Terrariums & Aquariums

Practical tips

HP-Textiles

About us

Since the company was founded in 2004, HP-Textiles GmbH has stood for the development and distribution of fibre-reinforced materials. In addition to a wide range of fibre reinforcement materials and specially formulated epoxy resins, further strategic business areas have been created with DeinTeich.de and bredderpox®. As a result, our satisfied customers include not only the composites industry but also users from the pool construction and surface protection systems sectors.

Our business areas:

HP-Textiles
Composite Materials

www.hp-textiles.com/shop

DeinTeich.de
Teich Pool Dach
GRP Coatings

www.deinteich.de

bredderpox®
Building Chemistry

breddermann-kunstharze.de

In order to guarantee our business partners a continuously high quality of our services as well as optimal process reliability, the quality management of HP-Textiles was certified according to DIN EN ISO 9001 in 2011. Through enthusiasm and passion for scientific research, coupled with an understanding of our customers‘ wishes, we guarantee optimal product properties in the future as well.
Together with strong partners from science and industry, we also offer custom synthesis and manufacturing of a wide variety of products. The establishment of a networked, cross-company development allows us to respond to customer wishes even at short notice. Variable batch sizes enable us to supply large industrial customers as well as small quantities for project developments.

Our young, qualified team, a large warehouse and reliable logistics partners guarantee fast processing of your order.

The constant further development of our product range should also be a basic requirement in the future in order to guarantee optimum component properties at economical prices!

Your team of
HP-Textiles GmbH

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Our aquarium & terrarium resins

Wet terrariums & aquariums

HP-E45T
- Low viscosity
- For solid substrates (OSB, stone,...)

HP-E45TM
- Medium viscosity
- For soft or non-porous substrates (styrofoam,...)
- Suitable for marine aquariums or drinking water coatings

Desert Terrariums

HP-E25TU
- Low viscosity
- For solid substrates (OSB, stone,..)
- Suitable for the use of UV lamps

HP-E25TMU
- Medium viscosity
- For soft or non-porous substrates (styrofoam,...)
- Suitable for the use of UV lamps

Technical data sheet of epoxy resins

Sealing

With wooden terrariums there are several options for sealing and design. In aquarium construction, the aquarium is also sealed.

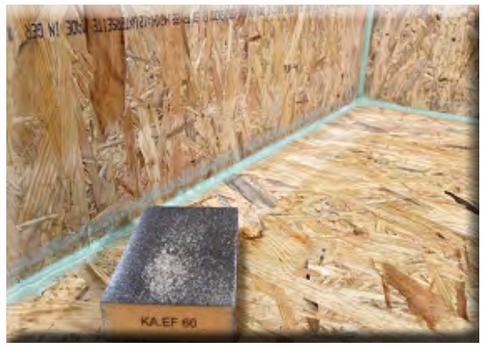
Preparation:
Sand and clean the substrate.
The corners should be pre-finished with an epoxy filler or epoxy resin with fillers before coating.

Mixing the putty

Applying the epoxy putty

Approximately 2 hours after application of the filler, the actual sealing can be started.
If the filler has completely hardened, it must be sanded before sealing.

All products used are listed in detail on pages 15 and 16.



Unevenness can, if necessary, be ground off with a sanding block.

Mix the appropriate resin with the hardener according to the mixing ratio.

Mix thoroughly and intensively with a stirring rod, including the edge zones and the bottom of the cup. Repot to avoid unabsorbed resin residues at the bottom of the cup and stir again.

Mix resin and hardener

Video: Mixing epoxy resin and hardener:

Application of the epoxy resin system

The ready-mixed system is applied directly to the wood.

For a more beautiful surface and for stability reasons, a glass fabric can be incorporated. To do this, first apply a layer of resin to the wood and then directly insert a fabric or scrim, which is then soaked with the resin mixture.

Coating with glass fabric finish

After drying/curing, the protruding fabric can simply be cut off with a cutter knife.

Excess glass fabric is cut off

Back wall design

With color pigments

After the mixed system has been dressed to the point where it is no longer liquid but still slightly tacky, the design can begin.

For a colorful design, our color pigments/pastes can be stirred into the mixed system and applied. It is also possible to sprinkle dry sand or dried coconut fibers or similar into the final resin layer.

Weigh resin and hardener accurately and mix well.

Mix in the desired color (15-20%). The individual pigments can be mixed with each other. This means that you can also create your own colors from the colors available.

Caution: Color becomes darker in the epoxy resin. Crush any lumps.

Transfer the finished mixture to a paint tray.

Apply evenly with a velour roller. Depending on the color and substrate, approx. 2-3 coats are necessary. Allow the previous coat to set until it is still tacky but no longer liquid.
Attention: Avoid runners.

With sand and coconut fibers

It is possible to use different colored sand, coconut fiber and other products for the design application.
Attention: the material used must be absolutely dry.

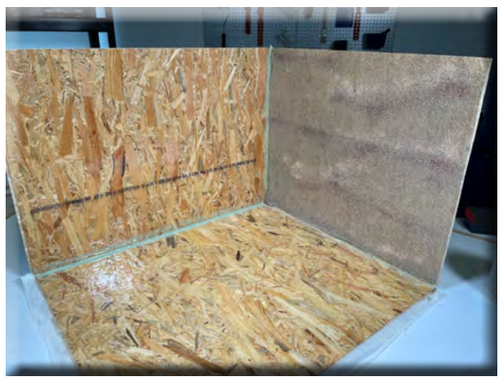
After the first coat of epoxy resin has dried but is still slightly tacky, a second coat is applied.

Sand substrate can be sprinkled into this still wet epoxy layer. A natural look can be achieved with different colored material, e.g. by scattering in layers or shapes.

