

# picopoly

## two-component model stump material based on polyurethane

complies with EN ISO 14233:2003 for high precision models

### Application Fields

picopoly is excellently suited for the fabrication of precision models or even single stumps for the dimensionally stable and true-to-detail reproduction of the oral situation. Furthermore, it lends itself for the production of models for the CAD/CAM technique (picopoly is water-repellent and suited for turbines).

### Preparation of Moulding Materials

picopoly is particularly well suited when using moulding materials made of silicone. When employing polyether moulding materials (e.g. Impregum, Permedyne by Espe), the moulding material has to be processed by means of a separator (e.g. Majesthetik-Separator) beforehand. Spray the separator thinly and evenly into all areas or daub on thinly. Leave the excess separator to dry and do not work with compressed air. It will dry in around 1 to 2 minutes. Hydrocolloids and alginates are not appropriate.

### Properties

picopoly is a thin fluid and can therefore be poured easily (even in the case of very large cavities). It traces precisely and in a dimensionally stable manner. In addition, it ensures the highest edge stability and abrasion resistance (abrasion behaviour equals zero). Moreover, it is pressure and impact resistant and can be easily grinded and sawed. When employed correctly, there will be no substance loss by rinsing, evaporation, ultrasonic bath or by fitting and removing hard workpieces.

### Composition

#### Hardener:

polyisocyanate based on diphenyl methane diisocyanate  
aliphatic polyether polyol, inorganic filler

#### Basis

### Technical Data

#### Colour:

white (appropriate colour paste is enclosed)

#### Processing time:

3-4 minutes (at 20-23°C)

#### Demouldable:

after approx. 60 min (at 20-23°C)

#### Shrinkage:

0,09 %

#### Shore-D (24h):

78

#### Vickers hardness HV 0.2 (after 24 h):

12 (at 20-23°C)

#### E-module (following ISO 1567):

approx. 2,800 MPa

#### Bending strength (following ISO 1567):

approx. 33 MPa

#### Mixing ratio:

see tables

### Shipped as

#### picopoly basis:

660 g (3 x 220 g) box with an additional plastic bottle with tilt lever

#### picopoly hardener:

100 g (1x) box with an additional glass bottle with nozzle

#### picopoly colour paste:

8 g

#### Accessories:

4 small wooden spatulae/2 big wooden spatulae  
beaker (3 x 30 ml + 1 x 50 ml)

basis hardener	
basis	hardener
10 g	1,5 g
20 g	3 g
30 g	4,5 g
40 g	6 g

mixing ratio volume	
basis	hardener
5 ml	1 ml
10 ml	2 ml
20 ml	4 ml
25 ml	5 ml
30 ml	6 ml

### Processing Instructions when opening for the first time:

**Basis:** Open one of the three basis storage containers, agitate filler intensively, and decant into to the plastic metering cup completely.

**Hardener:** Important: Shake briefly prior to opening, subsequently decant contents into the glass bottle completely and close immediately. The hardener is strongly hygroscopic. Thus, the bottle has to be carefully closed immediately after use.

### Processing Step-by-Step

1. Agitate basis material intensively prior to use by means of a wooden spatula so that a homogeneous fluid is obtained. In case the material has not yet been standing for a longer period (1-2 days), it may be agitated very easily using an ultrasonic bath (approx. 3 min). (Attention: avoid entry of water)
2. Remove desired quantity of basis material and fill into a metering cup according to table (g or ml). We recommend metering by weight.
3. In order to dye the model, add the colour paste to the basis while stirring. ATTENTION: Add a maximum of 3 % of mass, see "Important Notes". For ease of metering, we recommend you dye the entire 220 g of basis with 6.6 g of colour paste.
4. Meter the corresponding quantity of hardener (see table) into the beaker. Carefully close the hardener bottle immediately after use.
5. After mixing up for approx. 30 seconds, all components are mixed well, and no streaks are visible any more. Pour the model stump material by a thin spout into the purified (isolated) and dry mould. Processing time is approx. 3-4 minutes at 20-23°C.
6. In order to avoid inclusions of air, the mould may be kept on the shaker at a low intensity when metering and/or may be hardened after pouring into a dry pressure membrane apparatus for approx. 10-15 minutes at 2-4 bar.
7. After approx. 60 minutes, the material has hardened and may now be demoulded.
8. picopoly adapts the stump and distance lacquers available on the market and is isolator resistant.

### Important Notes

Avoid bringing the liquid components in contact with moist or wet surfaces, since they are extremely moisture-sensitive. The product might be irreversibly damaged. Close the bottles immediately after use. Isopropanol is suitable for cleaning the working materials (beaker etc.). Do not expose to heat unnecessarily. Please notice: The temperature of the material influences the given processing and hardening times substantially. At high temperatures, the material hardens more quickly, at lower temperatures, it hardens more slowly.

**Colour paste: When mixing up more than 3% of mass of colour paste, there is a risk of the material not attaining the required final hardness.**

### Warning Notices

#### Please also observe the valid safety data sheets.

The hardener contains diphenyl methane diisocyanate, isomers, and homologues.

4,4' methylene diphenyl diisocyanate; o-(p-isocyanatobenzyl)phenylisocyanate; 2,2' diphenylmethane diisocyanate.

May cause an allergy, asthma-like symptoms or breathing difficulties if inhaled. It is suspected of causing cancer.

It may harm the organs in the event of extended or repeated exposure. Harmful to the health if inhaled.

May irritate the airways. Causes skin irritation. Causes severe eye irritation. May cause allergic skin reactions.

Do not breathe in the vapour. Wear breathing protection if there is insufficient ventilation.

If the product comes into contact with the eyes: Rinse carefully with water for several minutes. Remove contact lenses if possible.

Rinse again. If you feel unwell, seek medical advice. Keep locked away. Dispose of the contents/container in accordance with local/regional/international regulations.

Contains isocyanate. May provoke allergic reactions. Hazardous to health when inhaled. Irritant to eyes, respiratory tract, and skin. Potential sensitisation by contact with skin. In case of contact with eyes, rinse with plenty of water and consult a physician (supply label if possible). In case of contact with skin, rinse with plenty of water and soap.

Basis: Toxic to aquatic life with long lasting effects. Avoid release to the environment. Collect spillage.

**Storage:** Store material in a cool and dry place. Storage at 5-25°C.

**Shelf Life:** 1 year in tempered rooms in the sealed original container. Do not use after expiry of shelf life. Spend opened original containers within three months. A potential brown discoloration of the basis fluid and/or a white deposit at the bottom of the hardener (preservative against moisture) will not affect the characteristics of the material. Shake or agitate prior to use.

**Standards:** picopoly complies with the requirements in DIN EN ISO 14233:2003 "Dental Medicine - Synthetic Materials for Model Stumps".

The product was developed for application in the dental sector and has to be employed according to the information on use. The manufacturer shall not be liable for any damages resulting from other applications. Furthermore, the user is bound to check the material prior to application for suitability and applicability for the intended purposes on his/her own authority, the more so in case these are not referred to in the information on use.



**Danger**