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https://www.apraktika.hu/en/f32-polyurethane-resin-100g

# F32 Polyurethane Resin: Technical Data Sheet

The F 32 Fastcast polyurethane resin system consists of a polyol and isocyanate components that cure at room temperature and are suitable for manual processing as well.

The cured F 32 polyurethane resin can be used to make slightly flexible finished products as well as moulds.

It is especially recommended for casting parts or whole objects with a small wall thickness. Even thin elements can be easily and undamaged removed from the silicone mould.

Main properties of the hardened product:

- Very fast reaction, short pot life
- Easy to use thanks to the 1:1 weight mixing ratio
- Very low aggression against the silicone mould
- Not transparent even in thin layers
- Excellent paintability
- Odorless



## 1. Instructions for use

- Prepare the two components (resin / base and catalyst) and mix them separately. Weigh out the amounts of polyol and isocyanate components given in the table below.
- 2. Keep the mixing ratio exactly. The technical properties listed below are guaranteed only this case.
- 3. Do not leave unmixed components on the wall of the mixing bowl.
- 4. Stir until the color is homogeneous. The polyurethane resin can then be cast.

Crystallization can occur with both the isicyanate and the polyol component.

In this case, i.e. if the polyol component becomes inhomogeneous and the isocyanate becomes opaque, place in a heat treatment chamber and homogenize at 60 ° C.

The system is then reusable.

Ensure the components are mixed at least 18 ° C.

#### 2. Important Recommendations

- Observe the general health and safety regulations
- Wear protective gloves
- Ensure adequate ventilation
- Wear safety goggles and suitable safe clothing



# 3. Chemical and Physical Properties

	Isocianate	Polyol	Mixture
Mixing ratio (mass %)	100	100	
Mixing ratio (volume %)	86	100	
Consistency	liquid	liquid	
Coulor	dark amber	white	beige
Viscosity	35	35	35
Density at 25 °C	1,14	0,98	1,08
Working time (pot life) at 25 °C			2
Hardness Shore D1/D15			74/72
Flexural elasticity modulus MPa			1100
Flexural strength MPa			48
Sharpy impact resistance kJ/m <sup>2</sup>			15
Working temperature oC			-20 / +80
Glas transition temperature, °C			100
Disassembly time 23 °C			20
Total curing time (days) 23 °C			3
Maximum casting thickness (mm)			5



The cured finished product must not be classified as dangerous in accordance with Directive 88/379 / EEC and subsequent amendments. The hazards of the components can be seen in another document.

## 4. Shelf Life

The F32 polyurethane resin is guaranteed for a period of 18 months if stored correctly at a temperature of between  $5^{\circ}$ -  $27^{\circ}$ C (41° -  $80^{\circ}$ F).

The advice given verbally, in writing or through demonstrations on the use of the products are based on our knowledge.

The use and application of the product by the user lie beyond the control of the company and are therefore the user's own responsibility.