GelMaster

Product Overview:

GelMaster is a three-component, water-expanding hydrogel based on acrylate or methacrylate that cures to a flexible, rubber-like product. One of the key features of GelMaster is its extremely low blending viscosity, which is almost equivalent to the viscosity of water. This allows for a series of renovation procedures that cannot be accomplished with injection materials of a higher viscosity. GelMaster can be applied in the case of grout curtains, brickwork injection, horizontal barriers, and ground stabilization.

In its cured state, GelMaster has a good chemical resistance against many acids, bases, solvents, and fuels due to its high-quality material basis. During the reaction and in the cured state, GelMaster does not emit any toxic substances into the groundwater. Any product elements that are not built in during the reaction process, such as monomers and intermediates, are rapidly and completely biodegradable.

Technical Data:

All values listed are approximations.

Component A:

Makeup	Liquid
Colour:	Clear
Density at 23°C (g/cm^3)	1.05
Dynamic viscosity at 23°C (mPas)	13

Component B:

Makeup	Liquid
Colour:	Clear
Density at 23°C (g/cm^3)	0.9
Dynamic viscosity at 23°C (mPas)	7.5

Component C:

Makeup	Solid
Colour:	White
Density at 23°C (g/cm^3)	2.6
Apparent density at 23°C (g/cm^3)	1.1

A + B + C

Reaction temperature	Exothermic
Gel time (min)	5
Total curing time (min)	12
Tensile strength (MPa)	0.1
E- Modulus (MPa)	0.15
Fracture elongation	290%

Formulation Instructions:

1) Component A and B are mixed at a ratio of 20:1, for a recommended 3 minutes (This activates GelMaster)
2) Component C is mixed, for a recommended 3 minutes, with water in equal volume to Component A
3) Mixing Ratio
   (A + B) : (C + Water) 1 : 1 (parts per volume)

Storage:

GelMaster has a minimum shelf life of 12 months, in dry conditions as temperatures between 15-25°C. Product should be kept out of direct sunlight. Should you wish to use the product after 12 months, we recommend a sample be sent to Deutsch Master for quality testing.

Disposal:

General waste can be used for small quantities of reacted product. Singular components should be disposed of in accordance with local laws.