1. Product description
Mineral dry bagged masonry restoration mortar based on Trass with hydraulic binders.

2. Field of application
KEIM Restauro-Grund is a natural stone / masonry replacement material for lining/filling deep areas of damage (> 2 cm/0.8 in.) and as a core material for open form casting.

3. Product properties
**Material characteristics acc. to WTA leaflet 3-11-97/D**
- Bulk density: approx. 1.34 g/cm³
- Water consumption: approx. 0.14 l/kg (approx. 4.7 fl oz per kg)
- Working time: at most 45 minutes
- Setting time: approx. 4 hours
- Compressive strength: approx. 29 N/mm²
- Bending tensile strength: approx. 8 N/mm²
- Thermal dilatation: approx. 6 x 10^-6 (1/K)
- Hygric dilatation: approx. 1.0 mm/m

**Color shade**
Brown

4. Application instructions
**Application temperature**
Ambient and substrate temperature must not fall below +5°C (41°F).

**Substrate preparation**
**Chisel out:**
Chisel out defective natural stone or masonry which is to be repaired with KEIM Restauro system. Masonry should be carved back to a sound base using a notched chisel or similar tools. Especially on flat areas of natural stone, a box-shaped recess should be formed when chiseling back to provide a good key for the restoration mortar.

**Reinforcement:**
Supporting reinforcement may be required for protruding natural stone features and KEIM Restauro reinforcement materials should be used for this purpose.

**Cleaning:**
Any stone dust must be carefully removed from the areas to be repaired with compressed air or with clean water and a brush.

**Pre-wetting:**
The restoration mortar must only be applied onto a moist substrate. Adequate pre-wetting is absolutely essential. Surface should be wet but with no standing water, remove any excess water with a sponge.

**Application**
**Mixing:**
KEIM Restauro-Grund is mixed with water only, approx. 4.0 l (1.06 gal) per 30 kg. Use a hand mixer or professional mixer for larger quantities. After a maturing period of 5 minutes, the mortar should be of a consistency suitable for application by throwing.
Application:
The matured mortar is thrown into the chiseled out, pre-wetted damaged area, only filling the cavity up to approx. 2 cm/0.8 in. beneath the original stone surface. Total layer thickness must not exceed 5 cm/2 in. per application/lift. Protect freshly applied mortar from sun, wind and rain for at least 24 hours.

Consumption
Approx. 20 kg per m² (10.8 sq ft) at a layer thickness of 1 cm (0.4 in)
Approx. 4.7 kg / sq.ft. / 1 in. thickness

Finishing
Once the base mortar has set approx. 4 hours, roughen the surface and allow at least 24 hours before additional applications or finishing operations.

Cleaning of tools
Clean with water immediately after use.

5. Packaging
30 kg sacks

6. Storage
12 months in original unopened sack under dry conditions.

7. Hazardous substances

Xi  Irritant,
R 38:  Irritating to the skin.
R 41:  Risk of serious damage to the eyes.
S 2:  Keep out of reach of children.
S 22:  Do not breathe dust.

S24/25:  Avoid contact with skin and eyes.
S 26:  In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 37/39:  Wear suitable gloves and eye/face protection.
S 46: If swallowed, seek medical advice immediately and show this container or label.

8. Transport hazard class
n/a

9. Disposal
EC Waste Code no. 17 01 01
Any residues must be emptied out of sacks before recycling. Solidify any residual material with water and, after consulting the relevant authorities, dispose of in a building material landfill site.

10. Safety instructions
Provide appropriate protection for surfaces which are not to be treated. Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with water. Protect the eyes and skin from splashes. When using, do not eat, drink or smoke. Keep out of reach of children.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.