



STARBOND® EPC

High Build Solvent Free Epoxy Coating

Product Data Sheet

Description

STARBOND EPC is a two component, solvent-free, epoxy resin self smoothing chemical resistant floor coating system. It has excellent adhesion qualities, chemical resistant and glossy finish and easily cleaned.

Uses

STARBOND EPC is designed for use in wide range of industrial environments where a lasting solution to floor maintenance problems is required. It provides a dense, impervious, coloured and chemically resistant floor surface which is hygienic and easy to clean. Typical applications include:

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

Advantages

- Excellent wear under heavy traffic
- High flow characteristics combined with an attractive self smoothing finish.
- Fast application - minimizes downtime.
- Chemically resistant - good resistance to a wide range of chemicals.
- Durable and good impact resistance.
- Hygienic - provides a dense, impervious, seamless floor surface which is easily cleaned.
- Attractive - available in a wide range of colours to enhance the working environment.
- Solvent free, low odour and safe application.

Properties

Component: Two components base and hardener

Form	: Pourable liquid
Colour	: Available in various colours
Mixed density	: 1.40 +/- 0.05 gm/ml

Solid content : 100 %

Potlife : 30 – 70 minutes

Full cure : 7 days

Shore A Hardness : 80 +/- 3 @ 7 days

Compressive Strength : 75 N/mm² @ 7 days
(ASTM C 579)

Tensile Strength : 12 N/mm² @ 7 days
(ASTM C 307)

Abrasion Resistance : 20 mgs loss (CS17 wheel/
(ASTM D 4060) 1000gms/1000 revolution)

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

Note: Properties measured at 25°C. Data quoted typical for this product does not constitute a specification. To obtain performance characteristics stated in this data sheet, the mixing ratio must be maintained.

Instructions for use

Substrates should be dry and not suffer, or be likely to suffer, from rising damp. If necessary, suitable damp-proof membranes should be installed during construction to prevent this. Substrates should not have a relative humidity greater than 75% at the time of installation.

All surfaces to be repaired must be clean, sound and dry, free of mould release agents, bond breaking coatings, curing compounds or any other form of contamination that may affect the bond strength of the epoxy coating. Remove them by mechanical means i.e. wire brushing & washing with water jet. Establish area where epoxy flooring to be done by

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visual inspection and hammer sounding. Highlight all areas where concrete quality is weak. Remove poor quality concrete in the floor until sound concrete is apparent. Ensure the surfaces are left in a smooth condition. Any minor repairs shall be done with Oximortar 70. All edges ideally should be cut at right angles. Feather edges are usually points of weakness. Upon completion of shot blasting or grinding the floor should be vacuumed and cleaned.

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.

STARBOND EPC floor coating is supplied in two component pack including base and hardener, which are ready for immediate on-site mixing. Part mixing of these components is not acceptable and will affect both performance and appearance of the finished floor. Mixing should be carried out using either a forced action mixer; or a heavy duty, slow-speed drill fitted with mixing paddle. All such equipment should be of a type and capacity approved by SSPL. The components should be mixed accordingly as add the hardener (Part-B) to base (Part-A) and mix for 2 - 3 minutes, until homogenous. After applying the first coat it should be allowed to dry for a minimum of 24 hours before application of the next coat. Do not mix material in quantities which cannot be applied within the workable time of the product.

Coverage

5 Sq. meter/liter @ 200 microns wet or DFT.
Recommended thickness as 400 microns with 2 coats.

Allowance of 10% for wastage may be considered depends upon the application.

Note: The coverage figures mentioned above are theoretical. Due to wastage factors & the variety and natures of possible substrates porosity practical coverage figures will be vary.

Packaging

It is available in 5, 10, 15 liter kit.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consults SSPL Technical Services Department.

Safety precautions

It should not come into contact with skin and eyes or be swallowed. Avoid prolonged inhalation of solvent vapors. Some people are sensitive to epoxy resins, hardeners and solvents. Gloves, goggles and barrier creams should therefore be used while handling the product. Adequate ventilation should be ensured and if working in enclosed areas, suitable breathing apparatus must be used. If the resin comes in contact with skin, it must be removed before it hardens with a resin removing cream, followed by washing with soap and water. Should accidental eye contamination occurs with any of the above products, it should be washed well with plenty of water and medical advice should be sought. If swallowed medical attention should be taken immediately. Vomiting should not be induced.

Disposal

Do not re-use containers. To be disposed off as per local rules & regulations.

Information

Star Factory Specialist for Adhesive products, products are guaranteed against defective materials and are sold subject to standard terms and condition of sale, copies of which are available on request which are reasonable care it's taken compiling this technical data sheet, all recommendations regarding the use of product are made without guarantee since the conditions used are beyond the company' direct control. It is the customer responsibility to satisfy themselves that each product is fit for the purpose for which they intend to use it.