

## **Nature's Binder – Unpaved Road Stabilizer**

Roadbind America Inc. is the sister company of Ice Ban America, Inc., a 1998 recipient of the Charles Pankow (CERF) Civil Engineering Research Foundation Award. Roadbind America began operations in January of 1997 and currently produces and markets its environmentally friendly unpaved road stabilizers and dust suppressant through out the U.S. and South America. The Roadbind America products are derived from the pulping process of timber with proprietary agricultural Co products added. The enhancement of the Roadbind America Lignosulfonates has shown time and again that the usage of our product not only reduces unpaved road maintenance costs by up to 95%, it also provides for a safer and healthier environment by eliminating hazardous fugitive dust.

Additional benefits of the Roadbind products are:

- A. 10% of paving costs
- B. Increase (LBR) load bearing ration by up to *150%*
- C. Prevents costly destructive wind and water erosion
- D. User and environmentally friendly
- E. Animal feed pellet binders

In conclusion, the future usage of our products are unlimited. As each day passes more groups and markets are using our products. To date, the Roadbind product is being used at the Federal, State, County and Municipal levels along with sugar cane, citrus groves, farms, and private industry. The Sierra Club International and City of Pikes Peak is a big advocate of Roadbind America Products. At this point in time, the Highway Technology Evaluation Center service center of CERF HITEC/EVTEC Environmental Technology Evaluation Center is researching and analyzing the Roadbind products.

UNPAVED ROAD STABILIZATION & DUST CONTROL

Product Name:

**RB ULTRA PLUS™**  
**RB ULTRA™**

Product Description:

**Unpaved Road Stabilization and Dust Control**

**WHAT IS RB ULTRA™ / RB ULTRA PLUS™?**

Our RB Products™ are all natural and derived from agricultural processing with proprietary additives. They are cost effective, safe, non-toxic, environmentally friendly unpaved road stabilization and dust control agents.

RB Products™ are for use with all types of unpaved roadway surfaces including shell, coquina, limestone, clay, sand, marl, and gravel. It has been used successfully on roadways, airstrips, helicopter pads, campgrounds, parks, racetracks, parking areas, nature trails, and for embankment stabilization. RB Products™ are a safe and economical alternative for unpaved road stabilization and dust control.

**PRODUCT COMPOSITION**

The major ingredient in RB Products™ is lignin, a naturally occurring substance in woody plants. About one-quarter of dry wood is lignin, making it the second most prominent component of the wood part of a tree, with cellulose being the principal component. In the pulp mill process, cellulose is separated from the lignin and recovered for use in a variety of different products.

Using lignin as the main ingredient, Roadbind America Inc. has blended it with other environmentally safe proprietary agricultural additives. These blended products are known as RB Ultra™ and RB Ultra Plus™. When properly mixed and applied Roadbind products are more resilient, durable, long lasting, and will increase load bearing ratios two to three times. While our Roadbind products are water-soluble and are rinsed from equipment and clothing easily, it takes heavy and prolonged rains and traffic to effect the treated surfaces.

**PRODUCT APPLICATION**

Roadbinding product application rates vary according to the road compositions and the intended purpose. It can vary from as little as two-tenths gallons per sq. yard for minimum dust control to one gallon per sq. yard for maximum road stabilization. (Mix in to a 4" to 5" depth)

As with all unpaved road treatments the roadbinding product must be applied to:

- Well-graded surfaces with proper crown.
- Well-compacted surfaces.
- Adequately drained surfaces.
- Pre-wetted surfaces, especially sandy soils.



*This is an unpaved quarry road located in Coral Springs, Florida, stabilized with RB Ultra Plus™. The average trip count is 200+ trucks per day, with loaded weights of 60,000 to 80,000 lbs. Before using RB Ultra Plus™ the road needed to be watered 2 to 3 times a day for dust control and graded to keep the road open. After using RB Ultra Plus™ watering was reduced to once every 6 weeks and grading was reduced to once a month.*

**PRODUCT FEATURES AND BENEFITS**

- Cost effective solution for maximum Dust Control and Road Stabilization
- Reduces road maintenance Cost (blading/grading, watering and gravel replacement)
- Ease of application
- Prevents costly destructive wind erosion
- Environmentally safe, non-toxic, and biodegradable
- Effective with most road material conditions
- Provides an inexpensive, smooth, firm driving surface
- Increases load bearing capacity (comparable to 3- to 5-inch layer of asphalt concrete)
- Creates a denser, firmer road cap that is inexpensive
- Dust suppressant (may eliminate up to 95% of dust on treated roads)

*"We Bite The Dust So You Don't Have To"*



*Another Environmentally Friendly Product From Natural Solutions Corporation*