

1.0 Description:

- TONECRETE PW is two-component coloured solvent free epoxy paint.
- Used in drinking water and sanitation facilities where food is manufactured and stored.
- Suitable flexibility and good hiding power.
- Good durability against abrasion and friction.

2.0 Uses:

- Applied in drinking water and wastewater facilities in food processing and storage locations
- As paint for cement substrata exposed to traffic e.g. receiving areas, service areas, stairs, machinery rooms, stores, industries area, etc.

3.0 Approval & Certification:

Bond with primer to concrete	: ASTM D7234
Bond with Mild Steel	: ASTM D4541
Compressive Strength	: ASTM C579
Flexural Strength	: ASTM D580
Tensile Strength	: ASTM D638
Abrasion	: ASTM D4060
Permeability	: EN 12390-8
Micro-Organism Report	: JIS Z 2801,2010
VOC	: SCAQMID Rule 1113
National Organization for Potable Water and Sanitary Drainage	: Approved

4.0 Colours:

Shall be produced in different colours according to color chart or as required.

5.0 Product Data:

Solid Content	: 99	%±1
Bond with primer to concrete	: 1.87	N/mm ²
Bond to steel	: 2.37	N/mm ²
Compressive strength	: 43.36	N/mm ²
Flexural Strength	: 8.42	N/mm ²
Tensile Strength	: 13.16	N/mm ²
Abrasion test wheel CS17	: 0.0617	gm
Abrasion test wheel CS10	: 0.0538	gm
Permeability +ve side	: No penetration under 7bars for 72hrs	
Micro-Organism Report	: decrease in bacterial growth (attached tests)	
VOC	: 11	g/l

Notes:

- Above values are subjected to slight change depending on colour.
- All above data is for the final mixed components.

6.0 Film thickness per coat:

Wet Film Thickness	: 109 - 146	microns
Dry Film Thickness	: 109 - 146	microns
Consumption (R+H)	: 150 - 200	gm/m ² /coat



7.0 Surface Preparation:

For Concrete floor Substrate:

- Shall be Reinforced concrete with dimension and reinforcement suitable for expected loads.
- Stress shall not be less than 300 kg/cm² or according to project specification.
- Expansion & contraction joints shall be suitable to concrete slab dimensions and filled with the suitable joint sealant.
- Application of Expansion & contraction joints shall be put into consideration to make sure that it complies with the proceeding self-levelling epoxy coat.
- Suitable trowelling should be taken into consideration because:
 - Delayed Trowelling will force addition of excess water that shall cause separation of that above weak layer of cement + water.
 - Early trowelling will cause irregularities to the surface.
 - Extra trowelling will cause extra smooth surface.
- If epoxy finishing is to be applied surface hardener, sprinkled cement shall not be applied while finishing the concrete surface, as it gives a smooth surface that reduces the adhesion of the epoxy layer to concrete and may cause separation.
- Curing concrete with water for minimum 7 days after casting.
- Deviation in levels of the concrete floor shall be within acceptable limits.

Preparation of Concrete Surface after curing:

- Substrate should be free of oil grease, dust, or any other dirt.
- Surface should be blasted using disc Grinder or similar equipment to increase the surface area for maximum adhesion of proceeding layers.
- All weak or separated layers in concrete should be removed.
- Repair damaged areas using Epoxy paste if below 0.5mm or Epichor1618 if above 0.5mm.

For Wall substrate:

- Substrate should be free of oil grease, dust, or any other dirt.
- All weak or separated layers in concrete should be removed.
- Repair any damaged areas using Epoxy paste or cement repairing mortar
- Smooth the Surface should by sanded.

For Steel Substrate:

- Clean the substrate & remove any foreign materials, oil and grease chemically or mechanically.
- Remove all rust with blasting / sanding.

Preparation of Surface for priming:

- In case of concrete substrate should be minimum 4 weeks curing.
- Moisture should not exceed 5%.

8.0 Application Methods:

8.1 On Concrete Substrate:

EPICHOR 101P	: 175 - 200	gm/m ² /coat
OR EPICHOR 1618	: 200 - 250	gm/m ² /coat
EPASTE	: 150 - 250	gm/m ² /coat depends on substrate
TONECRETE PW 1 st coat	: 150 - 200	gm/m ² , 125 - 160 microns
TONECRETE PW 2 nd coat	: 150 - 200	gm/m ² , 125 - 160 microns



1. Make sure that all above mentioned surface preparation has been accomplished.
2. Applying one coat primer epoxy EPICHOR 101P / 1618 that completely penetrates the surface to increase the bond strength for coming layers.

