Product Data Sheet

STARBOND EP-SL400

Multi Component, Solvent Free, High Performance, Pigmented, Self Leveling Epoxy System

Uses:

- Heavy duty industrial flooring applications – Factories, Kitchens, Car Parks or Storage Facilities
- Flooring Applications where wear and tear as well as impact resistance is required
- Hygienic Areas – Food Plants, Pharma Facilities or Laboratories

Product Description

STARBOND EP-SL400 is a solvent-free, high-performance multi-component pigmented self-leveling product, composed of epoxy resin, hardener, and filler pack. It is a specially selected product for new and old concrete floors to provide a hard-wearing, chemical-resistant, impervious, and easy-to-clean seamless floor topping. It has enough flexibility to withstand impact from industrial traffic.

Advantages

- Fast & Easy Application - Minimum Down time
- Excellent wear under heavy traffic
- High flow characteristics combined with an attractive self-smoothing finish.
- Chemically resistant - good resistance to a wide range of chemicals
- Hygienic - provides a dense, impervious, seamless floor surface which is easily cleaned
- Attractive - available in a wide range of colors to enhance the working environment
- The applied product will be resistant to water as well as a wide range of chemicals.
- Bonds tenaciously to become an integral part of the floor

Standard Compliance

- ASTM C579
- ASTM D4060
- ASTM C307

Technical Properties

STARBOND EP-SL400	Typical Values @ Laboratory Conditions
Available colors	Standard Colors
Recommended DFT / coat	1.0 - 4.0 mm
Compressive Strength ASTM C579	70 N/mm²
Tensile Strength ASTM C307	22 N/mm²
Bond Strength to Concrete ASTM D4541	>2 N/mm²
Taber Abrasion ASTM D4060 CS17 Wheels (mg loss/1000cycles)	30
Hardness Shore D	80
Impact Resistance ASTM D2794	10 Joules
Pot Life @ 40°C/104°F (min)	25
Thin Film Dry Time (hours) @ 40°C	10

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Chemical Resistance

Hydrochloric acid, 20%	Excellent
Nitric acid, 20%	Good
Acetic acid, 10%	Good
Sulfuric acid, 25%	Excellent - Discoloration
Sodium hydroxide, 50%	Excellent
Kerosene	Excellent
Ketones	Poor
Alcohol	Good
Petrol	Excellent
Jet Fuel	Excellent

Application

Surface Preparation

The surface should be clean, dry, sound and free from oil, grease and wax contamination. Cement laitance, loose particles, mould release agent or curing membranes must be removed.

Laitance and weak surface layer shall be removed using mechanical methods such as grinding or blasting to provide a sound, well-profiled surface. Repair all necessary areas before application by using epoxy mortar from the STAR range.

Concrete substrates should be at least 28 days old, and the moisture content should be 5% or below.

Priming

Once the surface preparation is complete the concrete should be primed with **STARBOND EP-SF100**. The primer should be brushed into the surface using a stiff brush, broom or roller & allowed to dry (minimum 12 – 16 Hours) before the application of **STARBOND EP-SL400**. In case of extremely porous substrate, two coats of primer are recommended. Allow the first coat to dry before applying the subsequent coat. The primer coat needs to be allowed to dry completely before laying **STARBOND EP-SL400**

Application

Mix **STARBOND EP-SL400** as supplied. Add the entire content of hardener, filler, pigment and resin and mix thoroughly for about 3 minutes using a slow speed mixer.

Once mixed, apply **STARBOND EP-SL400** immediately in a continuous pour using notched trowels or gauged squeegees.

Continuous Coating Film must be achieved. Over application to be avoided – Puddles, non absorbed material can have an effect on the finished product.

After laying, roll the material immediately using a spiked nylon roller to remove slight trowel marks and assist air release. The rolling should be carried out using a 'back and forth' technique along the same path.

An overlap of 50% with adjacent paths is recommended. Further light rolling may be required to remove surface imperfections or for subsequent release of trapped air but should be before the setting of the product.

Cleaning

Remove **STARBOND EP-SL400** product from tools, equipment, and mixers with STAR Solvent before the initial set. Cured material can only be removed mechanically.

Packing & Coverage

Product	Pack Size	Theoretical Coverage
STARBOND EP-SL400	54 kg kit	2mm: 13-15m² 3mm: 8-10m² 4mm: 6-7m²

(Custom Packing is available based on request.)

Stated consumption data are for general guidance. Actual consumption depends on the nature of substrate, method of application, and wastage.

Shelf Life & Storage

The original sealed container of **STARBOND EP-SL400** and has a shelf life of 12 months, provided it is stored clear of ground in a dry, shaded place below 35ºC.

Limitations:

- **STARBOND EP-SL400** should not be applied at ambient temperatures below 5°C and dropping.
- **STARBOND EP-SL400** should not be applied on surfaces expected to suffer from rising dampness or relative humidity greater than 75%.
- If any doubts arise concerning application or substrate conditions, consult the STAR Technical Department.

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Health & Safety

STARBOND EP-SL400 contains epoxy resins that can be harmful to the skin. During use, avoid contact with skin and eyes. Wear suitable protective clothing, gloves, eye protection, and respiratory protective equipment. The use of barrier cream provides additional skin protection. In case of skin contact, rinse with plenty of clean water, cleanse with soap and water. In case of contact with the eye, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately – do not induce vomiting.

For complete Health and Safety instructions and information, please refer to STAR MSDS.

Additional Information

STAR manufactures a wide range of construction chemicals and specialty products for various applications divided into the following product sections:

1. **Waterproofing Products**
2. **Sealants, Grouts, and Joint Fillers**
3. **Adhesives**
4. **HVAC – Adhesives, Coatings & Sealants**
5. **Flooring Products**
6. **Industrial Adhesives (i.e. Paper Industry)**
7. **Accessories**

STAR Technology provides various technical information such as detailed method statements, specification clauses, application manuals and technical support both in contractors and consultant's offices as well as construction sites.

For further information on these products and systems kindly visit our website or contact your local STAR representative.