

# MC-Montan Injekt LE-S 100

High density, expansion resin for soil stabilization, load bearing capacity increase, jacking of structures and sealing against water flow



## PRODUCT PROPERTIES

- Low-viscosity polyurethane-based expansion resin
- High density expansion, no resqueezing
- Water-displacing
- Durable water impermeability
- Pressure-resistant, dampening vibrations
- Low relaxation
- REACH exposure: water contact permanent, inhalation periodic, processing and application

## AREAS OF APPLICATION

- Improve properties of sub-base, sub-grade and base course to enable flexible or rigid pavements and load bearing slabs to carry more load, prevent deformation and vibration under static and dynamic conditions
- Precision injection of soil below sub-structure to increase elasticity modulus and net safe bearing pressure, enabling the structure to carry additional load, facilitating change in usage of structures and additional dead/live loads carrying capacity with minimum collateral damages
- Lateral compaction of granular sub-soil layers up to approx. 10 m depth by controlled expansion for increasing angle of internal friction
- Displacement grouting in cohesive soil to improve compression index and swelling index
- Increasing the load-bearing capacity of the structures against static and dynamic loads
- Precision lifting and stabilization of structures undergoing undesirable settlement in silty, sandy and soft soils
- Stopping extreme water leakages in structures and sewage structures
- Cavity filling up to 60 cm in diameter (without aggregate)

## APPLICATION ADVICE

**Preparatory measures:** Prior to injection, an investigation of the rock or structure and of any leaks must be carried out according to the state of the art and the rules of technology, and an injection concept must be planned. The compatibility of an uplift injection for structures must be confirmed by a building structural engineer. Injection lances or injection packers must be set before injection. A trial injection is recommended.

**Mixing the components:** Components A and B are mixed as they pass through the 2K-mixing head of the 2K-injection pump in a mixing ratio of 1:1 by volume (mixing distance  $\geq 20$  cm inline static mixer).

**Injection:** Injection is performed with the two components injection pump with flushing unit, which generates sufficient pressure and delivery rate, e.g. MC-I 710 with flushing unit.

Injection lances with 1/4" internal diameter are recommended for injection into loose rock. The insertion depth of the injection lances is based on the implementation plan. It can be between 1 m and 15 m. MC-Bore Packer LS 18 packers are recommended for injection into solid building components.

The injection can be carried out in frost-free subsoil regardless of the subsoil temperature if the resin temperature is 5 to 30 ° C. The same applies to building injection.

Ensure compliance with the information given in the specifications and the Safety Data Sheets.

**Equipment cleaning:** Within the working time of the resin, all solvent-resistant tools can be cleaned with MC-Cleaner eco or thinner product MC-Verdünnung PU. Material that has reacted or set will need to be removed mechanically.

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Mixing ratio	parts by volume	1 : 1	comp. A : comp. B
Density	kg/dm <sup>3</sup>	approx. 1.125 approx. 1.02 approx. 1.23	mixture component A component B
Viscosity	mPa · s	approx. 350 approx. 210	EN ISO 3219 component A component B
Working time	seconds	approx. 10	ASTM D7487
Application conditions	°C	approx. 5 - 40	subsoil and material temperature
Reaction time, pot life	seconds	approx. 24	tack-free property
Expansion factor		approx. 12	depending on backpressure

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

Colour	yellowish
Equipment cleaning agent	MC-Verdünnung PU (thinner), under no circumstances should water or aqueous cleaning agents be used, MC-Cleaner eco
Delivery form	20 l component A and 20 l component B 200 l component A and 200 l component B 1000 l component A and 1000 l component B
Packaging disposal	Make sure single-use containers are completely empty.

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : PU40

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2400023720]