The world’s oldest liquid soil provider
WBM is your specialist for liquid soil, a building material that is manufactured using mineral components/plasticiser and a stabiliser and used in construction work both above and below ground, for example as fill or backfill material. Together with our partner IAB, the Weimar Institute of Applied Construction Research (Institut für Angewandte Bauforschung Weimar GmbH), we not only boast the most experience, but also the most extensive scientific background when it comes to dealing with liquid soil. WBM Flüssigboden® liquid soil was first used back in as early as 1987. When marketing this building material, we aim to guarantee optimal quality management and a high level of product safety.
Areas of application
WBM Flüssigboden® can be used in a wide range of different areas of application, for example for the construction of sewers, pipelines and roads, structure backfilling and cavity filling. The advantages of using WBM Flüssigboden® are particularly prominent in these areas.

Product and processing advantages
By using different formulations, we can adapt WBM Flüssigboden® to meet a wide variety of different construction site requirements with regard to:

- permeability
- compressive strength
- solubility
- load-bearing capacity
- working consistency
- imperviousness
- thermal conductivity

Components

Basic material: Suitable natural soil, sand or recycled material

Platros® – our plasticiser: The mixture of water, high-performance bentonites and other special additives is individually tailored to meet our customers’ quality requirements.

Stabilisers: The stabilisers help to ensure that the liquid soil solidifies at an early stage without forming a hardened cement paste matrix.

Further additives: Other special substances can also be added to the mixture according to the required objectives of the liquid soil in each specific case.

Forms of delivery: The additives are normally delivered in sacks, big bags or silos.
Unit equipment and performance features of the CM20+ and 30+ mixing units

- 2 silos with a capacity of approx. 3 tons each depending on the density of the binding agent
- Storage capacity sufficient for 50m³ to 80m³ of liquid soil depending on the formulation
- Precise additive weighing of the mixture and binder with a maximum deviation of +/-2%
- 3 load cells used to optimise the consumption of liquid soil and the binding agent
- Heavy-duty mixer / planetary mixer with high shear energy and a capacity of 1.0m³ per batch for a fast and homogeneous mixture
- No addition of lime required
- No time-consuming intermediate transport of the liquid soil required
- The amount and consistency of the liquid soil can be changed in every batch
- Quick and easy transport by lorry or trailer
- The mixing process can be carried out on the lorry or on the ground Daily production capacity of up to 300m³ possible
- Formula creation
- Specialised planning
- Delivery options: paper sacks / water-soluble paper sacks / big bags / in bulk

**Mixer lorry**  
**FBS 800/1000 mixing bucket**
Using laboratory technology to optimise the material composition

We help our customers to meet their construction-related needs, even in the case of complex soil conditions and construction site requirements involving high-quality materials, by performing suitable tests and calculations for every order in our laboratory.

When carrying out our quality assurance measures, we make the most of the support of selected external partners, who provide us with their expertise and state-of-the-art testing, measuring and laboratory technology. They are able to perform highly complex inspections and analyses and can even create extremely specific special formulations in special cases.

A system is only as good as its quality assurance
Technical details

Bulk density: 1.6 – 2.1 t/m³
Compressive strength: e.g. 28d = 0.3-0.8 N/mm²
Can be adjusted to provide other
Solubility in accordance with DIN soil class 3 – 5
Water permeability: 10⁻⁵ – 10⁻⁹ m/s
Solubility in accordance with DIN:

Load-bearing capacity: Eᵥ₂ ≥ 45 MN/m²
Working consistency: from F1 (stiff) to F6 (fluid)
(adjustable on the basis of DIN EN-206)

Thermal conductivity: e.g. 1.1 W/(mK)
Pollutant immobilisation: e.g. from Z2 to Z1.1 or even Z0 (in elution)
The values specified depend on the soil classification.

Patents and property rights:
DE 199 09817 DE 102 005 011 266 DE 197 177 63
DE 198 512 56 DE 103 258 64

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