

Product Overview:

PolyMaster 4 is a 2-component polyurethane injection resin, designed for waterproofing and reinforcement of water retaining structures.

The reactivity of PolyMaster 4 varies when water or PolyMaster Cat is added. Reaction data can be seen below.

PolyMaster 4 provides an effective solution for stabilization and solidification of water bearing structures including but not limited to rock, soil and sand. PolyMaster 4 can be used to stop water inrush in tunnels, shafts, dams and other concrete or masonry structures during construction.

The product can also serve as an injection grout for concrete crack repair, transmitting forces across the crack post curing. The force-transmitting ability restores structural integrity to the cracked concrete element.

PolyMaster 4 can be injected into cracks, voids, and permeable areas, where it will expand and solidify in contact with water, forming a permeable foam seal.

Technical Data:

All values listed are approximations.

Component A:

Colour:	Yellow tint
Density at 23°C (g/cm ³)	1.05
Dynamic viscosity at 23°C (mPas)	140

Component B:

Colour:	Brown
Density at 23°C (g/cm ³)	1.20
Dynamic viscosity at 23°C (mPas)	100

A + B

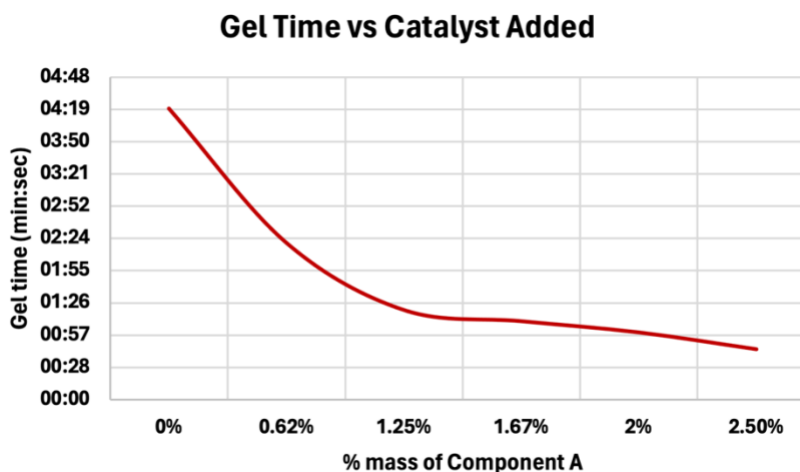
Mixing ratio by volume (A : B)	1 : 1
Reaction temperature	Slightly exothermic
Viscosity at 23°C (mPas)	120

Gel time (mins)	4
Total curing time (mins)	30
Tensile strength (N/mm ²)	30
Compressive strength (N/mm ²)	70

Although the information and specifications provided in this document are, to the best of our knowledge, accurate and truthful, Deutsch Master recommends that users conduct a trial to confirm the suitability of the product for the intended application. Please note that regional climatic conditions may result in variations in the product's performance. No warranty, express or implied, is provided or implied in connection with any recommendations or suggestions made by Deutsch Master, its representatives, agents, or distributors. The information contained in this technical data sheet is effective from the date shown and supersedes all previous data. Customers should check with their local Deutsch Master office to ensure they are referencing the current version.

The reaction time can be altered by giving the catalyst PolyMaster Cat. This is added to the A component (data below is the amount of PolyMaster Cat added as a % of component A). The gel time was determined at 20°C with no water added.

Catalyst %	Gel time (min:sec)
0%	4:00
0.62%	2:20
1.25%	1:20
1.67%	1:10
2%	1:00
2.5%	0:45



In the event of strong water flows we recommend the use of PolyMaster 1.5

For crack injections and ground consolidation we recommend PolyMaster 80

Storage:

PolyMaster 4 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.

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