# **Generative Resin GR-16 Xray**

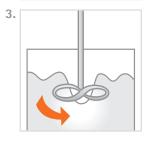
## Instructions



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#### 1. Product description

pro3dure's generative resin **GR–16 Xray** is a resin for the generative production of radioopaque objects for dental scan guides based on 3D-printing (SLA, DLP) with irradiation systems ( $\leq$  405 nm). The formulation of **GR–16 Xray** is optimized for the requirements of a robust production guaranteeing constant high quality. The material can be used for build processes with layer thicknesses from 50–100  $\mu$ m. It is recommended to use the CD–1 or CD–2 curing device from pro3dure medical for post curing.

#### 2. Processing

- GR-16 Xray bottles should be well shaken before use (fig 1).
- Make sure that **GR-16** Xray material is adjusted to temperature range 23 °C to 30 °C.
- Carefully pour **GR-16 Xray** 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-16 Xray 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-16 Xray resin.
- After cleaning the parts with isopropanol ≥ 97 % (approx. 3-5 min. in an ultrasonic bath) the objects are postcured in a light curing unit (e.g. pro3dure's 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-16 Xray** can be repaired with **GR-16 Xray** 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-16 Xray. It is recommended to filter and stir up the resin on a regular base (fig 3). To avoid bubbles let GR-16 Xray rest for 1 hour before usage.

Contains: Alkoxilated bisphenole-A-dimethacrylate, radioopaque fillers, 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-16 Xray 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-16 Xray. 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.

Product description: photopolymerizable resin for the production of radioopaque objects for dental scan guides by 3Dprinters (SLA, DLP) with irradiation systems (≤ 405 nm).

#### Technical data:

- Colour: white opaque
- Density: ca. 1.1 g/ml
- Viscosity (23 °C): ca. 1,7 Pa s
- Post cured material: (depends on postcuring unit) Hardness:
   ca. 85 Shore D
- Storage:



# Ordering information:

Standard packing:

1kg bottle, white opaque item no.: D1001401



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



