

POLIMOLD TR 30-40-55-70

Poly-Urethane Rubber for flexible and resistant moulds

INTRODUCTION:

Two component room temperature vulcanising poly-urethane rubber which cures with addition of the appropriate hardener. Once cured, this rubber becomes flexible and resistant, free from air bubbles and imperfections. It is suitable in the manufacture of moulds for production of articles made of plaster and cement thanks to its accurate reproduction of fine details and due to its extremely low

linear shrinkage.

APPLICATION: POLIMOLD TR is specially suited for production of decorative plastersubjects,

> religious articles, statues, pottery, artistic ceramics, sanitary, precast concrete, garden ornaments, etc. Types characterized by high Shore A hardness value, are

suited for reproduction of large-sized patterns.

PACKING: Component A: Kg. 10; Kg. 20; Plastic bucket

Plastic bucket Component B: Kg. 1,25; Kg. 2,50;

SHELF LIFE: Both components (A and B) 8 months, stored in their original tightly closed

containers, in a dry and fresh place at temperatures in the range from +5°C to +30°C. NOTE: The Component A contains isocyanic prepolymer which reacts with water and moisture. Therefore, once the container is opened, the material must be used within a few hours. In the case of partial utilization, fill the empty space with a coat of dried nitrogen. Mix carefully the Component B (polyol) before use.

TRANSPORT: RID/ADR exempt: the product is not flammable.

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Chemicals for Industry & Artworks

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TECHNICAL PROPERTIES (at +20° C. and 60% U.R.)

POLIMOLD TR	TR 20	TR 30	TR 40	TR 55	TR 70
Mixing ratio A+B (parts in weight)	100:12,5	100:12,5	100:12,5	100:12,5	100:12,5
Colour	grey	grey	grey	grey	grey
Viscosity mixture A+B (cps)	3.300 -3.600	3.500-3.800	3.500-3.800	3.500-3.800	4.000
Specific gravity mixture A+B (kg./dm3)	1,25	1,40	1,40	1,40	1,40
Pot life mixture A+B (minutes)	30	30	20	20	20
Demoulding time (hours)	24	24	24	24	24
Hardening time (hours)	7 - 10	7 - 10	7 - 10	7 - 10	7 - 10
Hardness (Shore A)	20 ± 3	30 ± 3	40 ± 3	55 ± 3	70 ± 3
Linear shrinkage after 5 day ageing (%) (ISO 4823)	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1
Elongation at break (%)	> 450	> 400	> 350	> 300	> 250
Tearing resistance (KN/mm) (DIN 53515)	8 ± 1	8 ± 1	8 ± 1	7 ± 1	7 ± 1

NOTE:

Regarding how to use this product and models' preparation, we suggest to see related technical sheet titled "How to use POLIMOLD TR 20 - 30 - 40 - 55 - 70".

Avoid product's catalysis at temperatures higher than +30°C.

Pouring time, pot life and moulding time will depend on environment's temperature and relative humidity value.

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INSTRUCTIONS FOR USE

- Treat the pattern to be reproduced with a coat of wax release agent POOLWAX-S.
 Porous surfaces such as plaster, wood, etc, have to be previously insulated by applicating shellac paint, then treated with a light coat of POOLWAX-S.
- 2) First mix carefully POLIMOLD TR 55 parts A and B separately, then mix them together in the correct ratio 100 + 12,5 parts by weight (A+B). The two components must be accurately mixed together for a few minutes.
 In order to avoid any mistake by volumetric mixing, it is imperative to use a microbalance with a 1 gr. of discrepancy margin. In case of mixing using a hand-drill driving a mixing screw, work at a low number of revolutions, in order to avoid air bubbles' formation into mixture.
- 3) Once the mixture is ready, it is advisable to transfer the compound into another container. Then remix for a short time to ensure that the whole mass has been thoroughly mixed.
- 4) Wait 2-3 minutes before pouring POLIMOLD TR 55 on the surface to be reproduced.

 The standard pouring time of the material is 20 minutes (at 20°C); after such a time the viscosity ratio gets too high, compromising the utilization of the compound itself.

 In order to avoid the creation of air bubbles, pour the compound slowly.
- 5) This product takes from 12 to 24 hours to get hard, according to application temperature. Wait a little time over hardening time before pattern's withdrawing operations in order to avoid dimensional deformation of rubber pattern.
- 6) It is highly advisable to treat the rubber mould with a layer of POOLWAX-S to obtain an easier release of the pattern.

NOTE. The information given to users is based on our best experience. However, because of the many possible applications, which are outside of our knowledge and control, we cannot accept liability for loss or damage resulting from reliance upon such information. Typical data values should not be used as a basis for product specifications.

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