## **Product Data Sheet**

# **PENTENS E-603CTE**

**High Performance Cold Tar Epoxy** 

Description

PENTENS E-603CTE is a tar-extended, twopart epoxy formulation, chemical-resistant coating consisting of coal tar epoxy resin, reinforcing fillers and a special blend of solvents.

### Uses

To provide protection to concrete and metal structures such as marine structures, pipe-lining coating, sheet piling, industrial coating in power plants, oil and gas refining plants, sewage treatment plants, effluent plants, channels, culverts, tank foundations, mechanical room floor, under ground protection for concrete & metal structures etc.

## Advantages

- High adhesive strength.
- Excellent chemical resistance.
- Provide long term protection.
- Immersed piers.
- Oil catchment tanks.
- Easily applied by brush, roller and airless spray.
- Steel protection.
- High film builds in a single application.
- Marine structures.
- Easy to maintain.

Design Criteria

PENTENS E-603CTE is designed to be applied in two coats to achieve a dry film thickness of 200 to 350 microns.

## Technical & Physical Data

Color	Black
Volume Solids	> 75%
Touch Dry	18 hours at 25°C
	10 hours at 35°C
Specific Gravity	1.35 - 1.45
Full Cure	7 days at 25°C
	5 days at 35°C
Over-coating Times	Min Max
25°C	24 hrs 96 hrs
35°C	15 hrs 72 hrs
45°C	10 hrs 24 hrs
Mixing Ratio	Part A (4): Part B (1)
Fully Cured Coating is	Water, saturated sodium
Resistant to	chloride, sewage water,
	diluted mineral acids and
	alkalis, salt solutions
Pot Life (25°C)	~ 2 hours
Shelf Life	6 months in unopened
	original packaging when
	stored in a dry, cool place
Estimated Coverage	0.25 litre/m²/coat
Packaging	
■ Part A	16 litre /pail
■ Part B	4 litre /pail

## **Important Notes**

- 1. Minimum ambient and substrate temperature is 5°C.
- Apply only on clean surfaces. Substrate should be free from surface water and leakages.

## Instruction for Use

#### **Surface Preparation**

Precising and efficient surface preparation is essential to achieve the high adhesive qualities of PENTENS E-603CTE.

#### Concrete:

Concrete surfaces should be prepared thoroughly by mechanically wire-brushing, abrading, scarifying or preferably using high pressure water or sand blasting. Concrete surfaces must be fully cured, laitance-free and free from any traces of shuttering, release oil and curing compounds.

All blow holes and imperfections should be filled with PENTENS E-GROUT epoxy putty adhesive.

#### Steel:

All surfaces should be grit-blasted to meet the requirements of BS 4232 on quality. The lining work should be programmed so that the newly-cleaned steel is coated as soon as possible before rusting or scaling.

In all cases, proceed with coating on prepared metals without delay within 4 hours of preparation.

#### Priming

All surfaces should be prepared to meet the requirements of BS 4232 on quality or SA2 and to achieve a blast profile of 50-75 microns.

#### Mixing

The content of the base should be stirred thoroughly to disperse any loose settlement. The entire content of hardener should then be added to the base container and mixed thoroughly until a uniform color and consistency is obtained, taking particular care to scrape the sides and bottom of the container.

#### Application

All surfaces should be treated with at least two coats of PENTENS E-603CTE. The first coat should be applied by brush, roller or airless spray to achieve a uniform coating with a minimum wet film thickness of 200 microns. This coat should be allowed to dry for 18 hours at 25°C. The second coat should be applied as above, again achieving a minimum wet film thickness of 200 microns. When using airless spray equipment, nozzle pressure of 2000 psi and nozzle orifice of 0.031 inch are required.

## Limitations

- PENTENS E-603CTE is not color-stable when directly exposed to UV light for a period of time.
- PENTENS E-603CTE should not be applied over existing coatings and surfaces must be free from contaminations such as oil, grease, loose particles and organic growth.
- Application should not proceed when the prevailing relative humidity exceeds 90%. The surface temperature must be at least 5°C above dew point at all times to prevent moist condensation.

## Cleaning

Remove unhardened PENTENS E-603CTE from tools and equipment with thinner. Hardened material can only be removed mechanically.

## Safety

PENTENS E-603CTE contains cement and is alkaline. Keep away from fire sources. Do not smoke. Sufficient ventilation is needed during application. Otherwise, wear respiratory equipment. Suitable precautions should be taken to minimise direct contact with skin. Wear gloves and goggles when using the material. If the material gets into the eyes, rinse immediately with clean water and seek medical advice if irritation persists.



