

## PRODUCT SPECIFICATIONS

### Product Description

A Single component, heat resistant finish specially designed with inorganic copolymer with MIO and other heat resisting pigments for protection of CS & SS surfaces. This high-performance surface tolerant coating forms multi-polymer matrix after curing which resist temperature range between -196 to 850 °C.

### Design Feature

- It gives excellent protection against corrosion on buried high temperature vessels & underground pipelines.
- 850 °C dry operational continuous temperature resistance for stainless steel surface.
- 750 °C dry operational continuous temperature resistance for carbon steel surfaces.
- 250 µm DFT high build single coat DTM application over a zinc silicate primer for C5/CX exposures.
- 200 °C, Suitable for hot steel surface application during shutdown & maintenance.
- -196 °C, suitable for thermal shock/rapid cycling in dry or dry/wet service temperature.
- Protect stainless steel from chloride attack by forming a protective barrier.
- Outstanding weathering & UV resistance and durability along with good chemical resistance.
- Confirms to NACE SPO198-2017 systems SS-5,CS-6and CS-8
- Tested and evaluated to NACE TM0174 and ISO12944-6.
- Tested and evaluated for suitability to CUI resistance as per Houston pipe test.

### Physical Characteristics

Recommended Application Data		Wet [µm]	Dry [µm]	m <sup>2</sup> /l
Theoretical Coverage		165	125	6
Volume Solids	:	75% (based on ASTM D2697)		
Dry Film Thickness Range	:	100 µm to 250 µm		
Flash Point	:	27 °C		
VOC	:	345 ± 10 gm/lit (depending on shades)		
Finish	:	Semi-Gloss		
Colour Range	:	Black Grey		
Standard Packing Size	:	5 litres		

### Application

AIRLESS SPRAY	:	Tip Size : 0.38 mm (15 thou) Pressure : 110 – 130 atm (1400 – 1800 psi)  Do not overapply. Over-application will slow down drying and handling times.
BRUSH OR ROLLER	:	May be used. However, the finished aesthetic appearance of the coating will not be as brilliant and attractive as when it is spray applied.
CONVENTIONAL AIR SPRAY	:	May be used.

### Drying Time

Substrate Temperature	Touch Dry	Hard Dry
15 °C	70 mins	6 hours
25 °C	50 mins	5.5 hours
35 °C	35 mins	5 hours

### Useful Information

THINNER	:	SOLVALUX 7-800 (Maximum 10% addition)
STORAGE	:	Store in a cool dry shaded area.
SHELF LIFE AT 30 °C	:	12 months when stored as prescribed in the MSDS.

## Surface Preparation

The service life span and the service performance of Berger Apcotherm 800 CUI is directly related to the degree of surface preparation.

### STEEL

- Berger Apcotherm 800 CUI should be applied to a surface that has been blast cleaned. It may be applied directly to blast cleaned steel or over a suitable primer e.g. Zincanode 330.
- Remove all wax, oil and grease by solvent cleaning in accordance with the guidelines given by SSPC-SP1. Where necessary remove weld spatter and round off all rough weld seams and sharp edges to a smooth surface.
- Abrasive blast clean to a minimum standard of Sa2½ (ISO 8501-1:1988) or SSPC-SP10. An average surface profile of 50 – 75 microns is required.
- Ensure that all surface defects detected after blast cleaning is ground, filled or treated in a suitable manner.
- After blasting, remove dust from the surface. Ensure that the surface to be coated is clean, dry and free from any contaminants.
- Apply Berger Apcotherm 800 CUI immediately after blasting to prevent oxidation and recontamination of the steel surface. The use of a dehumidification system and / or the use of a suitable blast/holding primer such as Epilux 610, is recommended to prevent oxidation of the blasted steel surface. In case of oxidation/recontamination, re-blast to the required standard.

To avoid condensation of moisture onto substrate prior to coating application, relative humidity should not exceed 85% and substrate temperature should be more than 3°C above Dew Point.

## Recommended Use

Hot Piping, Process vessels, Heat Exchangers, Boiler Casing, Refinery Heaters, Crackers & Reactors, Furnaces and Other exposed insulated or buried high temperatures equipment's.

## Notes

- The coating specifications given above are typical. For specific recommendations to suit individual applications, please refer to your Berger Paints representative.
- This product is not suitable in use in immersed conditions.
- Do not apply this product directly onto Zinc primer, Galvanised substrate without a suitable tie-coat.
- Do not exceed the recommended film thickness to avoid blistering during service.

## Safety Precaution

- Avoid contact with eyes and skin. Wear suitable protective clothing such as overalls, goggles, dust mask and gloves. Use barrier cream.
- Ensure that there is adequate ventilation in the area where the product is being applied. Do not breathe in vapour or spray mist.
- This product is flammable. Keep away from sources of ignition. Do not smoke.
- Take precautionary measures against static discharge.
- In case of fire, blanket flames with foam, carbon dioxide or dry chemicals.

## First Aid

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|-------------------|---|---|
| <b>Eyes</b>       | : | In the event of accidental splashes, flush eyes with warm water immediately and seek medical advice.      |
| <b>Skin</b>       | : | Wash skin thoroughly with soap and water or approved industrial cleaner. Do Not Use solvents or thinners. |
| <b>Inhalation</b> | : | Remove to fresh air, loosen collar and keep patient rested.   |
| <b>Ingestion</b>  | : | In case of accidental ingestion, DO NOT INDUCE VOMITING. Obtain immediate medical attention.              |

For further safety information, please refer to our **Material Safety Data Sheet (MSDS)**

The information provided on this data sheet is not intended to be complete and is provided as general advice only. It is the responsibility of the user to ensure that the product is suitable for the purpose for which he wishes to use it. As we have no control over the treatment of the product, the standard of surface preparation of the substrate, or other factors affecting the use of this product, we are not responsible for its performance nor would we accept any liability whatsoever or howsoever arising from the use of this product unless specifically agreed to in writing by us. The information contained in this data sheet may be modified by us from time to time, and without notice, in the light of our experience and continuous product development.

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