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https://www.apraktika.hu/en/f180-polyurethane-resin-100g

F180 Polyurethane Resin: Technical Data Sheet

The F 180 fastcast polyurethane resin system consists of a polyol and isocyanate components that cure at room temperature and are suitable for manual processing.

The cured F 180 polyurethane resin can be used to make both finished products and moulds.

Main features of the product:

- Medium approx. 5 minutes pot time, fast curing
- Easy to use 1:1 weight ratio
- Components are less prone to sedimentation
- Very low aggression against the silicone mould
- Not transparent even in thin layers
- The end product is almost white and can be dyed well with pigments



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 | Filled Mixture RZ 30150 |
|--|------------|------------|----------|----------------------------|
| Mixing ratio (mass %) | 100 | 100 | | 360 |
| Consistency | liquid | liquid | liquid | liquid |
| Coulor | Of-white | Dark amber | Of-white | Of-white |
| Viscosity | 52 | 110 | 80 | 4000 |
| Density at 25 °C g/cm ³ | 0,94 | 1,1 | | |
| Hardened Density g/cm ³ | | | 1,06 | 1,65 |
| Working time (pot life) at 25 °C | | | 3,3 | 5,3 |
| Hardness Shore D1/D15 | | | 74 | |
| Flexural elasticity modulus MPa | | | 1130 | |
| Flexural strength MPa | | | 41 | |
| Sharpy impact resistance kJ/m ² | | | 18 | |
| Glas transition temperature, °C | | | 98 | |
| Disassembly time 23 °C | | | 45 | |
| Linear shrinkage (mm / m) | | | 4-5 | |

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 F180 polyurethane resin is guaranteed for a period of 18 months if stored correctly at a temperature of between 5° - 27° C (41° - 80°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.