



Moditherm (Sealing Compound For Boreholes)

Moditherm is a dry mass in powder form which is mixed with water to obtain a fluid for injection into energy wells. The mass contains natural clay minerals in combination with sand which provides a very good seal of the space between the casing and the rock. Moditherm is mixed with water to obtain a density of 1.65 - 1.85 kg/litre. The mass is used to prevent mixing of different water reservoirs and to prevent the spread of contaminants from different levels into the groundwater in the space created by the drilling of energy wells. Moditherm is carefully selected to also efficiently transfer energy from the bedrock to the energy collector.

Application

After completion of the drilling, the energy collector (PE100 SDR11) is installed together with an additional PE pipe (PE100 32 mm or 25 mm SDR17) along the entire length of the borehole. The energy collector is pressurized to counteract buckling pressure during the backfilling process. Moditherm is mixed with water in a high-speed mixer to obtain a homogeneous fluid. The fluid is pumped through the additional PE hose to the bottom of the energy well and fills the energy well from the bottom up. For deep wells, the injection hose can be gradually lifted to reduce the injection pressure. Backfilling is completed when the grout has filled the entire energy well. After completion of backfilling, it is recommended to maintain the overpressure in the collector for at least 6 hours.

Technical data premixed fluid

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| Density | 1.7 kg/liter |
| Water/Bentonite ratio | 0.57 |
| Funnel Viscosity | 50 ± 70 s |
| Thermal conductivity | > 2 W/mK |

Mixing

1 m³ of finished slurry consists of 1150 kg of Moditherm and 650 liters of water.

Packaging

1000 kg packed in 20 kg bags on pallet with shrink film.