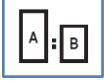


EP-400



Solvent-free, epoxy resin-based floor and wall coating

Description

A two-component, solvent-free, epoxy resin-based protective colored coating for floors and walls with excellent mechanical and chemical resistance. It forms a durable, hygienic, and long-lasting coating on concrete and cement-based surfaces, providing outstanding resistance to abrasion, impact, oils, and a wide range of chemicals.

Advantages

- Solvent-free.
- Suitable for both horizontal and vertical surfaces.
- Low VOC content.
- Provides excellent mechanical strength.
- Highly resistant to abrasion.
- Offers excellent resistance to a wide range of chemicals.
- Resistant to oils and greases.
- Prevents dust formation on concrete surfaces.
- Easy to clean and maintain.
- Creates a smooth, glossy, and aesthetically pleasing finish.
- Provides excellent adhesion to concrete substrates.
- Exhibits outstanding adhesion to epoxy coatings, concrete, steel, and cementitious surfaces.
- Forms a waterproof protective coating.
- Can be used as an anti-corrosion coating in the construction industry.

Areas of Application

- As a protective finish coat for horizontal and vertical surfaces such as epoxy coatings, concrete, natural stone, epoxy mortars, wood, anti-corrosion steel, and cementitious substrates.
- As an anti-corrosion protective coating in the construction industry.
- Factory and industrial production facilities.
- Acid and chemical storage areas and containment tanks.
- Warehouses and logistics centers.
- Car parks and parking garages.
- Hospitals and healthcare facilities.
- Food processing and manufacturing plants.

- Pharmaceutical manufacturing facilities.
- Shopping malls and commercial centers.
- Workshops and maintenance facilities.
- For the protection and decorative coating of concrete floors.

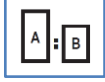
Surface Preparation

- The substrate must be clean, sound, and free from paint, paint residues, bitumen, curing compounds, dust, oil, grease, and any other contaminants that may impair adhesion.
- Ensure that the substrate is free of any loose or weak layers. Any unsound material should be mechanically removed. Surface defects, voids, and damaged areas must be repaired using Hammerfast Epoxy Mortar repair mortar before application.
- Dust should be removed thoroughly using an industrial vacuum cleaner.
- The concrete substrate must have a minimum pull-off strength of 1.5 N/mm² and a minimum compressive strength of 25 N/mm².
- The moisture content of the concrete must be below 4%.
- Priming the surface with Hammerfast EP-112 Epoxy Primer before application is recommended.

Application

- Pour Component B into the container of Component A and mix thoroughly for 3–4 minutes using a low-speed electric mixer (300–400 rpm) until a homogeneous mixture is obtained.
- Transfer the mixed material into a clean container before taking it to the application area and applying it.
- Use the mixed material within its specified pot life. Do not dilute or attempt to rework material that has begun to thicken.
- Hammerfast EP-400 can be applied by brush, roller, or airless spray. The final surface texture depends on the application method and, when using a roller, on the type of roller selected. Apply one or two coats at a consumption rate of 240–300 g/m² per coat.
- If a second coat is required, it should be applied within 48 hours after the first coat.

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Technical Properties

Color	Component A: Colored liquid Component B: Clear / Light yellow
Mixing Ratio (A)	5:1 (by weight)
Density (A+B)	1.65 ± 0.10 kg/L
Viscosity (A+B)	~2,000 mPa·s
Pot Life	20–25 minutes
Gel Time	~60 minutes
Light Traffic Resistance	48 hours
Overcoating Interval (Min./Max.)	Minimum: 18 hours Maximum: 48 hours
Full Cure Time	7 days
Application and Substrate Temperature	+10°C to +35°C
Service Temperature (Continuous)	-20°C to +60°C
Maximum Substrate Moisture Content	Maximum 4%
Shore D Hardness (DIN 53505)	80 (after 7 days)
Compressive Strength (EN 196-1)	50 N/mm ² (after 7 days)
Flexural Strength (EN 196-1)	25 N/mm ² (after 7 days)
Adhesion Strength (EN 1542)	≥ 2.0 N/mm ² (Concrete failure)
Impact Resistance	~20 Nm
Taber Abrasion Resistance (ISO 5470-1)	90 mg
BCA Abrasion Resistance (EN 13892-4)	50 µm
Reaction to Fire (EN 13501-1)	EFL
HS Code (GTIP)	3208.90.91.00.19

Note: All values are based on laboratory conditions at 23 ± 2°C and 50 ± 5% relative humidity.

