Talrakote® PU

Plural component aliphatic polyurethane based pigmented protective coating for concrete or mortar

The Construction Alchemists

Description

Talrakote® PU is a plural component, pigmented, aliphatic polyurethane, UV and chemical resistant coating suitable for concrete protection applications.

Features & Benefits

- Durable: low maintenance and recurring costs
- UV Resistant: suitable for outdoor application also
- Chemical resistant: excellent resistance to most of the industrial chemicals
- Jointless: seamless coated surface, easily cleanable

Primary Application

Talrakote® PU provides an easily cleaned chemical and UV resistant protective coating for concrete.

Technical properties

Pot life at 30°C	Min. 1 hour
Recoat time at 30°C	16 -20 hours
Initial cure at 30°C	16 hours
Final cure at 30°C	7 days

Chemical Resistance

Talrakote® PU is resistant to most of the common industrial chemical spillages at ambient temperature, as indicated below:

Hydrochloric acid (36%)	Occasional contact
Nitric acid (15%)	Occasional contact
Sulphuric acid (10%)	Regular contact
Citric acid (10%)	Occasional contact
Sodium Hydroxide (50%)	Occasional contact
Ammonia (10%) Soln.	Occasional contact
Bleach concentrate	Occasional contact
Urea (Saturated)	Regular contact

Standards compliance

Talrakote® PU does not allow spread of flame when tested as per UL 94 for flamability specifications.

Specification clauses

The coating shall be Talrakote® PU, a plural component aliphatic polyurethane coating to a thickness of 120 - 150 microns DFT in three coats of application. When exposed to UV rays for long periods, the cured coated film shall not undergo degradation. The coated surfaces should retain a semi gloss finish. The potlife of the mixed material be a minimum of 60 minute at 30°C. It shall be re-coatable in 16-20 hours at 30°C and shall cure fully in 7 days at 30°C. The cured material shall not be flammable and shall be resistant to spread of flame when tested as per Ul94 standards. It shall develop a minimum bond strength to concrete substrates of 1.5 MPa when tested with a pull-out tester.

Application Instruction

Surface preparation

Concrete or screed substrate should be fully cured and have a minimum of 25MPa compressive strength. All surfaces must be smooth, sound and free from any traces of shuttering release oils, curing compounds, debris, loose or flaking material and areas of standing water. All surfaces should then be grit/ sand blasted or scarified to remove all foreign matter. All blow holes and imperfections should be filled with Talrak epoxy putty. The substrate should be dry and the moisture shall not be more than 3% and free from rising dampness and ground water pressure. If no damp proof membrane is present Talrakepoprime LV should be incorporated.

Mixing

The individual components should first be agitated thoroughly into their own containers before mixing them together. The components should then be mechanically mixed together for at-least 3 minutes using a slow speed (400 - 500 RPM) drilling machine attached with a mixing paddle.

Application

Apply Talrakote® PU with a nylon brush, or a lamb's wool roller on the prepared substrate at a thickness of 100 microns WFT (45 microns DFT) per coat. Allow Talrakote® PU first coat to dry for 16-20 hours at 30°C and then apply the second and third coats as above. When applying Talrakote® PU as a topcoat over any of the Talrakote® range of epoxy systems, it must be applied after 6 hours but within 24 hours of applying the epoxy. Three finish coats are recommended unless used as a top coat for freshly applied epoxies.

Note : When applying Talrakote® PU, if the moisture content in the substrate is more than 3%, blistering of the coating may occur.

Curing

This coating will become tack free in approximately 8 hours and be fully cured in 7 days.

Talrakote® PU

The Construction Alchemists

Limitations

- Minimum ambient surface and material temperature must be between 1° to 40°C. For applications outside this range, contact Talrak for advise.
- Application of the product should be always on dry substrates.

Estimating

Packaging

Talrakote® PU - 4 Litres
Talrasol GP - 5 & 20 Litre tins

Coverage

The theoretical coverage is 10 m^2/litre/coat at 100 microns WFT (45 - 50 microns DFT). However practical coverage may vary depending on the porosity of substrate, application thickness etc.

Storage

Talrakote® PU has a shelf life of 6 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® PU should not come into contact with skin and eyes or be swallowed. Avoid prolonged inhalation of solvent vapours. 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 is 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 - solvent should not be used. Talrasol GP should be washed from skin immediately with soap and water. Should accidental eye contamination occur 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 sought immediately. Vomiting should not be induced.

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

Works:
Plot No. 115-A, 1st Phase. Harohalli Industrial Area,
Kanakapura Taluka - 562 112. Ramanagar Dist.
www.talrak.in