



DeGe Pathway Binder & Stabilizer



Eco-friendly, VOC-free, safe around plants and animals. Create beautiful, natural surface pathways and patios. Excellent for commercial and residential D. G. paving applications
Reduces or eliminates dust from D. G. materials.

INSTALLATION SPECIFICATIONS FOR MAINTENANCE OF EXISTING MAT

DeGe Pathway Binder & Stabilizer is the most widely used psyllium husk binder. It is a non-toxic premium additive for all dirt or hardscape surfaces. Psyllium husk is an organic polymer that acts as the glue that binds decomposed granite or crushed aggregates to create a more stable product. It is a colorless, odorless concentrated powder that is a natural glue which binds soil or other materials together. Psyllium is outer coating to certain species of plant seeds, it harvested from the husks of seeds from plants including but not limited to Plantago, Plantaginis Ovatae Testa. Once harvested, the seeds are separated from the surrounding husks, which are valued for their soluble fiber with impressive swelling properties. These husks are then finely milled into a consistent, fine powder that is highly effective at binding soil particles together. After the milling process, the psyllium husk powder is carefully packaged and branded as DeGe Pathway Binder and Stabilizer.

The regular maintenance schedule recommended for this surface is entirely dependent upon its use. Normal maintenance might include spot surface repair as necessary with general surface repair required every 2-3 years (contingent upon proper grade and amount of ambient moisture).

1. Till existing material to desired depth and apply DeGe Stabilizer according to recommended rates.
 - 1" Depth 1 lb. per 20 sq. ft.
 - 2" Depth 1 lb. per 10 sq. ft.
 - 3" Depth 1 lb. per 7 sq. ft.
 - 4" Depth 1 lb. per 5 sq. ft.
2. Mix DeGe Stabilizer thoroughly through total depth with rototiller or similar method.
3. Grade and smooth DeGe Stabilizer to desired finish.
4. Apply water until moisture penetrates total depth of tilled area. Water activates DeGe Stabilizer so it is ESSENTIAL that the FULL DEPTH of the material receives water at this time.
5. After the surface water disappears, compact area. Depending upon size of project, compaction can be done with a small riding roller or power walk-behind roller.
6. Allow finished surface enough time to dry completely. Set-up time varies, depending upon weather conditions. Hot, dry climate will set up sooner than cool, moist climate.

What is Psyllium Husk and Where it comes from?

In India a large amount of agricultural production is geared to the production of psyllium. Psyllium is outer coating to certain species of plant seeds, it harvested from the husks of seeds from plants including but not limited to Plantago, Plantaginis Ovatae Testa. Once harvested, the seeds are separated from the surrounding husks, which are valued for their soluble fiber with impressive swelling properties. These husks are then finely milled into a consistent, fine powder that is highly effective at binding soil particles together. After the milling process, the psyllium husk powder is carefully packaged and branded as DeGe Pathway Stabilizer.

The genus Plantago contains over 200 species. *P. ovata* and *P. psyllium* are produced commercially in several European countries, the former Soviet Union, Pakistan, and India. Plantago seed known commercially as black, French or Spanish psyllium is obtained from *P. psyllium* and *P. arenaria*. Seed produced from *P. ovata* is known in trading circles as white or blonde psyllium, Indian Plantago or Isabgol. Isabgol, the common name in India for *P. ovata*, comes from the Persian words "isap" and "ghol" that mean horse ear, which is descriptive of the shape of the seed. India dominates the world market in the production and export of psyllium. Psyllium research and field trials in the U.S. have been conducted mainly in Arizona and also in Washington.

Psyllium is produced mainly for its mucilage content, which is highest in *P. ovata*. Mucilage describes a group of clear, colorless, gelling agents derived from plants. The mucilage obtained from psyllium comes from the seed coat. Mucilage is obtained by mechanical milling/grinding of the outer layer of the seed. Mucilage yield amounts to approximately 25% or more (by weight) of the total seed yield. Plantago seed mucilage is often referred to as husk or psyllium husk. The milled seed mucilage is a white fibrous material that is hydrophilic (water-loving). Upon absorbing water the clear colorless mucilaginous gel that forms increases in volume by ten-fold or more

MAINTENANCE AND REPAIR PROCEDURES FOR STABILIZED CRUSHED STONE PATHWAYS, WALKWAYS, CART PATHS, DRIVEWAYS, PARKING LOT AND PATIO AREAS

Remove debris, such as paper, grass clippings, leaves or other organic material by mechanically blowing or hand raking the surface as needed.

During the first year, a minor amount of loose aggregate will appear on the surface (1/16 to 1/4 inch). If this material exceeds 1/4 of an inch, redistribute the material over the entire surface. Water thoroughly to the depth of 1." Compact with power roller of no less than 1000 lbs. This process should be repeated as needed. If cracking occurs, simply sweep fines into the cracks, water thoroughly and hand tamp with an 8" to 10" hand tamp plate.

Repairs

Excavate damaged area to the depth of the stabilized aggregate and square up side walls. If area is dry, moisten damaged portion slightly.

Pre-blend the dry required amount of DeGe Stabilizer powder with the proper amount of aggregate in a concrete mixer. Add water to the pre-blended aggregate. Thoroughly moisten mix with 25 to 35 gallons per ton of pre-blended material or to approximately 10% moisture content.

Apply moistened pre-blended aggregate to excavated area to finish grade.

Compact with an 8" to 10" hand tamp or 250-to-300-pound roller (if area is high traffic, such as cart path, driveway, parking lot, use a larger 1000 lb. roller). Keep traffic cutoff areas for 12 to 48 hours after repair has been completed.

MATERIAL AND SAFETY DATA SHEET

DeGe Stabilizer: Organic Powdered Soil Binding Agent

Product Name: DeGe Pathway Binder & Stabilizer

Hazard Rating:

Health - 3

Flammability - 3

Reactivity - 0

OSHA Std: None TLV: None

Synonyms: Flea Seed, Plantago, Plantaginis Ovatae Testa

Chemical Formula or Composition: Natural material composed primarily of carbohydrate

Physical and Chemical Properties:

Boiling Point - N/A

Vapor Density (air=1) - N/A

Physical State - Powder

PH at Concentration - N/A

Melting Point - N/A

Vapor Pressure - N/A

Color - Light to dark brown

Odor Description - Musty

Fire/Explosion:

Flash Point - N/A

Explosive Limits - Class ST2 dust

Auto-Ignition Temp - N/A

Combustible Dust - Class ST2

K = 196 bar m/s Pmax = 12.5 bar

Reactivity: Stable, highly water soluble

Exposure Route Classification of Toxic Properties

Eye - May cause mechanical irritation unless rinsed immediately with water.

Skin - Single prolonged exposure (hours) causes no effect. Repeated prolonged exposures may or may not cause skin irritation.

Inhalation - Amounts which may be swallowed as a result of industrial handling are not likely to cause injury.

Website link: <https://www.earthstonerock.com/Dee-Gee-Pathway-Binder-Stabilizers/229676.htm>

If we can be of further assistance, please do not hesitate to contact us at any of the details.

chris@earthstonerock.com

626 263 0531