Consumption

For Primer Application:

Hammerfast EP-112 Epoxy Primer: 0.4–0.6 kg/m²

For Topcoat Application:

Hammerfast EP-400 Epoxy Coating: 0.4–0.5 kg/m²

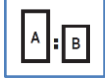
Points to Consider

- The stated technical values are typical laboratory test results. Actual performance may vary depending on site conditions, substrate absorbency, and ambient temperature.
- Incorrect mixing ratios, insufficient mixing, or the use of unsuitable equipment may result in curing problems and surface defects.
- This product is intended for professional use. A trial application is recommended before applying to large areas.
- Do not apply at temperatures below +10°C or above +30°C, as the pot life and curing times will be affected.
- The coating can be opened to light foot traffic after 48 hours.
- Full resistance to heavy loads and chemical exposure is achieved after 7 days.
- Epoxy resins are prone to yellowing when exposed to UV radiation. For exterior applications or areas exposed to direct sunlight, the coating should be protected with a UV-resistant topcoat.
- Do not cover the coated surface with cardboard, plastic sheets, or other materials before the full curing period of 7 days has elapsed.
- Do not clean, wash, or expose the coating to liquids until the full curing period of 7 days has been completed.
- Proper substrate cleaning is essential for the long-term performance of the coating. Do not proceed with the application until the surface has been thoroughly cleaned. The use of an industrial vacuum cleaner is recommended.
- Do not apply the product directly to substrates exposed to continuous water immersion or negative hydrostatic water pressure.
- The product has limited resistance to highly concentrated acids and certain solvents. A compatibility test is recommended before use.
- Material consumption may vary depending on the coating thickness, substrate condition, and the use of aggregates.

Cleaning of Tools

Clean all tools and application equipment immediately after use with epoxy thinner or a suitable cleaning solvent. Hardened material can only be removed mechanically.

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Safety Precautions

- Keep out of reach of children.
- Do not eat or swallow the product.
- Keep away from food, beverages, and animal feed.
- Avoid breathing vapors and avoid direct contact with skin and eyes.
- May cause an allergic skin reaction.
- In case of contact with eyes, rinse immediately with plenty of clean water and seek medical attention.
- It is recommended to wear suitable protective gloves, safety goggles, and protective clothing during application.
- Wash hands thoroughly with soap and water after handling the product.
- For detailed safety information, refer to the Safety Data Sheet (SDS).

Storage and Shelf Life

Store the product in its original, unopened packaging in a dry, moisture-free environment, protected from direct sunlight and frost, at temperatures between +10°C and +30°C. Under these conditions, both Component A and Component B have a shelf life of 12 months from the date of manufacture.

Keep the container tightly closed when not in use. Do not stack pallets on top of each other.

Packaging

Component A: 5 kg plastic pail
Component B: 1 kg plastic pail

Quality Certifications

- CE
- ISO 9001
- ISO 14001



Chemical Resistance Table

Hardened specimens of Hammerfast EP-400 measuring 2.5 × 7.5 × 0.3 cm were cured under standard laboratory conditions for 7 days and then immersed in the following chemicals at 22°C for 30 days. The test results are presented in the table below.

Sulfuric Acid (10%)	Unaffected
Sulfuric Acid (30%)	Unaffected
Hydrochloric Acid (30%)	Unaffected
Formic Acid	Unaffected
Nitric Acid (30%)	Unaffected
Ethyl Alcohol (Ethanol)	Unaffected
Acetic Acid (10%)	Unaffected
Caustic Soda (20%)	Yellowing Observed
Leaded Gasoline	Unaffected
Toluene	Unaffected
Xylene	Unaffected
1,1,1-Trichloroethane	Unaffected
Skydrol 500A (Hydraulic Fluid)	Unaffected
Octanol	Unaffected
Fruit Juices	Unaffected
Gasoline (98 Octane)	Unaffected
Sulfuric Acid (10%)	Unaffected

