Talrakote® EP-S

High potent solvented epoxy resin protective coating

The Construction Alchemists

Description

Talrakote® EP-S is a three part high-performance solvent based, chemical resistant epoxy resin protective coating system supplied in pre-weighed packs of base, hardener and pigment that can be readily mixed at site before use.
The cured product provides a tenacious but flexible coating on clean concrete, granolithic screeds, and certain metal surfaces. The product is supplied in clear and range of selected shades.

Features & Benefits

- Durable - low maintenance costs
- Chemical resistant to a wide range of industrial chemicals
- Hygienic - Seamless finish provides easily cleanable surface
- Aesthetic - available in all range of colours to the floor and for delineate isles

Primary Application

To provide a hard wearing, easily cleanable, attractive coating in areas where high resistance to chemical attack is required. It is suitable for use in production assembly areas, workshops, dairies, soft drinks production and bottling plants, kitchens, showrooms etc. It is particularly suitable in wet working areas and where chemical spillage is likely, e.g. plating shops, processing plants, dye works etc. It can also be used as a final coating and sealer for epoxy floor screeds to provide a more durable and easily cleanable surface where high impact is desirable.

Technical Properties

Properties	At 20°C	At 35°C
Pot life	4hrs	1.5hrs
Tack Free time	4-6hrs	2-4hrs
Time between coats	6-24hrs	4-16hrs
Initial hardness	24hrs	18hrs
Full cure	7 days	5 days
Wet film thickness Per coat	100 microns	
Dry film thickness per coat	45 microns	
Number of coats recommended	Two coats	

Note: After the pot life, the viscosity of the mixed material, progressively increases with time. Gelled material should be discarded.

Chemical Properties

Talrakote® EP- is resistant to range of industrial chemicals. Few of them are listed below.

Citric Acid 10%	Resistant
Hydrochloric Acid (10%)	Resistant
Lactic Acid (10%)	Resistant
Sulphuric Acid (10%)	Resistant

Chemical spillage, if any, should not be allowed to dry as the concentration of the chemical increases with evaporation of water / solvents. Hence it is advised to wash the spilled chemicals as quickly as possible.

Design Criteria

Talrakote® EP-S is designed for application to achieve a total wet film thickness of 200 microns in two coats. Substrates should be dry and not suffer, or be likely to suffer, from rising dampness. If necessary, suitable damp proof membranes should be installed to prevent ingress of moisture into the substrate. The relative humidity in the substrate shall be less than or equal to 75% at the time of application of Talrakote® EP-S.

Specification Clauses

The coating shall be Talrakote® EP-S, a three component solvent based epoxy system suitable for application by spray, brush or lambswool roller. The coating shall be applied in two coats to achieve a total wet film thickness of 200 microns.

Application Instructions

Surface Preparation

It is essential that Talrakote® EP-S is applied to sound, clean, dry substrates in order to achieve tenacious bonding between the protective coating and substrate. Because Talrakote® EP-S is a relatively thin coating, the substrate must be smooth finished. Any surface undulations may cause excessive wear on high spots changing the original colour of the coating upon usage.

New concrete

The concrete substrate should be at least 28 days cured and shall not have a moisture content greater than 5%. The substrate should be sound and free from bond breaking materials such as oil and grease, mortar and paint splashes or curing compound residues. Excessive laitance can be removed by the use of mechanical methods. Dust and other debris should then be removed by vacuum cleaning.

Old concrete

A sound, clean substrate is essential to achieve maximum adhesion. As for old concrete substrates dry removal of laitance by use of mechanical methods is preferable. Oil and grease penetration should be removed by the use of a proprietary chemical de-greaser or by hot compressed air treatment.

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Any damaged areas or surface irregularities should be repaired using Talrak® range of repair mortars.

Mixing

The base and hardener components of Talrakote® EP-S should be thoroughly mixed in their containers, before mixing them together. The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly, then add the pigment and mix for at least 3 minutes. The use of a heavy-duty slow speed, flameproof or air driven drill fitted with a mixing paddle is desirable. Mix these components in the quantities supplied taking care to ensure all containers are scraped clean. Do not add solvent thinners at any time.

Application

The mixed Talrakote® EP-S should be applied to the prepared surface using brush or lambswool roller. Ensure that the area is completely coated and puddling of the material does not occur.

The second coat may be applied as soon as the first coat has initially dried (typically 12 to 18 hours). The time will be dependent on the type of surface and the ambient conditions. Minimum two coats of application is recommended.

Cleaning

The tools used for the application of Talrakote® EP-S should be cleaned with Talrasol GP immediately after use. Hardened material can be removed mechanically.

Limitations

- Talrakote® EP-S should not be applied onto surfaces known to or are likely to suffer from rising dampness or have a relative humidity greater than 75% as measured in accordance with BS 8203 Appendix A or by Protimeter thermohygrometer or speedy moisture meter.
- Generally acid etching is not recommended for surface preparation.
- The durability of Talrakote® EP-S is reduced in areas where foot traffic, door ways, work stations wheeled chairs are used. In such areas additional coats are recommended.
- Talrakote® EP-S should not be applied on asphalt floors or PVC tiles or sheets.
- Some slight shade changes may be experienced over the long term when placed in adverse exposure conditions. This is a common phenomenon for all epoxy floors. This is not detrimental to the performance of the coating.
- Talrakote® EP-S should not be applied at temperatures below 5°C.

Estimating
Packaging

Talrakote® EP-S : 4.5 liter pack (Including colour pack)
Talrasol GP : 5 & 20 liter can

Coverage

The theoretical coverage is 10 sqm/litre at 100 microns WFT per coat (2 coats application is recommended). However, practical coverage may vary depending on the porosity of substrate, application thickness etc.

Storage

Talrakote® EP-S and Talrasol GP has a shelf life of 12 months if kept in dry store in original, unopened containers. If stored at high temperature and/or high humidity conditions the shelf life may be reduced.

Precautions
Health & Safety instructions

Talrakote® EP-S and Talrasol GP should not come into contact with skin and eyes or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves, and eye protection. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provide additional skin protection.

In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water.

Fire

Talrakote® EP-S and Talrasol GP are flammable. It complies with BS 476, Part 7: 1971 - Class 1 spread of flame. Keep away from sources of ignition. No smoking. In the event of fire, extinguish with CO_2 or foam. Do not use a water jet.

Flash points

Talrakote EP-S : 23°C
Talrasol GP : 33°C

Talrak Construction Chemicals Pvt. Ltd.
An ISO 9001:2015 Certified Company

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