Attention: The material used must be absolutely dry.

After drying, remove the excess sand.

Then sand generously to achieve a closed appearance.



Finished side wall

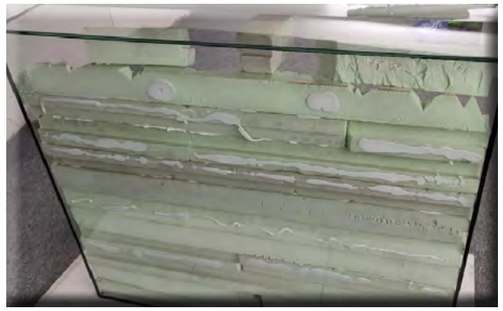
Coating preformed back wall

A back wall made of materials such as Styrofoam, Styrodur, PU foam, tile adhesive and many more can also be coated.

Place the terrarium or aquarium on the back wall.

Styrodur is very suitable for carving shapes.

Place the roughly shaped parts on the back panel accordingly. Finer structures can be introduced as desired.



When all the parts are carved, they can be glued in place with acrylic or aquarium silicone. Here you need to pay attention to the drying time.

When the bonding has dried sufficiently, the actual coating can be started. Mixed epoxy resin is applied according to the specifications and directly sprinkled dry substrate. If the substrate shows through, the process can be repeated as often as necessary.

Afterwards, branches or other decorations can be glued into the back wall, e.g. with silicone.

PREFORMED BACK WALL

Stone Back wall creation in silicone molds

Video: Back wall creation part 1 & 2:

Scan now and watch matching videos!

The silicone resin is used to cast an existing stone wall is molded, and in the next step coated again to create a replica of epoxy resin, glass scrim and quartz sand.

Mix resin & hardener according to mixing ratio. Mix thoroughly and intensively with a stirring rod, including the edge zones and the bottom of the bucket.

Repot to avoid uncaptured resin residues at the bottom of the bucket and stir again.

By adding a thixotropic agent for silicone, the compound becomes more viscous, which optimizes the flow properties. In addition, this shortens the processing time.

The surface must be clean and dry for the impression. Pour the silicone onto the surface and spread it evenly with a brush or similar. Apply the silicone generously to increase stability.

After approx. 5 hours at 20°C, the cured silicone can be demolded.

After demolding and complete drying of the silicone, the release agent is applied to the silicone mold. The drying time of approx. 15 minutes at 20°C must be observed.

After complete drying of the release agent, the appropriate epoxy resin is mixed and applied to the silicone mold and evenly distributed with a brush.

Dry sand is spread directly on the liquid mixture in the desired color and grain size.

For reinforcement, a glass fabric or scrim is placed on the sand surface and carefully impregnated with the epoxy resin.

Allow to cure for at least 24 hours at 20°C and then demold.

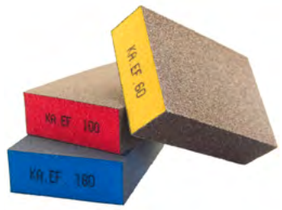
Protruding scrim or tissue can be easily removed with a cutter knife.

Products used

Sealing

- Filler system: HP-E30S
- Sanding sponges: HP-SS
- Brush: e.g. HP-L1101
- Velour Roller: e.g. HP-L1015
- Polyamide Roller: e.g. HP-L1016
- Glass fabric: e.g. HP-T194EF
- Suitable aquarium or terrarium resin (see page 4)

Filler system



Sanding sponges

Glass fabric

Back wall design

- Color pigment: HP-FD
- Plastic Resin Tray: e.g. HP-L51
- Velour Roller: e.g. HP-L1067
- Suitable aquarium or terrarium resin

Color pigment

Plastic Resin Tray

Velour Roller

Preformed back wall

- Suitable aquarium or terrarium resin (see page 4)

Silicone mold

- Silicone rubber: HP-SI30GB
- Thixotropic: HP-SI-VD
- Brush: e.g. HP-L1002
- Mold release agent: HP-BM17
- Glass fabric: e.g. HP-B320E
- itable aquarium or terrarium resin (see page 4)

Silicone rubber

Mold release agent

Glass fabric

General

- Table scale: e.g. HP-VZ3006
- Wood spatula / plastic Stirrer: e.g. HP-L1061 oder HP-L1120
- Plastic cup or Bucket: HP-L1064 oder HP-L1046
- Gloves: e.g. HP-L1053 or nitrile gloves
- Scissors: e.g. HP-L1054
- Acetone: HP-AC
- Suitable aquarium or terrarium resin (see page 4)

Table scale

Plastic cup

Acetone

Various tools and aids

Customer projects

More information

In our video and download portal of our online store www.hp-textiles.com/shop you will find various working instructions and videos on different topics. Some examples are listed here and can be accessed conveniently via the QR codes.

Work instructions

Boat building

Pond & Pool Coating

Application videos

Often asked questions

Do I have to pay attention to a certain occupational safety during processing?

- Keep out of the reach of children
- Avoid inhalation of vapors and product contact with skin
- Wear suitable protective gloves and goggles
- Do not eat, drink or smoke during application

Where can I find detailed information about the products?

- Information on the products in the online store at www.shop.hp-textiles.com
- Further information in the technical data sheet

What is the best way to store the products?

- Epoxy resins are best stored in a cool place (approx. 15°C)
- Shelf life at least 12 months with optimal storage

What do I have to consider when disposing of the products?

- Do not allow to enter drains, watercourses or the ground
- Uncured products are hazardous waste
- The cured system is construction site waste / household waste

How can I clean the tools?

- Remove uncured product residues from tools with acetone or Thinner XB
- Allow to air thoroughly after washing out with solvents
- Cured product residues can only be removed mechanically (e.g. by grinding)

Our business areas:

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