

Hempaprime CUI 275

A high-performance alkylamine-cured epoxy to combat Corrosion Under Insulation (CUI), with short recoating and return to service intervals for higher productivity

Product description

Hempaprime CUI 275 provides long-lasting barrier protection in coating systems for severe corrosive environments, making it ideal for high temperature and wet conditions found beneath thermal insulation.

Typical uses

Hempaprime CUI 275 meets ISO 19277 standard for protection across a wide temperature range where CUI typically occurs, as well as where thermal cycling is present. Better crack resistance when applied at high DFTs minimises the risk of failure. Short overcoating intervals makes it ideal for high-productivity projects.

Hempaprime CUI 275 can be used in new construction, maintenance and repair, on carbon and stainless steel in both insulated and uninsulated service. It can be applied at temperatures down to -10°C (14°F) and is suitable for application onto hot surfaces up to 204°C (399°F).

Key features

- ✓ Fast overcoating
- ✓ Superior crack resistance to thermal cycling compared to traditional epoxy phenolic coatings
- ✓ Wide temperature resistance from cryogenic up to 275°C (527°F)
- ✓ Can be applied at temperatures down to -10°C (14°F)
- ✓ Aluminium pigmented

Use areas

Hempaprime CUI 275 is designed for use in the following process areas where a corrosion resistant coating is required to protect against CUI.

- ✓ Process piping
- ✓ Pressure vessels
- ✓ Storage tanks
- ✓ Stacks
- ✓ Flare lines
- ✓ Burners and dryers
- ✓ Pressurised storage spheres



Characteristics	Benefits
Fast drying with short minimum overcoating interval	Offers productivity improvements in fabrication shop situations as multiple coats can be applied in a single shift. Reduces time to reinsulate in maintenance situations
High dry heat resistance (275°C / 527°F)	Offers a wider safety margin when specifying organic coatings for use beneath insulation
Application down to temperatures as low as -10°C (14°F)	Wider application window compared to typical epoxy phenolic coatings. Increases available painting time in cold climates. Reduces costs associated with heating paint shops
Reduced discolouration at elevated temperatures	Reduced colour change and better mechanical properties, such as adhesion, when exposed to elevated temperatures
Extensively tested for CUI resistance	Meets the requirements of ISO 19277:2018 for corrosion categories CUI-1, CUI-2, CUI-3 and their cryogenic extensions
Reduced cracking when applied over-thickness or exposed to higher temperatures	Reduced likelihood of subsequent corrosion under insulation. Minimises rework

Physical constants

Colour:	19530: Aluminium red 19690: Aluminium grey
Number of components:	2
Mix ratio:	3:1
Pot life, hours:	2 (20°C / 68°F)
Finish:	Semi-Flat
Volume solids, %:	66 +/- 2
Flash point:	35°C (95°F)
VOC:	306 g/L (2.55 lb / US gal)
Specific gravity:	1.3 kg/L (11 lb / US gal)
Minimum application temperature:	-10°C (14°F)
Surface dry, hours:	3.5 (20°C / 68°F)
Hard dry, hours:	4 (20°C / 68°F)
Minimum self overcoating interval, hours:	1.5 (20°C / 68°F)

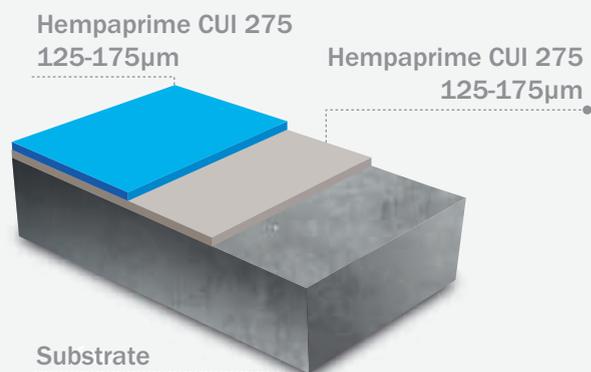
The physical constants stated are nominal data according to the Hempel Group's approved formulas. They are subject to normal manufacturing tolerances. The product should be used with reference to the technical specifications.

Certificates and approvals

- ✓ Meets the requirements of ISO 19277:2018 for corrosion categories CUI-1, CUI-2, CUI-3 and their cryogenic extensions
- ✓ Meets the requirements of ISO 12944 for corrosion categories C5-H and CX



System details



Suitable for use as a fast-drying intermediate coat when used as part of a scheme including a zinc based primer and topcoat.

Suitable topcoats include Hempthane HS 55610 (up to 120°C) and Hempel's Silicone Acrylic 56940 (up to 204°C). For use with other topcoats, please contact Hempel.

For more information, please contact Hempel at hempel@hempel.com

Test marketing disclaimer. This document is an interim document to support test marketing. All results / performance statements remain subject to change prior to releasing the product to market.

Hempel A/S
Lundtoftegaardsvej 91, 2800 Kgs. Lyngby, Denmark
Tel: +45 4593 3800
hempel.com/cui