Nanogel

Providing Soil with Excellent Performance and Environmental Advantages

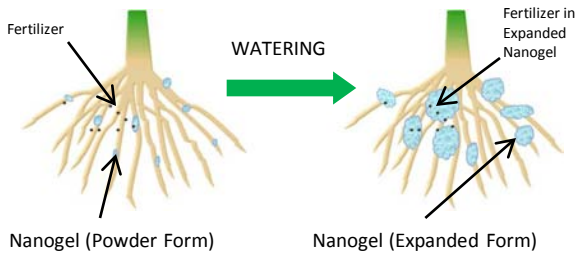
Nanogel is a highly effective soil conditioner for activization of the agrophysical and agrochemical processes in the soil. It contains highly effective nanogel and natural minerals that improve the ion exchange in the water, soil and plants. It activates agrophysical and agrochemical processes in the soil in an environmentally safe manner.

Nanogel soil conditioning technology is defined as an effective soil conditioner consisting of a mixture various 'nano' components from different groups, all assisting the plant growth processes in a synergetic way. This technology is more effective than any single polymer or fertilizer products. It significantly increases the capability of soils and growing media to retain and provide water and nutrients, to improve plant and root growth, and to reduce the amount of water necessary to create high-quality plants.

Advantages

- Improves the efficiency and value of chemical fertilizer up to 50%.
- Reduces watering and save water up to 50%.
- Stimulates plant growth and extend their life spans.
- Improves soil fertility and its microbiological activity.
- Reduces soil salinization and migratory mobility of contaminants in the ionic form and their movement to ground water.
- Reduces dependence on chemical applications and fertilizer requirements.
- Does not contain pathogenic micro-flora, seeds of weeds and genetically modified organisms.
- Can be combined with all type of organic and chemical fertilizers.
- Reduces loss of chemical fertilizer nutrients by rain or high temperature.
- Retains nutrients for use by plants.
- High cation exchange capacity (CEC).
- Reducing planting shock in dry season.
- Improves long term soil quality.
- Reduces the chance of root burning from excess ammonia.
- Improves ammonia retention and reduces nitrogen losses.
- Increased aggregate stability.
- Resistance to soil erosion.
- Reduction of greenhouse gases by soil C sequestration.
- Rehydration process can be used repeatedly over a year time before Nanogel loses it's effectiveness.

Water and Nutrients Retention



1. *Nanogel works at root level. It has to be mixed with the soil.*
2. *Nanogel is activated by watering the plant. The Expanded Nanogel absorbs the water and fertilizers. It encourages root hair growth. These root hairs grow inside the Expanded Nanogel and absorb the required amount of water and nutrients.*

Lower Costs & Environmental Benefits

The 'nano-size' increased coverage and improved performance from **Nanogel** will require fewer soil condition applications. These result in lower cost and less usage.

SHEPROS®
Safety, Heath & Environment Product Solutions

Application Rates

Plant Hole Size (cm x cm x cm)	Plant Hole Volume (liter)	Nanogel Volume (gram)
10 x 10 x 10	1	1.2
20 x 20 x 20	12	14.4
30 x 30 x 30	27	32.4
40 x 40 x 40	64	76.8
50 x 50 x 50	125	150
60 x 60 x 60	216	259.2
70 x 70 x 70	343	411.6
80 x 80 x 80	512	614.4
90 x 90 x 90	729	874.8
100 x 100 x 100	1,000	1,200
150 x 150 x 150	3,370	4,044
200 x 200 x 200	8,000	9,600
250 x 250 x 250	15,625	18,750
300 x 300 x 300	27,000	32,400

Application Methods

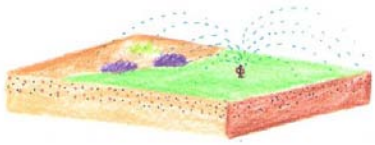
Planting or Seedling

Step 1:

Soil preparation with Nanogel for planting or seedling.

Step 2:

Planting or seedling.



Step 3:

Water thoroughly.

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Transplanting a tree: Six Important Steps
(Refer to Application Rate Table)

Step 1: *Dig a hole of two times of the diameter of the root ball. Keep a small amount of soil for later use in step 5.*

Step 2: *Add Nanogel to soil taken from the hole and mix well at the recommended rate.*

Step 3: *Fill ¼ of the hole with Nanogel-soil mixture. Place the tree in the middle of the hole in straight position.*

Step 4: *Fill with rest of Nanogel-soil mixture slightly higher than the top of the root ball.*

Step 5: *Apply the soil set apart earlier as a mulch layer, creating a concave shape to trap available water.*

Step 6: *Water the mulch layer thoroughly until the concave shape overflow with water.*

Soil Preparation with Nanogel

Flat Condition: *Lawn*

Apply Nanogel to surface at recommended rate with a fertilizer spreader or mix off-site with growing medium and apply this to surface.

Slopes Condition: *Lawn*

Apply Nanogel to surface at recommended rate with manual sprinkling or mix off-site with growing medium and apply this to surface.

Raised Beds: *Flowers, vegetables or shrubs*

Mix into the root zone to a depth of 20 cm (8 in.) with a rotovator, rotary hoe or rototiller, across the length and width of the area.

Slope Condition: *Flowers, vegetables or shrubs*

Use a hoe to incorporate the product into the soil at a depth of 20 cm (8 in.).

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Handling Precautions

Always wear goggles, masks and gloves during application. If eye contact occurs, immediately flush eyes with large amounts of running water. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately. Avoid prolonged contact with skin. May cause minor skin irritation for sensitive skin. Flush skin with water for approximately 15 minutes. If irritation persists, see a medical doctor.

Storage:

Store in dry area. Keep away from excess heat or flame.