

Introduction

These instructions for use are directed to dentists and dental technicians who use SHERAprint-cast&press as a burnout, light-curing 3D printing resin for the production of different types of cast - pressed objects. SHERAprint-cast&press is intended to be used for dental profession only. These instructions also include safety and disposal instructions. You may find the safety data sheet on digital.shera.de. In case of any further questions regarding handling, please contact the SHERA team. Kindly note the information mentioned at the end of this document.

1. Introduction

SHERAprint-cast & press is a material consisting of acrylic resins, initiators and dyes for the production of cast-pressed objects.

2. Description / Results

SHERAprint-cast&press can be used in all 3D printers with DLP procedure. We recommend using this material with a 3D printer SHERAprint/SHERAeco-print which provides an integrated LED light source. This combination leads to optimal results.

3. Indications

SHERAprint-cast&press should exclusively be used for the production of cast - press objects. Disregarding the instructions for use may have a negative effect on the chemical and physical quality of SHERAprint-cast&press. In case of allergic reaction please seek for medical professional's attention.

4. Hazards and precautionary statements (H&P phrases) Inhalation:

Wear protective clothing when working with SHERAprint-cast & press. Safety glasses and nitrile gloves are recommended. Information on the use of the product can be found in the safety data sheet, which is available at www.shera.de.

Unpolymerized material may cause skin irritation, allergic skin reactions, severe eye irritation and severe respiratory irritation. Avoid breathing vapors, use suction. Avoid contact with the material or wear protective gloves, protective clothing, eye protection. In case of contact with the skin wash off with plenty of water and soap. If skin irritation or rash occurs, seek medical advice. Repolymerized material is harmful to the environment, avoid release to the environment.

Hazard Statements:

H315 Causes skin irritation.

H317 can cause allergic reactions to your skin.

H411 Toxic to aquatic life with long lasting effects.

5. Storage conditions, expiry date and transport

Store the product in a dry place, protected from light, in the original packaging at room temperature (between 4 and 25 °C). Close the packaging after use. The expiry date can be found on the label. After the expiration date, the handling and quality of the product can no longer be guaranteed.

6. Application of SHERAprint-cast&press

We advise to use nitrile gloves when using SHERAprint-cast&press.

Before using SHERAprint-cast&press, make sure to mix up the product in the original packaging thoroughly using a spatula. Color deviations and print failures may occur when shaken insufficiently.

Make sure that you work as clean as possible. Dirty reservoirs or machines can cause deformation and therefore failure of the printed objects!

Pour the liquid material in the reservoir of the 3D-printing machine. Start the machine.

Follow the instructions for use for the printer. These are delivered together with the printer. When the machine has finished its program remove the building platform from the machine. Loosen the big black screw on the top of the platform. Place the platform on some paper or cloth with the built-up jobs facing upwards. The printed jobs can now be removed from the platform using a putty knife.

6.1 Cleaning

The printed objects are cleaned in two purification steps under flowing conditions in containers with SHERAultra-p.

pre-cleaning:

Clean the printed objects in SHERAultra-p for 3 minutes to remove residual liquid plastic.

General cleaning:

Clean the printed objects in fresh SHERAultra-p again for 2 minutes.

The two cleaning steps should not exceed a total time of 5 minutes, otherwise damage to the printed object may occur.

6.2 Post light-curing

For burn out objects, re-exposure is not mandatory. If a brittle behaviour of the material is desired, we recommend a re-exposure of a maximum of 2 x 1000 flashes according to the following procedure:

Dry the cleansed object with compressed air and make sure that no remnants of the cleaning liquid remain on the printed object. Place the objects in a UV light curing unit. For best results we recommend the SHERAflash-light plus. Expose the work with 1000 flashes. Allow the work to cool, apply and expose again with 1000 flashes. Devices with a protective gas atmosphere prevent the formation of an inhibition layer.

The information on the SHERA materials was determined based on test prints with SHERAprint / SHERAeco-print and the corresponding settings stored in the software.

Note that the light sources and printing machines require regular maintenance as specified by the manufacturer.

7. Finishing

Remove any support structures and finish jobs if necessary, using conventional dental methods and instruments.

Optionally, re-cleaning in an ultrasonic bath, e.g. SHERAultra-p, necessary. Differences in color nuance may occur due to production in batches of the raw material and product or inadequate mixing before use.

Before embedding the cast and pressed objects, make sure that they are free of any residual liquid or residual cleaning fluid.

8. Casting

Please follow the instructions for use of the investment manufacturer. We recommend SHERAVEST-RP.

9. Disposal

The product SHERAprint-cast&press in its polymerized form is not environmentally harmful.

Residual waste material in its liquid state should be delivered to a waste material collection point.

10. Cleaning

SHERAprint 3D-print material should be cleaned with non-chemical products.

11. Scope of delivery

The product SHERAprint-cast&press is available as follows:

1000g

Explanation of symbols on labeling:



Keep away from sunlight



Batch number



Consult instructions for use



Manufacturer



Use-by date

Warranty

SHERA Werkstoff-Technologie GmbH & Co. KG is certified according to DIN EN ISO13485 and guarantees for the products, due to a thorough quality control system, a flawless quality of its products. Our instructions for use are based on the results of our test laboratory. The technical data given can only be guaranteed if the processing is carried out as mentioned. The user is self-responsible for processing of the products. We are not liable for faulty results as SHREA has no influence on the processing. Nevertheless possibly arising claims for damages relate to the value of the products only.

