

TRI- COAT PU

Two components polyurethane Coating

Description

Tri -Coat PU is a coloured or transparent two components aliphatic polyurethane, solvent containing which provides excellent gloss and color retention coating. It is available in standard colors and special colors on request.

The product is certified by (Egyptian Petroleum Research Institute)

In accordance to ASTM (B117- salt spray test
D1748 - Humidity test



Uses

Tri -Coat PU used as a top coat for concrete, steel, and wood exposed to the effects of severely Condition environment, chemicals, abrasion, friction and mechanical stresses for the following:

- Laundries, stores, garages, hospitals and drinking water tanks.
- As a coating for cooling and freezing areas.
- Walls and floors of chemical plants, textile factories, and workshops,
- Dairy, food and pharmaceutical factories.
- Protective coating for plastic pipes against UV rays
- Top coat in hospitals for operation rooms due to its hygienic properties.

Advantages

- Stable against sun light and resistant to ultra - violet rays.
- Good abrasion resistance, impact strength, flexibility and MAR resistance.
- More flexible than Epoxy so it acts as a bridge for hair cracks,
- Has good impact resistance so can be used it as coating for sports area,
- Lactic acid resistance so its used for dairy production area.
- Hygienic so can be used for food and pharmaceutical factories,
- Anti-fungal and anti-bacterial.
- High resistance to the effects of chemical agents, atmospheric conditions, humidity and water.
- High resistance to mechanical stresses, specially friction and abrasion.
- High bonding strength to concrete, steel, wood surfaces.
- High coverage rate and short drying time.

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Factory & Head Office:

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Technical Data @°25c

| Test | Clear | Pigmented |
|------------------------------|--|--|
| Appearance | Transparent liquid | Grey and many colors on request |
| Density | 0.95 - 0.05 kg/Lt @ 25 °C | 1.31 - 0.05 kg/Lt @ 25°C |
| Solid content (by weight) | 56 ± 2 % | 70 ± 2% |
| Solid content (by Volume) | 50 ± 2 % | 55 ± 2% |
| Initial setting time | 2 hrs. Depend on Temperature | 2 Hrs. Depend on Temperature |
| Final setting time | 24 hours | 24 hours |
| Pot life | > 3 hours @ 25°C | > 3 hours @ 25° °C |
| Recommended mix ratio | 5A : 1B | 8A : 1B |
| Touch dry | 2 - 3 hrs. Depend on Temperature | 2 - 3 hour depend on Temperature |
| Full curing | 7 days decrease at high temperature | 7 days decrease at high temperature |
| Min. Application temperature | 10 C° | 10 C° |
| Re-coating time | 12 - 18hrs. Temperature depended | 12 - 18hrs. Temperature depended |
| Rate of use (theoretical) | 6-8 m ² per kg 50 microns DFT | 5-6 m ² per kg 75 microns DFT |

Chemical Resistance

| Chemical agent | Result | Chemical agent | Result |
|-----------------|-----------|----------------|-----------|
| HCL 30% | Good | Borax | Excellent |
| Phosphoric% 40 | Excellent | NaOH 45% | Excellent |
| Sulphuric 50% | Good | Benzin | Excellent |
| Acetic acid 15% | Good | Petrol | Excellent |
| Lactic acid | Excellent | CO2 gas | Excellent |

Directions for use

Surface Preparation

All surfaces should be sound, dry, free from oil, grease and loosely adhering Particles.

Steel surfaces should be free from scale and rust.

The concrete age should be 28 days at least.

Priming

Concrete surfaces should be primed with **tri prime SB**

(See separate data sheet).

Steel surfaces should be primed with **tri-zinc** (See separate data sheet).

The primer should be allowed to achieve a tack-free condition before Applying **Tri -Coat PU**.

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Mixing

Never mix **Tri -Coat PU** base with anything except **Tri -Coat PU** hardener.

Mix one can of base with one can of hardener.

Do not use the contents of cans which have leaks, holes or loose lids.

Stir the contents of each can thoroughly and then pour the entire can of hardener into the can of base and stir until the mix is a uniform color.

Application

Apply **Tri-coat PU** straight from the can by brush, roller, airless spray or spray gun.

For anti slip resistant surface, spray a layer of pure sand at (0.3 - 0.65) mm

Diameter at a rate of 1 kg/m² on the first coat **Tri-coat PU** , then apply top coat

By brush & roller:

Volume of thinner 1 - 8%

Air spray:

Volume of thinner 1 -10 %

Airless spray application:

Volume of thinner 1-8 % according to DFT required

- Nozzle orifice approx. 0.55- 0.70 mm.
- Nozzle pressure 150 bar.
- Humidity: below 85 % RH.
- Temperature: temperature of the surfaces should be 5°C min: 35°C max

dilution

Tri -Coat PU may be diluted by **Tri- sol 20** (0- 10) max. Depending on the Application type and Tools used.

Cleaning

Clean all tools and equipment immediately after use with white thinner.

Package

A+B 5,12,15 Kg pack,

Storage

should be stored at room temperature in dry warehouse.

Shelf life

Two Years in original packing.

Health and Safety

- Resins contain irritants, especially to the skin, eyes.
- Persons handling these materials should use appropriate protective clothing, Including rubber or plastic gloves.
- If the product should contact the skin, it should be removed immediately With a dry cloth or paper towel, and the areas of contact washed Thoroughly with soap and water.

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