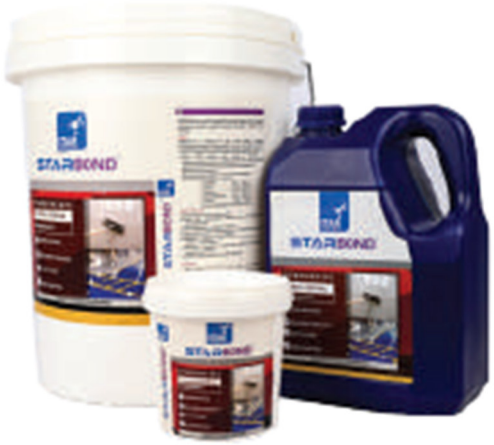
Product Data Sheet



STARBOND EPC

Two Component, Solvent Free, High Performance, High Build Epoxy Flooring System

Uses:

- Heavy duty concrete floor coating in industrial and commercial plants such as warehouses, service stations, chemical plants, metal treatment plants, internal car parking decks.
- Wet working areas subject to chemical spillage
- Machinery service areas
- Rust preventing coating for steel and concrete tanks.
- Coating on steel exposed to abrasion

Product Description

STARBOND EPC is a two component, solvent-free, epoxy resin self-smoothening chemical resistant floor coating system. It has excellent adhesion qualities, chemical resistant, glossy finish and it can be cleaned with no effort. **STARBOND EPC** is designed for use in wide range of industrial environments where lasting flooring required. It provides a dense, impervious, colored and chemically resistant floor surface which is hygienic and easy to clean.

Advantages

- Application by brush, roller or spray equipment & Fast 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
- Excellent resistance to Water Vapor Transmission
- 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.

Standard Compliance

- ASTM C 722
- ASTM F 3010

Technical Properties

STARBOND EP-300	Typical Values @ Laboratory Conditions
Available colors	Standard Clear – Yellowish Color (Others upon request)
Pot Life	30 - 70 min
Application Thickness / Coat	Approx.. 200 microns
Mixed density	1.40 +/- 0.05 gm/ml
Solid content	100 %
Pot life	30 – 70 minutes
Max Recoat/Topcoat Time @ 40°C (hours)	24 h
Full cure	7 days
Shore A Hardness	80 +/- 3 @ 7 days
Compressive Strength (ASTM C 579	75 N/mm2 @ 7 days
Tensile Strength (ASTM C 307)	12 N/mm2 @ 7 days
Abrasion Resistance	20mgs loss (CS17 wheel/(ASTM D 4060) 1000gms/1000 revolution
Bond Strength to Concrete ASTM D4541	>2 N/mm²

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Chemical Resistance

Hydrochloric acid, 30%	Excellent
Nitric acid, 20%	Good
Acetic acid, 10%	Good
Sulfuric acid, 40%	Excellent
Sodium hydroxide, 50%	Excellent
Kerosene	Excellent
Ketones	Poor
Alcohol	Good
Petrol	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.

Fill surfaces irregularities with a suitable repair product.

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-300**. 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 EPC**. 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 EPC**.

Application

Mix **STARBOND EPC** as supplied. Add the entire content of hardener and resin and mix thoroughly for about 3 minutes using a slow speed mixer.

Once mixed, apply **STARBOND EPC** immediately in a thin continuous film @ 200 micron/coat. Using Rollers 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.

The base coat should be allowed to dry for min. 2 – 24 h. Then apply the second coat perpendicular to the first coat at the same rate and allow it to cure.

Anti-Slip Aggregate

In the event of antislip silica aggregate specification, the base coat should be covered with antislip aggregate as soon as possible after laying the base coat.

The recommended procedure is to cover the base coat completely, but can also be in a light random pattern.

The top coat can now be applied by roller or airless spray equipment. Ensure a continuous film and to seal the aggregate surface. Apply the topcoat within 36 hours considering 20°C (15 hours at 35°C).

Cleaning

Remove **STARBOND EPC** 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 EPC	20 ltr kit	5 m² per Liter/Coat

(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 EPC** and has a shelf life of 12 months, provided it is stored clear of ground in a dry, shaded place below 35ºC.

Limitations:

- **STARBOND EPC** should not be applied at ambient temperatures below 5°C and dropping.
- **STARBOND EPC** 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.

Product Data Sheet

Health & Safety

STARBOND EP contains an 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.