TECHNICAL DATA SHEET

CHEMI TECH UC 200

highly crosslinked two component high build epoxy novolac coating solvent-free

Thortex Chemi Tech UC 200 is a high performance solvent-free coating based on an epoxy novolac complex resins mix. Specifically developed for high temperatures working conditions, idealized for a long term usage in which is required a very high resistance to chemical agents, abrasion and corrosion, up to 200°C; if in full immersion up to 95°C. A highly crosslinked coating suitable for both steel and concrete applications such as tanks, pipelines, flues, valves, pumps, and so on.

Before proceeding with the application, read attentively the following instructions in order to grant a correct application.

SURFACE PREPARATION

Steel surfaces:
For an optimal result, the surfaces must be sand-blasted at the minimum Standard Sa 2½, in accordance with ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2) or equivalent with a minimum blast profile of 75 microns. All incoherent abrasive powders and fragments must be blown away or aspired. For steel surfaces Primer is not needed, however, they must be coated within 4 hours after blasting, in order to evite the making of rust.
Where blasting is not possible, all oil and grease heavy contamination must be removed with **Thortex Universal Cleaner**. Remove all inconsistent materials, rust and surface contamination, including existing coatings and roughen the surface using a needle gun or grinding; make crossed passes to improve adhesion. When grinding at an angle, pay attention not to polish rather than to roughen the metal surfaces. In these conditions the final result will not be optimal but satisfactory for most applications.

Concrete surfaces:
All concrete surfaces should be lightly blast-sanded (wet or dry) or alternately cleaned with pressurized water. Be careful not to expose the aggregate of the concrete. Remove any residue and dust before applying the coating.
Concrete surfaces must have a maximum humidity of 7% before applying any coating.
Concrete surfaces must be treated with **Thortex Floor Tech SP Primer**.

MIXING

Thortex Chemi Tech UC 200 it is a two-component material comprising a base and an activator.

Before mixing, heat the base component at a temperature between 15 and 25°C; do not apply when the environment (or surface) temperature is below 8°C or lower than 3°C above the dew point. Avoid application even if the relative humidity exceeds 80%.

Mix the content of the base component and continue to mix by gradually adding all the activator until a homogeneous mixture is obtained.
At this point, the mixed material must be used within 45 minutes if at 20°C. This time will be reduced in higher temperatures and will increase at lower temperatures.

APPLICATION

Thortex Chemi Tech UC 200 can be applied with a double airless pump with heaters.
Heat the base component up to 50-60°C and the activator at 35-40°C. Adjust the pressure to get 4200 psi. Use a 21-23 degrees spray nozzle.
For brush or roller applications, use good quality brushes or short or medium bristle rollers.

All tools must be cleaned IMMEDIATELY after use with **Thortex Universal Cleaner**.

Theoretical coverage
2,85 m^2/Lt at 350 microns
1,65 m^2/Lt at 600 microns

Thickness recommended for spray application
Wet 600 microns

Thickness recommended for roller application
Wet 350 microns

Note: usually applied as a two-layer system to achieve an overall minimum thickness of 700-800 microns

Coverage values are theoretical and do not take into account the profile or conditions of the surface to be repaired

Detailed instructions are available at the Technical Center on request

TECHNICAL DATA

Mixing ratio
3,5 base parts for 1 part of activator by Volume
5 base parts for 1 part of activator by Weight

Appearance
Base Viscous Dark gray liquid
Activator Amber liquid

Drying and curing times at 20°C

Usable life 45 minutes

Maximum time per next layer 6 hours

Hardening 10 hours

Complete polymerization 7 days

To increase the mechanical, thermal and resistance performances, after the first 12 hours at 20°C, gradually increase the temperature to 60-100°C for a maximum of 8 hours

Solids Content 100%

Storage Life
Use within 5 years from the date of purchase. Store in original sealed containers at a temperature between 15 and 30°C

PHYSICAL PROPERTIES

Heat Resistance Suitable for use with temperatures up to 200°C in dry conditions, and up to 95°C in total immersion conditions

Hardness
Shore D - ASTM D2240 20-100°C 85

Flexural Strength 820 kg/cm²
ASTM D790 (11,660 psi)
Tensile Shear Adhesion 196 kg/cm²
ASTM D1002 (granulated steel)

Compressive Strength 790/cm²
ASTM D 695 (11,235 psi)

Abrasion Resistance 115 mg
ASTM D4060
loss/1000 cycles CS17 1 kg load

HEALTH & SAFETY

If the usual rules of prudence are respected, **Thortex Chemi Tech UC 200** is of safe use

During preparation and application it is advisable to use protective gloves and other recommended personal protective equipment. Before mixing and applying the material, make sure you have read and fully understood the safety data sheet. It is advisable to use a mask for spray applications

PACKAGE

4 and 16 Lt Packs

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