

Product Overview:

PolyMaster 80 is a slow hardening 2-component polyurethane injection resin, designed for waterproofing and reinforcement of water retaining structures.

The reactivity of PolyMaster 80 varies when water or PolyMaster Cat is added. Reaction data can be seen below.

PolyMaster 80 exhibits exceptional penetration into porous structures requiring waterproofing and sealing. Its viscous and hydrophobic formulation facilitates the displacement of incoming water, a stable and robust foam barrier is formed, blocking water ingress. Once fully reacted PolyMaster 80 is totally inert and will cease to react.

PolyMaster 80 is a versatile product for use in the stabilization and solidification of water-bearing geological formations, such as rocks, soil, and sand. It is particularly effective in halting rushing water in tunnels, shafts, dams, and other concrete or masonry structures. Additionally, PolyMaster 80 serves as a concrete injection product, enabling the force-transmitting filling of cracks.

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)	180

Component B:

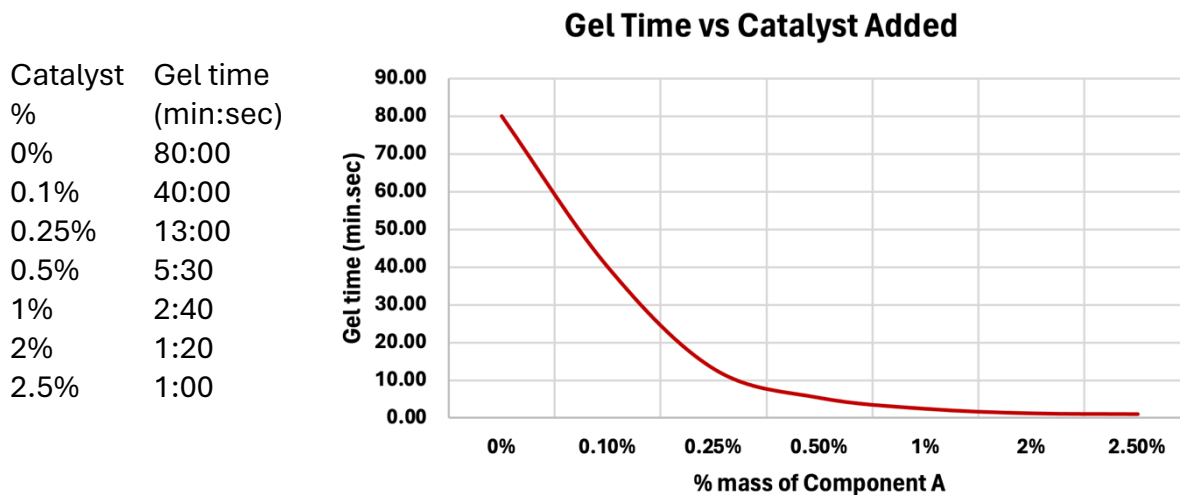
Colour:	Brown
Density at 23°C (g/cm ³)	1.20
Dynamic viscosity at 23°C (mPas)	100

A + B

Mixing ratio by volume (A : B)	1 : 1
Reaction temperature	Slightly exothermic
Viscosity at 23°C (mPas)	140
Gel time (mins)	80
Total curing time (hrs)	24
Tensile strength (N/mm ²)	30
Compressive strength (N/mm ²)	70
E-modulus (MPa)	2900
Volumetric Expansion Factor	1 (with water present 1.5 – 3)

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.



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

Storage:

PolyMaster 80 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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