Note: Proceeding steps should take place within 1 week of primer application otherwise, primer coat should be repeated.

3. Pasting the surface using 3 component epoxy paste EPASTE, if needed
4. Sanding of Epoxy paste shall be accomplished using suitable machinery.
5. Substrate shall be cleaned using vacuum cleaner.
6. Add TONECRETE PW resin to hardener in a suitable container and mix well.
7. Using a brush, woollen roller or airless spray gun apply TONECRETE PW 1st coat within a period that should not exceed 30 min. after mixing.

Note: Do not dilute TONECRETE PW with any solvent

8. Applying second coat TONECRETE PW after 24 hours.
9. Clean all Tools using thinner.

8.2 On Steel Substrate:

EPICHOR SP220	: 175 - 200	gm/m ² /coat
TONECRETE PW 1 st coat	: 150 - 200	gm/m ² , 125 - 160 microns
TONECRETE PW 2 nd coat	: 150 - 200	gm/m ² , 125 - 160 microns

1. Make sure that all above mentioned surface preparation has been accomplished.
2. If needed, apply one coat primer epoxy EPICHOR SP220 to prevent rusting.
3. Add TONECRETE PW resin to hardener in a suitable container and mix well.
4. Using a brush, woollen roller or airless spray gun apply TONECRETE PW 1st coat within a period that should not exceed 30 min. after mixing.

Note: Do not dilute TONECRETE PW with any solvent

5. Applying second coat TONECRETE PW after 24 hours.
6. Clean all Tools using thinner.

Notes:

- Temperature of the substrate should be min 10°C
- Good ventilation should be ensured
- The coating shall not be exposed to any spillage or mechanical wear until fully cured.

9.0 Product mixing Ration by weight:

Resin : Hardener	: 2.57 : 1.0	by weight
Total Weight	: 2, 4	Kg
Container	: Sealed pre weighed Steel Containers	



Notes:

- *The product components shall not be divided as total weight of each component shall be totally used.*
- *Slow Mechanical Mixing is recommended*
- *Mixed components should be transferred to a third container and remixing should take place to reach ultimate results*

10.0 Pot life, Drying and curing time:

Initial Curing Time	: 24	hours at 24 ⁰ C
Final Curing Time	: 7	days at 24 ⁰ C
Pot Life	: 30	min. at 24 ⁰ C
Walk on Time	: 48	hours at 24 ⁰ C
Recoating	: Duration between any two successive coats shall not exceed 1week otherwise, repriming should take place.	

11.0 Disclaimer:

- The information in this document is given to the best of our knowledge, based on laboratory testing and practical experience. We cannot guarantee anything but the above-mentioned quality of the products themselves. Minor product variations may be implemented to comply with local requirements. We reserve the right to change the given data without further notice. Users should always consult us for specific guidance on the general suitability of this product for their needs and specific application practices.
- Samples of any approved delivered materials shall be retested after delivery.
- These products are for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to our technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to our responsible representative for approval before commencing the work.

12.0 Handling of Epoxy Products:

- Avoid contact with eyes and skin. Emergency showers and eyewash stations should be readily accessible.
- Adhere to work practice rules established by government regulations.
- Use personal protective equipment.
- When using, do not eat, drink, or smoke.

13.0 Compatibility:

- Primers applied prior to specified product shall always be epoxy based products.
- For Floor Repairing and fixing defects, product shall always be epoxy based products
- For Wall repairing and smoothing surface a cement based, or epoxy-based products can be used.
- Recoating can be epoxy or polyurethanes products.

14.0 First aid Measures:

- General advice: Seek medical advice. If breathing has stopped or is laboured, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
- Eye contact: Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.
- Skin contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible, to do so without delay. Initiate and maintain gentle and continuous irrigation.
- Take off contaminated clothing and shoes immediately.
- Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
- Inhalation: Move to fresh air.

15.0 Storage:

- Store in steel containers, above ground, and surrounded by dikes to contain spills or leaks.
- Do not store in humid or extra hot weathering conditions.
- Keep containers tightly closed away from heat & in dry, cool, and well-ventilated place.