



# Technical Data Sheet

## EARTHGAURD® Earthguard Fiber Matrix

### Description

Earthguard® is a soil stabilizing emulsion specifically formulated to reduce erosion and sediment runoff. It is non-toxic, 100% biodegradable, and conforms to the State of California Department of Transportation Standard Specifications Section 07-382 E A05-30-06 for "Polymer Stabilized Fiber Matrix (PSFM)." EarthGuard® FM is a one-step spray application, combining EarthGuard® and wood/cellulose fiber. It is applied as an aqueous slurry by itself or in combination with seed. EarthGuard® FM is chemically engineered to be effective at low rates while absorbing the impact of raindrops, and providing immediate dust control, erosion control, and soil stabilization until permanent vegetation is established or construction has resumed. EarthGuard® FM's versatility allows it to be highly effective in many applications: erosion control, slope stabilization, dust abatement, landscape design, storm water runoff, fire burn rehabilitation, land development, and golf course construction.

### APPLICATION RATES AND METHODS

EarthGuard® FM application rates depend upon field conditions and desired benefits. The following charts can be used as general rate guidelines for seasonal erosion control (loamy soils that are balanced in organic matter and nutrients). Slope should be "track-walked" with flow interrupters every 25 feet.

| Slope              | 6:1   | 5:1   | 4:1   | 3:1   | 2:1   | 1.5:1 | 1:1   |
|--------------------|-------|-------|-------|-------|-------|-------|-------|
| Gals / Acre        | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
| (Lbs) Mulch / Acre | 1,500 | 1,500 | 1,500 | 1,800 | 2,000 | 2,500 | 3,000 |

### LONG TERM EROSION CONTROL OF PERMANENT SLOPES WITH SEED

During the fall and winter months, follow the above charts for EarthGuard® and mulch rates. Add seed mixes as recommended to achieve long-term erosion control. This can be applied via a one-step Hydroseeding process. However, some may prefer a two-step application (hydro seed and fertilizer first, and then EarthGuard® and mulch over the top). Consider increasing mulch rates to a minimum of 2,000 lbs. per acre when seeding. If slopes are ready for permanent landscape (plants, trees, etc.), use the EarthGuard® rates from the above charts without adding mulch. Apply the mixture to all exposed soil after planting is completed. This will provide temporary erosion control while the plants establish their root mass.



Spray all mixtures at a minimum rate of 3,000 gallons of water/acre (higher rates may be required) evenly over the area to be treated. Be careful not to spray too fast, creating puddles or run-off — they damage the soil structure before EarthGuard® products can work. Application should be sprayed from multiple directions and angles to insure complete and proper coverage. Do not disturb treated areas after EarthGuard® products are applied. Mulch manufacturers recommend all hydraulic applications using fiber mulch to have a 24-hour window without rain. Some situations with sandy – sandy loam soils, very little organic matter in the soil, poorly compacted slopes, heavy rainfall locations (over 20 inches per year), very intense rain storms (2–3 inches at a time), high wind exposure, etc. may require increasing the EarthGuard® and/or mulch by 1.25 – 1.50 times.

Many types of equipment can be used to apply EarthGuard® (hydroseeders, water trucks, spray rigs, aerial applicators, and irrigation systems). When mixing, fill the vessel 1/3 full of water prior to adding any EarthGuard®. As the tank continues to fill and agitators are running, slowly add the recommended amount of EarthGuard®. If the tank doesn't have agitators, it is important to add the EarthGuard® directly to the fill water flow. Mix or circulate the tank for a minimum of 10 minutes prior to application. A hydroseeder is required for applications of EarthGuard® FM. EarthGuard® can be stored for 6 months. Always thoroughly mix before using. Always close or seal containers after use. Store in a dry, insulated location to avoid moisture and freezing of the product.

On grading jobs, haul roads, etc. add 2 quarts of EarthGuard® to each 1,000 Gallons of water. Apply with a water truck as normal. Number of passes can be reduced up to 75%.

If the desired result is more of a “Dust Cap” (longer lasting effect yet still temporary) usually 8–10 gallons per acre will be required.

For temporary protection of slopes and flat areas that are still in progress, apply EarthGuard® at 3–5 gallons per acre prior to a storm event. After the rain has stopped and the ground is dry enough, proceed with grading. Use 3–4 gallons of EarthGuard® and 1,500 lbs. of mulch per acre. Pads should be “roughened” prior to application.

