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https://www.apraktika.hu/en/polyurethane-resin-transparent

# MaxFlex 0050 two-component Silicone: Technical Data Sheet

Max Flex 0050 is a two-component (base and catalyst) addition RTV silicone rubber that cures at room temperature.

It has an extremely high elongation capability and a very low hardness which is measured on the "Shore 00" scale under "Shore A".

It is used in the film industry to make animated figures, special effects and masks.

Due to its gel-like properties and biocompatibility (OECD TG 439), it is suitable for making prostheses.

Main properties of the hardened product:

- transparent
- extremely high elongation at break
- nearly zero shrinkage on curing
- no skin irritation



#### Main fields of application:

- Shape and model making with very large
- Instruments, etc. padding
- Orthopedics, making prostheses (external and internal)
- Flexible connection between parts with cyclic movements
- Making party accessories, imitation

### 1. Instructions for use

- 1. Prepare the components (base and catalyst) and homogenize separately. Weigh out an equal amount of base and catalyst (eg 100 g of base and 100 g of catalyst). In a bowl mix it thoroughly!
- 2. Pour the mixture into the tool from a height of at least 30 cm with a thin jet, so that fewer bubbles will arise.
- 3. Alternatively use a vacuum chamber to remove the bubbles.
- 4. After the hardening time disassemble the mould and remove the model.

  If necessary, use compressed air to facilitate separation. It is important not to force the separation with sharp tools as this can damage the object.

Making mask or wound imitation, the mixture can be made thixotropic with additive.

Manufacturing of prostheses use another harder, but addition or platinum-catalyzed silicone as a membrane for outer cover layer. Prepare the outer layer first and fill in with Max Flex mixed silicone.



# 2. Important Recommendations

Although this silicone rubber is not hazardous, take the below considerations

- 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

Mixing ratio volume or weight %	1:1
Viscosity of the mixture	8000 mPas
Working time (pot time) at 23 ° C	18 min
Curing time at 23 ° C	3 h
Hardness after 24 hours	50 Shore "00"
Tensile strength	2,17 N/mm <sup>2</sup>
Elongation at break	980 %
Tear resistance	8,92 N/mm
Density	1.07 g/cm <sup>3</sup>
Shrinkage	< 0,1%



The cured finished product is not 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

This translucent polyurethane resin is guaranteed for a period of 6 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.