

1. Product Description

StenAst® 2EP MT is a two-component epoxy primer that can be diluted with water. Being water-based, it can be applied to wet and damp surfaces. Moisture-tolerant and permeable to water vapor, it is a very good primer.

With its ability to penetrate the surface, it can be used as a surface protector and hardener. By penetrating deep into the concrete, it prevents water diffusion into the topcoat.

2. Uses

StenAst® 2EP MT is a two-component, water-based epoxy primer, prepared for topcoats and surface materials such as StenCoat®, StenSeal®, StenSport®, StenCare® to be applied especially on concrete, steel, wood, epoxy and polyurethane surfaces. It is a waterproof primer that can be used on asphalt and concrete floors in indoor and outdoor areas. It ensures adhesion of polymer-modified cement-based materials applied to old concrete for repair or coating purposes.

It is used to fill hairline cracks that form on the concrete surface and as a surface hardener and dust inhibitor for concrete pavements. It is preferred on rough, absorbent and cracked surfaces because of its high penetrating ability. It penetrates deep into the cracks and pores in these surfaces and prepares the substrate for the topcoat application. It is also used alone in areas with shrinkage cracks to protect the concrete from freeze/thaw damage.

3. Application

3.1. Surface Preparation

The surface must be free from contaminants such as loose material, oil, grease and paint; the concrete may be damp, but there must be no standing water on the surface. This is especially important if a polyurethane material will be applied to the primed surface. The moisture content of the concrete pavement must be determined.

If the moisture vapor emission rate is higher than 0.75 kg/24 hours/100 m² (ASTM F-1869/98) or relative humidity measured by hygrometer is higher than 75%, **StenAst® 2EP MT** must be applied in at least two coats. Surface moisture is not a problem where the product is used to ensure adhesion between old and new concrete. Contaminants adhering to the surface must be removed by sandblasting or grinding.

Contaminants that have penetrated into the concrete must be removed using cleaners capable of dissolving the contaminant, followed by cleaning with detergent and water. In areas where complete removal of contamination is uncertain, it is recommended to conduct an adhesion test before coating.

3.2. Application

It is recommended to condition the materials at 20-30 °C for one day before application. During application, surface and air temperature must be at least 10 °C and the temperature must not drop below 10 °C for 24 hours following the application. Before starting the mixing process, a container large enough to mix all the components easily with a mixer is prepared.

Two-Component, Water-Based, Moisture Tolerant Epoxy Primer and Surface Protector

Highlights

- Penetrates deep into concrete to prevent water diffusion
- Provides good adhesion for topcoats
- Fills hairline cracks to form a water-impermeable layer
- Surface hardener that prevents dusting
- Can be diluted with water
- Can be applied with a brush and roller



Component A of **StenAst® 2EP MT** is poured into this large, previously prepared container and mixed on its own for 2-3 minutes. Pour Component B into the vortex created by the mixer and continue mixing at a lower speed for 2-3 minutes. If required, 2.5-3 kg (approximately 20%) water is added to the mixture and mixed for at least 2 minutes at higher speed.

There must be no unmixed material left on the walls or at the bottom of the container. Manual mixing of the components is insufficient. Insufficient mixing may cause the material to cure partially or not at all. Then the mixture is applied continuously by working it into the floor with a brush or roller. If necessary, while the primer is still wet, dry aggregate of medium or coarse size can be sprinkled on it to create a non-slip, granular coating. It can be used to repair wide cracks in the application area by mixing the product with some quartz sand.

Each coat is applied at a thickness of approximately 200-400 µm. Accordingly, the approximate consumption is 0.2-0.5 kg/m² per coat. **StenAst® 2EP MT** is applied by brush or roller in one or two coats depending on the texture of the surface on which it is applied.

The pot life of **StenAst® 2EP MT** and the required time before the next coat can be applied are as specified in the table. Here, the temperature of the surface on which the application is carried out is important. It must be taken into account that the surface temperature may be higher than the ambient temperature in summer and lower in winter.

During application, the surface temperature must be above 10 °C. If the primer application will be carried out as two coats, the second coat must be applied before the first coat is fully cured, while it is still tacky. If the second coat is applied too late, intercoat adhesion may be adversely affected.

3.3. Cleaning

Equipment used can be cleaned with **StenSolver EP** at the end of the job.

4. Safety

Applicators and supervisors must read the Safety Data Sheet (SDS) carefully and follow the instructions provided. Emptied packages must be disposed of in compliance with relevant regulations and laws. The application must be carried out by skilled workers under the supervision of experts and the applicators must use all personal protective equipment required for the worksite and the task such as goggles, mask and gloves.

5. Storage

Storage temperature must be between 5 and 30 °C. Packages must not be exposed to direct sunlight. Under these conditions, the material will retain its properties in unopened containers for 12 months from the production date.

Protect the product from freezing. Frozen material cannot be reused.

6. Disclaimer

This document is provided for general information and is based on **Stenkim®**'s laboratory data and field experience at the time of publication. **Stenkim®** reserves the right to revise this information without prior notice.

Stenkim® warrants that its products conform to the stated specifications on delivery. The buyer is responsible for determining the product's suitability for the intended purpose and for all conditions of transport, storage, application, and use. **Stenkim®** accepts no liability for results obtained under conditions outside its control. **Stenkim®**'s liability under this warranty is limited to replacement of non-conforming product and excludes any consequential or indirect damages.



7. Technical Data

Property	Method	Result
Base Polymer		Two-Component Water-Based Epoxy
Solids Content (by weight)	EN ISO 3251	80%
Color		Transparent
Density	EN ISO 2811-2	1.05 ± 0.05 g/cm ³
Application Rate (per coat)		200-400 g/m ²
Full Cure Time		5-7 days
Application Thickness		200-400 µm
Pot Life @23 °C		75 minutes
Time to Open to Traffic @23 °C		8-10 hours
Tack-free Time @23 °C		4-8 hours
Shelf Life		1 year
Packaging		15 kg sets

Stenkim® reserves the right to make changes to the values in this table at any time.

