occurs, flush thoroughly with water. If irritation persists, call physician. Do not take internally. Product safety information: (800) 507-8899.
KEEP OUT OF REACH OF CHILDREN.

Notice: Request Material Safety Data Sheet 1435C for health and safety information related to AIRTROL Geobinder.

Notice: We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

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