

EDASIL®

Natural Calcium-Bentonite

The Soil Adjuvant for Gardening and Agriculture

"Soil" (top soil) is a conversion product of minerals and organic substances which is saturated with water and living beings (e.g. worms, bacteria; important for the creation of humus) and permits plant growth.

Mineral Substances = Clay Minerals

Montmorillonite (main ingredient in bentonites) is a so-called triple-layer clay mineral.

Because of their disc-shaped crystal structure these triple-layer clay minerals have a very high specific surface (600 - 800 m²/gram) with the ability to store water molecules and nutrient ions on their surface.

A soil's ability to retain water (particularly in sandy soil and especially with strong solar radiation) significantly increases when a triple-layer clay mineral is added, so that the water stored in the soil is available to plants over a longer period of time

Another important characteristic of these clay minerals is their high capacity for ion exchange. So-called "crystal mistakes" cause the clay minerals to be negatively charged, which is why they can bind nutrient ions such as potassium, ammonia, = Ca-lonen

Swollen montmorillonite crystals

calcium and magnesium. A specialty of this bond is that bonded nutrients are largely protected against being washed out, but can still be absorbed by the plants.

Organic substances = living organisms (worms, bacteria), humus, humic materials

Combined with the minerals they cause:

the soil's crumb structure, its readiness for cultivation, as well as absorption capability, and act as nutrient deposit for plants.

By adding triple-layer clay minerals (bentonites) in soil with organic substances plant growth and health can be effectively ensured through better storage of water and nutrients in the soil.

These soil properties are achieved with the clay mineral product **EDASIL®**, a bentonite montmorillonite made from choice Bavarian clays.

EDASIL® is a soil adjuvant for gardening and agriculture.

EDASIL® is a natural clay mineral product, without chemical additives.



EDASIL® is a calcium bentonite with a very high portion (65-70%) of the triple-layer clay mineral montmorillonite, which is important for soil improvement.

EDASIL® can be easily dosed and is low in dust because of its fine granulation.

EDASIL® Characteristics

- High water storage capability. Improves the soil's water balance and protects the plant from premature desiccation.
- High nutrient storage capability. Improves fertilizers' effect and reduces the need for fertilizer because of its repository function.
- Lasting enhancement of soil health through the production of clay-humus complexes.
- Supports the development of micro organisms in the soil (compost aid).

EDASIL® Area of Use

- To improve soil structure in light and heavy soils
- To improve water and nutrient storage, especially in light, sandy soil and/or with strong solar radiation and high evaporation rates.
- As additive for composting to prevent soil decay and bad smells
- As binding agent for suspension seeding (planting vegetation on embankments)
- As a piling aid for seed treatment
- For the decontamination of polluted soils

EDASIL® Application Rates:

Application	Amount	Note
Light to heavy soil	approx. 1- 2 kg/m ²	Depending on type of soil and climate; work in about 5 cm deep
Sport facilities, greens	approx. 2 - 4 kg/m ²	Depending on type of soil and climate; work in about 5-10 cm deep
Polluted soils	approx. 2 - 3 kg/m ²	Work in about 30 - 35 cm deep
Mixed with substrate	approx. 10 - 25 kg/m ³	Amount depends on substrate characteristic
Composting	approx. 15 - 20 kg/m ³	Evenly mix granules in

Usage Sample:

EDASIL® can be distributed evenly on a land area, e.g., as fine granules or powder with a fertilizer distributor and must be worked in about 5-10 cm with a ripper; then seed the lawn.

Grain Sizes:

EDASIL® powder: 90%< 63 μm
 EDASIL® fine granules: 0,5- 2,0 mm
 EDASIL® granules: 2,0-5,0 mm