nC ProTherm - CUI-HTF



## **Product description**

nC ProTherm - CUI-HTF is a sprayable thermal insulating coating for new or corroded metal surfaces up to 280°C. In addition, it prevents condensation in the interior. It is free of solvents. ProTherm - CUI-HTF can be applied in one coat in 4 mm to 15mm WFT. Life cycle of 15 to 25 years, depending on exposure to heat

## **Advantages**

- Thermally insulating coating λ W/(m K) 0.04
- Prevents condensation
- Fire class buildings B-S0-d0
- Stops cold bridges
- Breathable, does not form a damp screen
- Chemically bonds to the metal surface
- Does not contain solvents and metals
- Low consumption 500gr per m<sup>2</sup> per mm WFT
- Available in RAL colours\* Paintable
- Life cycle 15 to 25 years

## **Suitable for**

- Metal surfaces, blasted or corroded
- Indoor and outdoor performance requirements
- Surfaces with temperatures from -180 °C to 250 °C (short time against 280 °C)

# Characteristics

Viscous liquid <990 mPas Density: 0.50g/cm³/20°C (DIN 53217)

Color: White or RAL ordered pH value: 8.35 – 8.45
Odor: Shore hardness A 55

Solid substances: 89%

#### Logistics

Store for a maximum of 12 months in tightly closed packaging between  $5^{\circ}$ C and  $25^{\circ}$ C Available in sets of 4 kg, 16 kg, 40 kg, 175 kg

No dangerous goods

Product suitable for air transport



## **Preparing work**

- Remove dirt, grease, dust, loose corrosion, mill scale and/or paint.
- Pre-treat corroded surface with nC Corrosion Passivator Zinc Primer C5
- Mix wet component for 5 minutes.
- Mix 1 part dry to 3 parts wet component and keep stirring for 8 minutes.
- The surface temperature should not exceed 75°C during application.
- DO NOT apply when the humidity is above 90%.
- Although free of solvents, provide adequate ventilation, especially when spraying.
- Ambient temperature between 6°C and 35°C during application
- Wear safety glasses. Protect hands and skin from exposure using gloves and appropriate clothing.







Date of issue/revision: 01 February 2023

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## application

- Substrate must be free from grease, dirt or dust, loose rust and/or loose paint.
- Mix wet component B for 5 minutes, then, keep mixing, gradually add dry component A 25% weight to resin component B 75% weight. Mix for at least 8 minutes.
- Apply DIRECTLY after mixing. Stir regularly to maintain an airy mixture.
- ProTherm CUI-HTF may be applied by either rotor-stator spray equipment or concrete sprayer. Brushes may be used for touch-up and edging work, or for small areas that are not practical for spray application.
- It is best to spray at the lowest pressure. The pressure control should be set at a low-pressure setting and slowly increased until the mixture applied looks like dry rice coming out from the gun. If the spray pattern has fingers or tails, then the pressure should be increased.
- If the maximum pressure of the sprayer is not enough to achieve a good spray pattern, a spray tip with a smaller orifice should be used. To test the quality of the spray pattern, test patterns should be sprayed on scraps of cardboard or other waste material.
- Hold spray gun appr. 30 cm from surface, aim straight (both horizontally and vertically) at the surface. Extremely large tips will require you to move further away to achieve a good spray pattern.
- The spray gun should move across the surface with the wrist fixed to keep the gun pointed straight at the surface. "Fanning" the gun to direct the spray at an angle will cause an uneven finish.
- The spray gun should be triggered after beginning the stroke (also called the lead stroke) and released before ending the stroke (also called the lag stroke). The gun should move during both the trigger squeeze and trigger release. This technique prevents blotches of thick coating at the beginning and end of each stroke.
- Cross layer-application is recommended, wet-in-wet. This ensures that an even amount of coating is sprayed on the surface. Overlap each stroke by 25%. To maximize efficiency on broad surfaces (ceilings and bare walls), outside edges should be sprayed first. The middle can then be sprayed quickly, requiring less precise strokes.
- Key to proper coverage is controlling the coat thickness. Hints to ensure proper coverage and a quality finish:
  - Do not adjust the pressure to make the coat thicker or thinner. The pressure should be adjusted to the lowest pressure with a good spray pattern.
  - If the coating is too thick or running down the surface, one or more of the following will help: Move the spray gun faster, choose a smaller tip orifice size; choose a tip with a wider fan, make sure the spray gun is far enough away from the surface (about 30 cm)
  - If the finish is not covering the surface, one or more of the following will help: Move the spray gun slower, choose a larger tip, choose a tip with a narrower fan width
- One-coat WFT can be varied from between 4 mm to 15 mm.
- In warm, high-humidity areas, one-coat WFT must not exceed 8mm.
- It is always good to apply a grip layer first, of 2mm thickness.
- Use 450 gram of ProTherm CUI-HTF per m² for a one mm coat.
- Measure WFT during application.
- Forced drying is only allowed after 5 hours settling time.
- Let surface rest for 12 hours before painting over.
- Clean and rinse equipment during any stop or pause.
- Wash hands during any stop or pause. ProTherm CUI-HTF gets sticky on the skin!
- Unopened packaging can be stored for 12 months below 25°C.