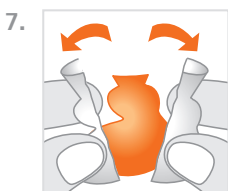
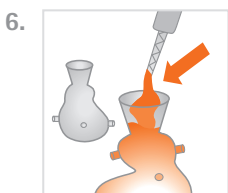
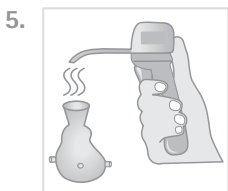
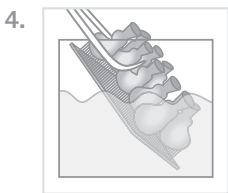
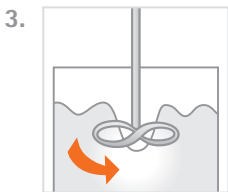
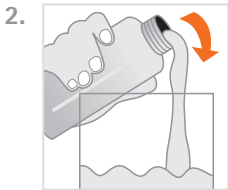
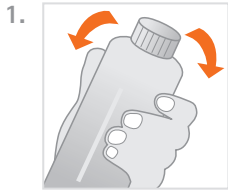


Generative Resin GR-12.1

Instructions

pro3dure medical GmbH

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GR-12.1

1. Product description

pro3dure's generative resin **GR-12.1** material is a resin for the generative production of audiology castforms based on image projection systems (≤ 405 nm). The formulation of **GR-12.1** material is optimized for the requirements of a robust production guaranteeing constant high quality prints. The material can be used for build processes with layer thicknesses from 25-100 μ m. It is recommended to use the **CD-1** or **CD-2** curing device from pro3dure medical for post curing.

2. Processing

- **GR-12.1** bottles should be well shaken before use (fig 1).
- Make sure that **GR-12.1** is adjusted to temperature range 23 °C to 30 °C.
- Carefully pour **GR-12.1** 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-12.1** 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 done at the time leave the produced objects in the liquid **GR-12.1** resin.
- Clean the parts with isopropanol ≥ 97 % (approx. 5 min. in an ultrasonic bath) (fig. 4).
- After cleaning the **GR-12.1**, castforms have to be carefully dried by clean air in order to avoid inhibition of the filling material (silicones) (fig. 5). The objects are postcured in a light curing unit (e.g. pro3dure's **CD-1** or **CD-2** for a period of 5 min.) in a protective gas atmosphere.
- Fill the castform without air bubbles and start the curing process by filling material according to the instructions (fig. 6). Crack the castform (fig. 7).
- Remove the objects out of the generative resin. **GR-12.1** can be repaired with **GR-12.1** resin.
- Impurity due to operation mistakes cannot be excluded. With respect to the low viscosity of the resin it is possible to filtrate the **GR-12.1**. It is recommended to filter and stir the resin on a regular base (fig 3). To avoid bubbles let **GR-12.1** rest for 1 hour before using.

Contains: methacrylates, 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-12.1** material.
- Wear 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. Consult a doctor if necessary.
- The lot number and the expiration date are indicated on each bottle of **GR-12.1**. In case of claims please indicate the lot number of the product. Do not use the product after expiry of the best before date.

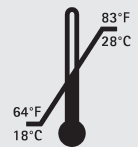
Safety advice

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.

Product description:
photopolymerizable resin for the production of castforms by image projection systems (≤ 405 nm)

Technical data:

- Colour: orange-translucent
- Density: ca. 1.1 g/ml
- Viscosity: < 600 m Pa s
- Post cured material: (depends on postcuring unit)
Elastic modulus: > 1600 MPa
Flexural strength: > 80 MPa
Elongation at break: < 8 %
- Storage:



Ordering information:

Standard packing:

1kg bottle,
orange-translucent
item no.: A1001002

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

idea to product.