

Generative Resin GR-12 LCD cast

Instructions

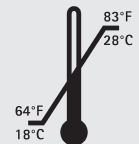
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Product description:
photopolymerizable
resin for the produc-
tion of dental cast
forms by LCD image
projection systems
(≥ 405 nm)

Technical data:

- Colour:
red
- Density:
ca. 1.1 g/ml
- Viscosity:
ca. 0,3 Pa s
- Green flex modulus:
Elastic modulus:
ca. 800 MPa
Flexural strength:
ca. 50 MPa
Elongation at break:
ca. 18 %
- Post cured
material: (depends
on postcuring unit)
Elastic modulus:
ca. 1600 MPa
Flexural strength:
ca. 80 MPa
Elongation at break:
ca. 5 %
Hardness:
ca. 85 Shore D
- Storage:

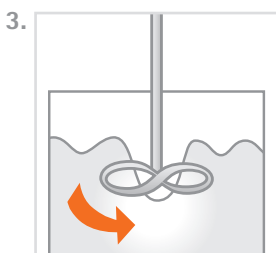
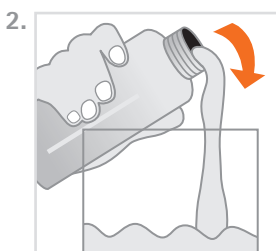


Ordering information:

Standard packing:

1kg bottle,
red
item no.: D1000739

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



1. Product description

pro3dure's generative resin **GR-12 LCD cast** is a resin for the generative production of dental castforms based on LCD image projection systems (≥ 405 nm). The formulation of **GR-12 LCD cast** 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 10 up to 100 μ m. It is recommended to use the pro3dure medical curing device **CD-1** or **CD-2** for post curing.

2. Processing

- **GR-12 LCD cast** bottles should be well shaken before use (fig 1).
- Make sure that **GR-12 LCD cast** material is temperature adjusted up to 23 °C to 30 °C.
- Carefully pour **GR-12 LCD cast** 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 LCD cast** 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-12 LCD cast** 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. 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-12 LCD cast** can be repaired and used with dental investment compounds 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-12 LCD cast**. It is recommended to filtrate and stir up the resin on a regular base (fig 3). To avoid bubbles let **GR-12 LCD cast** rest for 1 hour before usage.

Contains: Urethanedimethacrylates, 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 LCD cast** 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-12 LCD cast** 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.

**GR-12
LCD cast**

idea to product.