Generative Resin GR-10 guide

Instructions



pro3dure medical GmbH

www.pro3dure.com

Product description: photopolymerizable resin for the production of dental objects by image projection systems

Technical data:

- Colour: clear transparent
- Density: ca. 1.1 g/ml
- Viscosity: ca. 0,7 Pa s
- Green flex modulus: Elastic modulus: ca. 600 MPa Flexual strength: ca. 50 MPa Elongation at break: ca. 20 %
- Post cured material: (depends on postcuring unit) Elastic modulus: ca. 1700 MPa Flexual strength: ca. 90 MPa Elongation at break: ca. 10 % Hardness: ca. 80 Shore D
- Storage:



Orderina information:

Standard packing:

385 nm clear transparent

1 kg bottle, item no.: D1000800

405 nm clear transparent

1 kg bottle, item no.: D1000801

These data result from measurements of a representative sample, which were determined within the scope of our quality assurance.

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1. Product description

pro3dure's generative resin GR-10 guide is a resin for the generative production of dental objects based on image projection systems. The formulation of GR-10 quide is optimized for the requirements of a robust production guaranteeing constant high quality. The GR-10 guide is successfully tested for biocompatibility, certainly meets all mechanical and application demands. The material can be used for build processes with layer thicknesses from 25 up to 100 μm. It is recommended to use the pro3dure medical curing device CD-1 or CD-2 for post curing.



- GR-10 quide bottles should be well shaked before use (fig 1).
- Make sure that GR-10 guide material is temperature adjusted up to 23 °C to 30 °C.
- Carefully pour **GR-10 guide** into the vat of the image projection unit (fig 2).
- Bubbles can be removed with a cleaned spatula or by a recoater routine.
- If it is possible, always store a bottle GR-10 guide in your production unit in order to avoid temperature differences during refilling.
- For the build parameter adjustment please refer to the machine data sheet.
- After the build process is finished a direct post treatment is recommended. If this cannot be guaranteed leave the produced objects in the liquid GR-10 quide resin.
- After cleaning of the parts with isopropanole ≥ 97 % (approx. 3-5 min. in an ultrasonic bath) the objects are postcured in an adequate light curing unit (e.g. pro3dures CD-1 or CD-2 for a period of 3-4 min.) in a protective gas atmosphere.
- The dental objects generated out of the generative resin **GR-10 guide** can be coated and repaired as usual.
- Impurity due to operation mistakes cannot be excluded. With respect to the low viscosity of the resin it is possible to filtrate the GR-10 guide. It is recommended to filtrate and stir up the resin on a regular base (fig 3). To avoid bubbles let **GR-10 guide** rest for 1 hour before usage.

Contains: Alkoxilated bisphenole-A-dimethacrylate, initiators, dyes and stabilisers.

3. Important

- To avoid detrimental effects on material quality do not expose the liquid material to irradiation under any circumstances.
- Deviations from the described manufacturing process may lead to different mechanical and optical properties of the GR-10 guide material.
- Ensure personal protective gear during processing.
- Caution: Polymerised resins are chemically resistant avoid stains on clothing!
- Avoid any contact with skin and eyes. In case of accidental contact, rinse with adequate running water, consulting a doctor if necessary.
- The lot number and the best before date are indicated on each GR-10 quide packaging. In case of claims please always indicate the lot number of the product. Do not use the product after expiry of the best before date.



Safety advice

pro3dure medical GmbH is not liable for any damages caused by improper application of the material. To be used by trained specialist personnel for the purpose indicated only.

