

# Versiline CUI 56990

Fibre-reinforced single component inert modified inorganic copolymer

## Product description

Versiline CUI 56990 is an MIO pigmented, single component, inert modified inorganic copolymer coating. It is able to resist temperatures up to 650°C/1202°F and thermal shock/cycling in dry or dry/wet service.

The product is a new innovation designed to protect equipment exposed to Corrosion Under Insulation (CUI) and high heat environments. The product is designed to operate across a wide range of temperatures from -196°C to 650°C making it ideally suited for simplification of new construction specifications.

Its unique fibre-reinforced filler package prevents micro-cracking often associated with coatings in high temperature environments, thus preventing the inevitable corrosion that follows.

The excellent spray application properties of Versiline CUI 56990 makes it easy to apply and its dry film properties make it more resilient to damage during transport and installation.

## Typical applications

Versiline CUI 56990 is an inorganic copolymer, which meets the generic description and operating temperature ranges described in NACE SP0198 : 2010.

Versiline CUI 56990 is designed to be applied by airless spray/air spray/brush for applications where high temperature systems, such as silicones have historically been specified.

Versiline CUI 56990 is a single component product thus alleviating any potential errors arising from incorrect mixing.

It can be applied across a wide range of temperatures and can even be applied on hot surfaces up to a maximum substrate temperature of 200°C/392°F.

Versiline CUI 56990 is more tolerant towards high film thicknesses than conventional silicone products.

In addition, 3rd party testing has shown Versiline CUI 56990 to contain no halogen impurities making it suitable for use on stainless steel.



Features	Benefits
Extremely good heat resistance up to 650°C/1202°F	Allows a single product to be specified across a wide range of temperatures, allowing simplification of painting specifications
Excellent resistance to CUI conditions	Provides equipment operators with confidence that painted equipment will perform long term in insulated environments
Fibre-reinforced for reduced micro-cracking	Less micro-cracking after heat exposure means less potential sites for subsequent corrosion
Resistant to abrupt changes in process conditions	Excellent thermal cycling resistance means the coating will remain unaffected by deviations in the process conditions or during shutdown and startup operations
High film build and resistance to sagging	Results in a product that is easy to apply and can rapidly be built up to the required scheme thickness
Improved physical durability	Coating hardness and impact resistance minimises fabrication damage

# Typical specification

Typical paint system insulated

1st coat: Versiline CUI 56990 150 microns (6 mils)

2nd coat: Versiline CUI 56990 150 microns (6 mils)

Typical paint system uninsulated

1st coat: Versiline CUI 56990 225 microns (9 mils)

2nd coat: Versiline CUI 56990 225 microns (9 mils)

Where a topcoat is required up to 200°C/392°F for aesthetics or safety marking, use Hempel's silicone acrylic 56940 (available in a range of safety colours).



Physical constants	
Shade nos/Colours:	Dark grey / 10710 Light grey / 15730 Aluminium / 19360
Finish:	Flat
Volume solids, %:	74 +/- 1
Theoretical spreading rate:	5.0 m <sup>2</sup> /L - 150 micron (203.7 sq.ft./US gallon; 6 mils)
Flash point:	29°C (84°F)
Specific gravity:	1.90 kg/L (15.85 lbs/US gallon)
Surface dry:	30 minute(s) 20°C/68°F
Through dry:	1.5 hour(s) 20°C/68°F
Dry to handle:	16 hour(s) 20°C/68°F
VOC content:	420 g/L (3.5 lbs/US gallon)
Shelf life:	1 year

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

## Test results

The performance of Versiline CUI 56990 has been extensively demonstrated through testing, including:

- ✓ NORSOK M-501 Ed. 6 (ISO 20340) – certified by COT (Netherlands) when used with a zinc silicate primer
- ✓ ASTM D 2485 Method B to 650°C
- ✓ Houston pipe test
- ✓ Cyclic high temperature test
- ✓ Resistance to hot water (90°C) NACE TM0174 - Method B
- ✓ Salt spray (SST) to ASTM B-117
- ✓ Cryogenic testing to -196°C
- ✓ Natural weathering C5-M environment

## Certificates and approvals

- ✓ Conforms to NORSOK M-501, Ed.6, system no.1 when used with a zinc silicate primer
- ✓ Conforms to NACE SP0198 : 2010 Categories SS-5 and CS-6

### The Hempel Group Head Office

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

[versilinecui.hempel.com](http://versilinecui.hempel.com)