



# Natural leakage prevention.

**Are you looking for a membrane solution that has minimum or no impact on the environment? What about one with an extended lifetime and low total cost of ownership?**

As environmental regulations become even tighter to curb the impact of global climate change, new solutions based on more environmentally compatible materials are a necessity.

Dantonit A/S has developed a waterproof bentonite solution, based on natural, self-repairing material. One of our main focus areas is membranes for e.g. landfills where the bentonite, which is a self-repairing sustainable nature material, prevents leakages of harmful chemical products into soil and groundwater.

No chemicals or additives are used to achieve the density,

and the natural bentonite membrane therefore protects society and wildlife from undesirable effects such as toxicity and bioaccumulation.

Although we offer a wide range of bentonite products, we focus on two types of membranes that represent the most durable and long-lasting solutions today.

### **Dantonit stands for sustainability**

In comparison to the conventional plastic membranes used today, our answer to the growing environmental challenge is to produce bentonite membranes from a self-repairing natural material.

The quality of our bentonite membranes is significantly higher than that with plastic alternatives. Additionally, the membranes feature a self-repairing material, which adds to the sustainability and longevity of the solution.

What makes our membranes unique is that no chemicals or additives have been used to achieve their high density. Bentonite effectively prevents any leakages of harmful elements into the soil or water, especially the surrounding groundwater. For humans and wildlife, the natural material also avoids any undesirable effects, such as toxicity or bioaccumulation.

### **Dantonit stands for flexibility**

Depending on the application, Dantonit offers two main membrane solutions, both with exceptional reliability and flexibility.

The DantoCrude raw bentonite membrane provides the ultimate protection against leakage. The low-permeability layer is dense and extremely robust. The membrane features permanent flexibility, ensuring superior performance, remaining watertight and intact year after year.

DantoCrude is typically recommended for use to secure an area from contaminant seepage or to stop water from seeping down through soil layers. It is a good choice when establishing a landfill that requires an impermeable base layer or to secure a previously contaminated site against further leakage into the groundwater.

DantoBES (Bentonite Enhanced Soil) is a specially designed sand which is enhanced with bentonite powder, to make it low permeable.

Our laboratory designs the correct mix of the sand and bentonite powder so it is perfect for a wide range of applications.

DantoBES helps securing a relatively large area from water or contaminant seepage with a strong, sustainable membrane made of natural materials.

The finished BES material is incredibly easy and flexible to work with. It can be handled and laid using standard construction machinery in a quick and easy process. It is also possible to use a local base material and then mix the BES material on site for lower transportation costs.

### **Dantonit stands for a better solution**

Dantonit A/S is 100% owned by NCC in Denmark. The company develops and processes bentonite membranes in-house for a variety of applications.

Not only is our final membrane a strong and natural solution, it also lasts much longer with a lower total project price than competitive plastic membranes. Contact us for more detailed information.

### **For authorities**

Our bentonite is of very high quality and our reference list confirm that it corresponds to the highest demands for membranes. We have laboratory facilities that makes us able to construct membrane solutions according to your specifications.

### **For advisors**

It is becoming ever-more important to be ahead of the tightening environmental regulations. Solutions that are environmentally neutral and hazard-free will be expected in the future. Sustainable solutions like these bentonite membranes fulfill all criteria.

### **For builders**

Dantonit has made it quick and easy to lay the membrane in all types of applications. It is even possible to use local base materials to save time and costs.

### **For the community**

For those living close to a landfill or other groundwork area, safety is of utmost importance. The dense membrane material serves as a good sustainable alternative to standard solutions. Dantonit sources its high-quality bentonite on the Danish island of Taasinge, approximately 50 km from the factory in Odense.



## **DANTONIT**

- No impact on the environment
- Self-repairing natural material
- No chemicals or additives
- Watertight year after year
- Lower transportation costs
- Meets tightening regulations