cemseal®

Technical Data Sheet

CEMSEAL P100SLF

HIGH-PERFORMANCE FILLERISED EPOXY PRIMER

DESCRIPTION

CEMSEAL P100SLF is a two-component, high-performance fillerised epoxy primer. Formulated without color pigments, it serves as a robust surface sealer and adhesion promoter. The fillerised nature of the resin provides exceptional mechanical strength and pore-filling capabilities, creating a solid, rigid base for subsequent epoxy and polyurethane flooring systems.

FEATURES AND BENEFITS

- Formulated with a high solid content that ensures excellent film build and effective surface consolidation.
- Delivers exceptional compressive strength, creating a rigid and durable base suitable for heavy-duty environments.
- Provides superior adhesion to concrete substrates, ensuring a strong bond that exceeds the tensile strength of the concrete itself.
- Exhibits an extended pot life, allowing ample working time for large area applications without rapid curing issues.
- Supplied as a clear and natural fillerised system, allowing for easy visual inspection of substrate wetting during application.

RECOMMENDED USES

Suitable for new and existing surfaces:

- Priming concrete substrates and cement screeds before applying epoxy topcoats.
- Base coat for industrial flooring systems in warehouses and factories.
- Surface consolidation for substrates requiring high mechanical strength.
- Binder for epoxy mortars when mixed with silica sand.

PRODUCT INFORMATION

Packaging	Part A : 16kg pail Part B : 4kg pail Part A + B : 20kg set
Appearance	Part A : Hazy / Natural Liquid Part B : Transparent Liquid
Chemical Base	Epoxy Resin
Specific Gravity	1.39 ± 0.05

TECHNICAL PROPERTIES

Properties	Test Method	Typical Value
Adhesion to concrete	BS EN 1542	> 2.0 N/mm² (Failure in Concrete)
Shore D Hardness	ASTM D2240	≥ 78
Compressive Strength	ASTM C579	≥ 65 N/mm²
Flexural Strength	BS EN 13892-2	≥ 40 N/mm²

SUBSTRATE REQUIREMENTS & PREPARATION

- The surface must be clean, sound, dry, and free from contaminants such as dirt, oil, grease, coatings, and surface treatments.
- The concrete substrate must possess sufficient compressive strength (min. 25 N/mm²) and a minimum pull-off strength of 1.5 N/mm².
- Surfaces should be prepared mechanically using abrasive blast cleaning or diamond grinding to remove cement laitance and achieve an open-textured surface.
- Substrate moisture content must be less than 4% pbw when measured using the Tramex CM Method, and free from rising moisture.
- All dust and loose material must be thoroughly removed via vacuum before application.

APPLICATION INFORMATION

Ambient Temperature	+10°C min. / +35°C max.
Substrate Temperature	+10°C min. / +35°C max.
Relative Humidity	Maximum 80%
Dew Point	Substrate temperature must be at least +3°C above the dew point.
Substrate Moisture Content	≤ 4.0% pbw (measured by Tramex CM Method).
Pot Life (at 25°C)	~60 minutes
Mixing Ratio	Part A : Part B = 4 : 1 (by weight)
Consumption*	0.15 - 0.20 kg/m² per coat
Drying Time	Surface Dry: 5 hours Tack Free: 8 hours Full Dry: > 12 hours
Waiting Time / Overcoating	Min: 12 hours Max: 48 hours

*Actual consumption depends on substrate porosity and texture

MIXING

1. Stir Part A (Resin) thoroughly to disperse the fillers which may have settled.
2. Add Part B (Hardener) to Part A.
3. Mix continuously for approximately 3 minutes using a low-speed electric mixer (300-400 rpm) until a uniform mix is achieved.
4. Scrape the sides and bottom of the mixing container with a flat-edge trowel to ensure complete mixing, while avoiding excessive mixing to prevent air entrapment.

APPLICATION METHOD

1. Pour the mixed CEMSEAL P100SLF onto the prepared substrate and apply evenly using a short-pile roller, squeegee, or brush.
2. Ensure the material is spread evenly to achieve the required film thickness and maintain a "wet edge" during application for a seamless finish.
3. Ensure the product is well-rolled to wet out the concrete surface thoroughly.
4. If a mechanical key is required for the subsequent layer, broadcast quartz sand (0.3-0.8 mm) into the wet primer after waiting 15-30 minutes.

CLEANING OF TOOLS

Clean all tools and application equipment with an approved solvent thinner immediately after use. Hardened or cured material can only be removed mechanically.

IMPORTANT CONSIDERATIONS

- The product is supplied ready for use and must not be diluted with solvents, water, or thinners, as this will affect the curing process and final properties.
- Partial quantities of Component A and Component B must not be mixed, as improper weighing can lead to mixing errors and incomplete curing.
- The substrate and ambient temperature must be maintained at least 3°C above the dew point to reduce the risk of condensation or blooming on the floor finish.
- The maximum relative humidity during application and curing should not exceed 80%.
- Application must not be carried out on substrates with a moisture content higher than 4% (Tramex CM Method) or on surfaces subject to rising damp. If the moisture content exceeds 4%, it is recommended to install CEMSEAL MB200BC (Moisture Barrier).
- The newly applied material must be protected from damp, condensation, and direct water contact for at least 24 hours.
- The product generates heat after mixing, so it must be applied immediately and the mixed container should not be left unguarded.
- The maximum waiting time between coats must be respected; if the coating is left for more than 48 hours, the surface must be mechanically sanded to create a profile before applying the next coat.

STORAGE AND SHELF LIFE

Storage: CEMSEAL P100SLF should be stored in the original manufacturer's packaging in a shaded, cool, and dry place. Storage temperature should be between +5°C and +30°C. Keep at least 2 meters away from direct heat sources.
Shelf Life: Expected 24 months shelf life with the above-mentioned storage conditions.

HEALTH & SAFETY

The user must refer to the latest version of the Safety Data Sheet (SDS) for comprehensive information on the safe handling, storage, and disposal of this chemical product. The SDS contains essential physical, ecological, and toxicological data required for professional use.

BASIS OF TECHNICAL DATA

All technical data provided in this Technical Data Sheet are based on laboratory tests. Actual performance may vary due to factors beyond our control.

Disclaimer:
The information and any recommendations relating to the application and end-use of all CEMSEAL products are provided in good faith based on CEMSEAL's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by CEMSEAL. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions. All users should always refer to the most recent and up to date issue of the Technical Data Sheet for the product concerned, which is available on request. It is recommended that products should always be properly stored, handled and applied under tested and recommended conditions.

For More Information:

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