Technical Data Sheet

weber.tec 793

EP resin binder for versatile uses

2-comp. multi-use epoxy resin binder for resin mortars, bondcoats and as adhesive

Fields of application

As bonding layer for reaction resin mortars.
Also as binder for reactive resin mortars mixed with silica sand for thick applications on horizontal concrete surfaces and screeds.
Also as glue for several materials.
For use indoors and outdoors.

Description

weber.tec 793 is a factory-mixed 2-component and transparent reaction resin based on epoxy resin.

Composition

Epoxy resin

Main features

- **EMICODE EC 1^{PLUS}**: low emission of volatile substances
- 100% solids content (i.e no water and no solvent) as epoxy composition according to the test method of German Association for Construction Chemicals
- high compressive, flexural and bonding strengths
- excellent adhesion to concrete and screeds
- resistant to numerous diluted acids and alkalis
- resistant to animal and vegetable oils and fats
- for use indoors and outdoors

Saint-Gobain Weber GmbH
Schanzenstr. 84, D-40549 Düsseldorf
Contact: export.de.weber@saint-gobain.com

Technical values

Curing time:	approx. 12 hours
Application temperature:	+ 15°C - 30°C
Pot life:	approx. 35 minutes
Density:	approx. 1.1 kg/dm³
Application thickness:	depends on application
Mixing ratio:	comp A (resin base): comp B (hardener) = 73 : 27 parts by weight
Open to foot traffic:	approx. 24 hours
Water vapour diffusion resistance coefficient (μ):	approx. 50.000
Class of reaction to fire:	Efl (EN 13501-1)
Clean-up	thinner weber.sys 992 (fresh product); mechanical means (dry product)

Quality control

weber.tec 793 is subject to a regular quality control.

General notes

- All characteristics mentioned in this data sheet are given for a temperature of +23°C, without draught and a relative humidity rate of 50%.
- Higher temperatures and lower humidity rates accelerate, lower temperatures and higher humidity rates delay the reaction process.
- Larger packaging sizes and higher temperatures shorten the pot life.
- As a rule, reactive resins require a compressive strength ≥ 30 N/mm^2 and a tensile strength (pull-off strength) of concrete surfaces ≥1.5 N/mm^2.
- The residual moisture content of the concrete must not exceed 4 CM-% (by weight); the moisture content must be measured with a carbide hygrometer (CM) as a rule.
- The substrate temperature must be at least 3°C above the prevailing dew point temperature to avoid risk of condensation.
- Reactive resins are gas- and watertight coatings; therefore, detachments due to water vapour pressure and/or frost-thaw damage cannot be completely excluded.
- Do not process when it is raining or threatening to rain.
- Do not add foreign substances during mixing and application.

Saint-Gobain Weber GmbH
Schanzenstr. 84, D-40549 Düsseldorf
Contact: export.de.weber@saint-gobain.com

Substrate preparation

- The substrate must be sufficiently load-bearing, clean, dry, dimensionally stable, and free of all adhesion-impairing particles and substances.
- Carefully remove loose or flaking mortar and paint residues.
- If necessary, prepared the substrate by appropriate mechanical means, like milling, shot peening etc. to achieve an open textured surface.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

Mixing

- weber.tec 793 is supplied in 2 pre-mix twin packagings (component A = resin base and component B = hardener) with the specific mixing ratio for use; avoid mixing of partial quantities.
- Empty the component A totally into the component B.
- Mix both components with a slow-speed electric drill and with the stirrer weber.sys Rührpaddel no. 8 for approx. 2 minutes, until a homogeneous mixture of uniform colour is achieved.
- Take care that the product is also thoroughly mixed in the corners and at the bottom of the mixing container.
- We recommend decanting into a clean container and mixing shortly again.
- When mixing the epoxy resin with high quantities of silica sand, a forced-action mixer is compulsory due to the stiffness of the (mixed) material.

Application as bonding layer

- First apply the epoxy resin primer weber.prim 807, smooth down uniformly with a shorthair lambskin roller in cross motions.
- Whilst it is still tacky (waiting time 2 - 4 hours), apply a rich coat of weber.tec 793 as bonding layer, using first a rubber squeegee and afterwards a shorthair lambskin roller.

Application as binder for epoxy resin mortar

- Mix 1 volume of weber.tec 793 with 4 volumes of oven-dried silica sand (0 - 2 mm) for application in a layer thickness of 6 mm up to 20 mm.
- As above described, first apply the resin (uncut – without silica sand) as primer and also as bonding layer.

- Always work "wet-in-wet": priming coat and bonding layer must be tacky before they will be over-worked.
- Without delay after the installation of the bonding layer apply the prepared and mixed epoxy mortar screed "wet-in-wet" (on the tacky bonding layer).
- Apply the epoxy mortar in the intended layer thickness, using a flat trowel, a gauge, a lathe or a levelling board.
- Compact and smoothen the epoxy mortar either manually with a smoothing trowel or mechanically with a power trowel.
- Whenever the epoxy mortar will receive an epoxy coating (for ex. weber.tec 796), scatter the silica sand weber.floor 4936 (0.3 - 0.8 mm) at a rate of approx. 1.5 - 2.5 kg/m², whilst the epoxy mortar is still tacky.

Application for repair of defective floors

- Mix 1 volume of weber.tec 793 with 3 – 5 volumes of oven-dried silica sand in accordance with the required thickness.
- For levelling out unevennesses ≤ 2 cm use silica sand with a grain size of 0 - 4 mm.
- For levelling out unevennesses ≥ 2 cm use silica sand with a grain size of 0 - 8 mm.
- First apply the epoxy resin primer weber.prim 807 as primer and afterwards weber.tec 793 as bonding layer.
- Without delay place the mixed epoxy mortar onto the fresh bonding layer in the defective areas in the requested thickness, rule level and smooth down, using a flat trowel or a wide spatula.

Practical information

Colour:
transparent

Tools:
Electric drill + stirrer weber.sys Rührpaddel no. 8, forced-action mixer (for epoxy mortars); for application as primer and bondcoat: shorthair lambskin roller and rubber squeegee; for application as epoxy mortar: smoothing trowel, gauge, lathe, levelling board (aluminium beam), power trowel, wide spatula

Storage:
The product can be stored at least 24 months in its original unopened packaging, if kept dry.

Consumption / yield

as bonding layer:	approx. 400 - 700 g/m²
as binder for reactive resin mortar (1 volume resin: 4 volumes silica sand) in 10 mm layer thickness:	approx. 2.9 kg/m²

Packagings

Type	Sales unit	Number / euro-pallet
Metal bucket (kit with comp. A + comp. B)	1 kg	9 buckets / cardboard
Metal bucket (kit with comp. A + comp. B)	3 kg	56 buckets
Metal bucket (kit with comp. A + comp. B)	8 kg	45 buckets

The information in this technical data sheet is based on our current knowledge and experience at the time of printing. However, they do not guarantee in the legal sense.

Saint-Gobain Weber GmbH
Schanzenstr. 84, D-40549 Düsseldorf
Contact: export.de.weber@saint-gobain.com