



TECHNICAL DATA SHEET

CHEMI-TECH P.W.

Two Component Solvent Free Epoxy Coating



Thortex Chemi-Tech P.W. is a high performance solvent free coating designed for use as a lining system for the protection of tanks, pipes and associated equipment handling drinking water and liquids used in the food and drink processing industries.

Thortex Chemi-Tech P.W. is based on a special liquid epoxy polymer, reacted with a blend of non tainting amine and polyamino resins reinforced with non toxic pigments to produce a coating system with excellent abrasion, impact, adhesion and erosion resistance in combination with exceptional water and corrosion resistance.

Thortex Chemi-Tech P.W. is easy to apply by brush or roller and offers optimum adhesion to correctly prepared surfaces and is suitable for use on steel, concrete or mineral where potable water contact occurs.

Thortex Chemi-Tech P.W. meets the latest international drinking water standards.

Before proceeding, please read the following information carefully to ensure that the correct application procedure is fully understood.

SURFACE PREPARATION

Steel Surfaces - All surfaces to be coated should be abrasive blast cleaned to a minimum Sa2½ in accordance with BS7079 Part A1:1989 or equivalent with a blast profile corresponding to 'Medium' in accordance with BS7079 Part C3 / ISO 8503 / 1. All loose abrasive dust and debris must be blown clear or vacuum cleaned away. Steel surfaces do not require priming but should be coated within 4 hours of blast cleaning to prevent rash rusting.

Concrete Surfaces - All concrete to be coated should either be lightly abrasive blast cleaned using wet or dry abrasive techniques or alternatively high pressure water jetting. Care must be taken not to expose the aggregate in the concrete. All dust and abrasive material shall be removed from the surface prior to coating.

Concrete surfaces should have a maximum moisture content of 7% prior to any coating being applied.

Concrete surfaces should be primed with either **Thortex Floor-Tech S.P. Primer** or **Thortex Uni-Tech M.C. Primer** in accordance with the product tech sheet.

MIXING

Thortex Chemi-Tech P.W. is a two component material comprising base and activator components which must be mixed together prior to use.

Stir the contents of the base component, continue stirring and gradually add the total contents of the activator container, stir the combined mix until completely homogeneous.

The mixed materials should be used within 45 minutes of mixing at 20°C (68°F). This time will be reduced at higher temperatures and extended at lower temperatures.

APPLICATION

Thortex Chemi-Tech P.W. should not be applied at temperatures below 10°C nor when the relative humidity exceeds 80% or when the surface to be coated is less than 3°C above the dew point.

Thortex Chemi-Tech P.W. is suitable for application by brush or roller, using good quality brushes or short to medium pile rollers.

Thortex Chemi-Tech P.W. must only be applied to completely dry surfaces.

For large applications **Thortex Chemi-Tech P.W.** can be applied by dual feed hot airless spray equipment, full technical details can be supplied on request from the **Thortex Technical Centre**.

All equipment should be cleaned IMMEDIATELY after use with **Thortex Universal Cleaner**.

Theoretical Coverage Rate

4 m²/litre at 250 microns dft (43 ft²/litre at 10 mils dft)

Recommended Film Thickness

Wet 250 microns (10 mils)

Dry 250 microns (10 mils)

Note: Normally applied as a two coat system to achieve a nominal film thickness of 500 microns.

Detailed working Recommendations are available from the Technical Centre on request.

PHYSICAL CONSTANTS

Mixing Ratio 2 parts base to 1 part activator by volume

Appearance Base Coloured Thixotropic liquid
Activator Clear liquid

Drying & Cure**Times at**

20°C(68°F)	Usable Life	45 minutes
	Touch Dry	6 hours
	Minimum Overcoating	6 hours
	Maximum Overcoating	48 hours
	Full Cure	7 days

Volume Solids 100%

V.O.C. Nil

Shelf Life Use within 5 years of purchase.
Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).

Food Contact Meets USDA requirements for incidental food contact.
Meets FDA CFR 21.175.300 requirements for food contact.

Potable Water Approved for contact with potable water under the United Kingdom Water Regulation Advisory Scheme, in accordance with BS 6920. Authorised for use under Regulation 31(4)(a) of the Water Supply (Water Quality) Regulations 2000.

PHYSICAL PROPERTIES

TX961/1006

Abrasion Resistance	1 ml loss per 1000 cycles
ASTM D4060	1kg load - CS17 wheel
Direct Pull Adhesion	63 kg/cm ² (900psi)
ASTM D4541	
Impact Resistance	2.6 joules (45 ins lbs)
ASTM G14	
Salt Fog Resistance	Unaffected after 10,000 hrs
ASTM B117	
Tensile Strength	175 kg/cm ² (2500 psi)
ASTM D1002	
Water Vapour Permeability	3.75 x 10 ⁻⁶ perm. cm

HEALTH AND SAFETY

As long as normal good practise is observed **Thortex Chemi-Tech P.W.** can be safely used.

Protective gloves should be worn.

Vapour masks should be worn for spray application.

A fully detailed **Material Safety Data Sheet** is either included with the material or is available on request.

PACKAGING

Supplied in 5 litre packs.

The information provided in this Product Data Sheet is intended as a general guide only and should not be used for specification purposes. The information is given in good faith but we assume no responsibility for the use made of the product or this information because this is outside the control of the company. Users should determine the suitability of the product for their own particular purposes by their own tests.



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FOR FURTHER INFORMATION PLEASE CONTACT