



2-component Epoxy PROTECTIVE coatings

- TAR-FREE
- EXCELLENT ADHESION AND CURING TO WET SURFACE (WITHOUT MOISTURE BARRIER LAYER)
- Solvent free
- Excellent resistance against specific chemicals
- Excellent adhesion to concrete and metal surface
- Cures at low temperatures
- Good flexibility
- Easy to apply by brush, roller or sprayer

PRODUCT DESCRIPTION

webershield 146 is a 2-component epoxy based protective coating with solvent-free & tar-free that protects concrete and metal against chemicals, corrosion and abrasion in aggressive environments, such as manholes, pipelinings, sewage linings, etc...

The product does not require special primers. High build-may be applied up to 250 microns in one coat.

APPLICATION

webershield 146 is suitable for these areas:

- Concrete surface
- Metal surface
- Tank lining: sewage/waste water, sea water...
- Manholes
- Pipelining

PACKAGING AND STORAGE

Packaging	5kg/ set (part A + part B) Part A: resin 2.5Kg/drum Part B: hardener 2.5Kg/drum
Color	Light grey Black (glossy)
Shelf life and storage	Shelf-life: 12 months from production date in case of stored properly in unopened original packaging. Storage conditions: Dry conditions at temperature between +5°C and +30°C..

TECHNICAL INFORMATION

Characteristic	webershield 146
Chemical base	Epoxy
Density	Part A: ~ 1.58 g/cm ³ Part B: ~ 1.33 g/cm ³ Mixed resin ~ 1.46 g/cm ³
Mixing ratio	1:1 (by weight)
Recommended system	Primer: 1 layer of webershield 146 Coating: 2-3 layers of webershield 146
Consumption	Primer: 0.15 – 0.25 kg/m ² Coating: 0.3 – 0.4 kg/m ² /layer (depend on substrate condition and coating thickness required).
Solid content	98% ±2
Bonding strength	> 2.0 N/mm ²
Chemical resistance	Refer separate chemical resistance list
Application conditions Substrate temperature Ambient temperature	+8°C to +30°C +8°C to +30°C
Thermal resistance Permanent exposure Short-term exposure (max 7 days) Short-term exposure (max 12 hours)	+50°C +80°C +100°C
Note: Short term humid heat* up to +100°C where exposure is only occasional (steam cleaning etc.) *No simultaneous chemical load.	

SUBSTRATE QUALITY

- The concrete substrate must be at least 14 days old, sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².
- The substrate must be free of cement slurry, dust, grease, loose and friable particles and other contamination. Blast cleaning increases adhesion. This is particularly important in case of underwater exposure.
- In case of doubt, apply a test area first and ask support from Weber technical service.

SUBSTRATE PREPARATION

Concrete: Concrete substrates must be prepared mechanically using abrasive blast cleaning or high pressure water jet cleaning to remove cement laitance and achieve an open textured surface. Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.

- Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate suitable materials. The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.
- High spots must be removed by e.g. grinding. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

Steel and iron: surfaces must be blast cleaning according to ISO 12944 – 4.

MIXING

- Mix part A thoroughly, then add to part B and mix until homogeneous. Not dilute or add other ingredients to the product.
- To ensure thorough mixing, pour materials into another container and mix again to achieve a homogeneous mix.
- In case of using small quantities, the mixing proportions stated must be respected accurately.

APPLICATION

- Applied **webershield 146** by brush, roller or airless sprayer.
- Tools cleaning: Clean all tools and application equipment with thinner immediately after use. Hardened and/or cured material can only be mechanically removed.

APPLICATION NOTICE

- Recommended dry film thickness:
 - 250 µm (in several layers) for normal conditions.
 - 500 µm (in several layers) for severe conditions.
- Do not apply **webershield 146** on substrates in which significant vapor pressure may occur.
- Stability in vertical surface: < 300 µm (wet film thickness).
- Freshly applied **webershield 146** must be protected from damp, condensation and water for at least 24 hours.
- Avoid puddles on applied surface.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.
- For exact colour matching, ensure **webershield 146** is applied from the same control batch numbers.

• Pot-life:

Temperature	Time
+10° C	~90 mins
+20° C	~60 mins
+30° C	~30 mins

- Waiting time/overcoat ability: in case of coats up to 150 µm dry film thickness

Substrate temperature	Minimum	Maximum
+10° C	30 hours	3 days
+20° C	10 hours	2 days
+30° C	6 hours	1 day

Notes: : Times are approximate and will be affected by changing ambient conditions. If these waiting times cannot be observed inter-coat adhesion problems must be expected and activation will have to be carried out. The best activation method is by light grinding / blasting and followed by thorough de-dusting prior to apply of the next coat.

- Curing details:

Temperature	Foot traffic	Light traffic	Full cure
+10° C	~ 2 days	~ 5 day	~ 14 days
+20° C	~ 1 days	~ 4 days	~ 10 days
+30° C	~ 18 hours	~ 2 days	~ 5 days

Notes: Times are approximate and will be affected by changing ambient conditions.

- All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

HEALTH & SAFETY INFORMATION

- Avoid direct contact with skin or eyes. When getting into eyes, wash with plenty of clean water and see a doctor immediately.
- Keep out of the reach of children.
- Users should refer to the information and recommendations regarding the safe use, storage and disposal of products of the chemical group in latest technical safety documents on physical, chemical, toxicological, ecology and related safety criteria. Refer to MSDS for more detail.
- Ecology: Do not disposal into water.
- Waste disposal: According to local law.

Disclaimer:

The information related to Weber products is provided and recommended based on our knowledge and experience under properly stored, tested and used conditions under standard conditions. In practical applications, due to differences in materials, aggregates and actual site conditions, we do not guarantee the products will be suitable for any specific purpose, nor any legal binding on information, recommendations or advice from us. Users need to consult the latest documentation provided by us as well as check the product's suitability for the desired construction purpose.