

APCOTHERM HR FINISH

Moisture Cure Inorganic Silicate

PRODUCT DESCRIPTION

Single pack moisture cured inorganic silicate based heat resisting finish

FEATURES AND RECOMMENDED USE

- Heat resistance up to 400° C dry heat for atmospheric exposure conditions on top of suitable inorganic zinc silicate primer
- Excellent resistance to normal weathering or high temperature
- Minimizes the formation of zinc Salts on atmospheric exposure
- Not recommended for immersion service or where acid, alkali or solvent spillage/ splash occurs. Also not recommended for areas exposed to highly acidic environment.
- High temperature may result in a colour change without affecting performance

TECHNICAL DATA

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| Colour | Grey and White |
| Gloss | Flat |
| Volume Solids | Approx. 45% |
| Recommended DFT / Coat | 50 - 75 microns |
| Theoretical Coverage Capacity | 9.0 sq.mtr/ ltr @ 50 microns DFT 6.0 sq.mtr/ ltr @ 75 microns DFT |
| Drying Time | Surface Dry : 1 hour Hard Dry : 24 hours Full Cure : 7 days, allow full cure before exposure to service condition |
| Over coating interval at | Min. : Not Applicable Max. : Not Applicable * In certain circumstances Top coat may be required for marking purpose. Consult Asian Paints PPG Pvt Ltd |

The data given is for guideline only. The physical values are subject to normal manufacturing tolerances, colour and testing variances
The volume solids indicated are as per ASTM D 2697 air drying method.

The actual drying time/ overcoat interval may be shorter or longer, depending on film thickness, ventilation, humidity, temperature etc.
The information provided above is at 30° C and 65% relative humidity.

DIRECTIONS FOR USE

Surface Preparation

General:

- Apcotherm HR Finish should always be applied over a recommended zinc silicate primer
- Apcotherm HR Finish is suitable for application over fully cured zinc silicate primer free from any contamination and zinc salt.
- If the zinc silicate primer shows widely scattered breakdown or excessive zinc corrosion products, overall sweep blasting is necessary. Other types of shop primers are not suitable for overcoating and will require complete removal by abrasive blast cleaning
- Weld seams or damaged areas should be blast cleaned to Sa 2 1/2 and re-primed with zinc silicate primer.
- Ensure primed surface is clean, dry and free from any contamination/zinc salt.
- Ensure removal of dirt, dust, oil and all other contaminants from the primed surface that could interfere with adhesion of the coating. Oil and grease should be removed as per SSPC-SP1 solvent cleaning.
- Surface should be checked and treated in accordance with ISO 8504 prior to paint application

Blast Cleaning: (**required prior to Zinc Silicate Primer application)

- Prior to blasting remove weld spatter, protrusions, sharp edges and laminations in steel. Grind welds smooth in accordance with NACE RP-0178. Remove all surface contaminants, oil and grease in accordance with SSPC SP-1.
- Steel, abrasive blast cleaned to min. Sa 2 1/2 (ISO 8501-1: 200) or SSPC –SP6.
- A blasting profile of (Rz) 40 - 50 microns is recommended.
- Apply zinc silicate primer as soon as possible to avoid rusting of blasted surface

Application Conditions

- Substrate temperature should be at least 3°C above dew point but not above 50° C.
- Relative humidity should be above 50%
- Good ventilation is required in confined areas to ensure proper curing

Mixing

- Stir the material. If settling is observed, loosen the settled material with the help of hand stirrer followed by power driven stirrer for quick homogenous mixing.
- Strain the paint through 40-60 mesh screen & agitate continuously during application
- Once the pack is opened, it should be consumed within 4 – 6 hours. In case of part usage (which should be avoided), close the lid of container tightly to avoid contact with atmospheric moisture.
- If Thinner is added the pack should be consumed in one go.

Application

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| Airless Spray | |
| Recommended thinner | T 144 |
| Volume of thinner | 5 - 15% |
| Nozzle orifice | 1.50 – 3.00 mm |
| Nozzle pressure | 0.3-0.4 MPa (= approx.3-4 atm; 43-57 p.s.i.) |
| Cleaning Thinner | T 144 |
| Airless Spray | |
| Recommended thinner | T 144 |
| Volume of thinner | 0 - 10% |
| Nozzle orifice | 0.28 - 0.33 mm (11 – 13 Thou) |
| Nozzle pressure | 10 – 13 MPa (=approx.100-130 atm; 1400-1800 p.s.i.) |
| Cleaning Thinner | T 144 |
| Touch up: | |
| Prefer conventional spray for touch up. | |

Cleaning

- Do not allow the product to remain in hoses, gun or spray equipment. Clean all equipments immediately after use with Thinner T 144. It is recommended to periodically flush out spray equipment during the course of the working day. The frequency of cleaning will depend on amount sprayed, temperature and time gap.
- All surplus material and empty containers should be disposed off in accordance with appropriate regional legislation.

Product Characteristics

- The film of Apcotherm HR Finish by design exhibit some degree of surface roughness due to which it would have tendency to pick up dirt from air-borne particulates and contaminates e.g. dust, shoot and slight powdery appearance. While this does not interfere with the performance.
- To enable optimum cure and film strength, it is necessary to ensure wet coat application as far as possible. Hence avoid dry spray to maximum extent by keeping the spray gun close to the substrate and using slow passes to give even coverage. If due to local environmental conditions at the time of application dry spray is unavoidable, it should be removed by lightly rubbing with clean cloth after 24 hours.
- Due to product chemistry, surface cracking may occur due to excessive deposition of paint. This is likely to in acute corners and over weld areas. Such areas need to be treated by abrading cracks using emery paper, remove the dust completely and apply thin coat of Apcotherm HR finish by diluting with 15- 20 % thinner T 144. In case defect observed on more than 5% of total area, it is suggested to opt spot blasting/reblasting and application of entire paint system. All deficiencies and defects should be covered before placing the system in to service. Please refer working procedure for detailed information.
- Product is based on inorganic silicate chemistry hence the structures painted with this system are required to be handled carefully ensuring the minimum or least damages so that touch up areas are as low as possible.

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| PACK SIZE | 4 ltrs & 20 ltrs |
| STORAGE | Shelf Life: At least 6 months @ 30°C for original unopened pack, subject to inspection thereafter. Store in a cool, dry place and in accordance with local regulations |
| REGULATORY INFORMATION | Flash Point: Not less than 22°C VOC: Approx. 555 gm/ ltr (depending on shades) as per USA-EPA Method 24 Product Weight: Approx. 1.26 kg/ ltr (depending on shades) |

SAFETY INFORMATION

- As a general safety measure, inhalation of solvent vapours or paint mist and contact of liquid paint with skin & eyes, should be avoided. Forced ventilation should be provided when applying paint in confined spaces or stagnant air. Even when ventilation is provided, respiratory, skin and eye protection are always recommended when spraying paint.
- Please refer our Material Safety Data Sheet prior to using the product.

Disclaimer: To the best of our knowledge the information provided herein are true and accurate at the date of issuance. Since we have no control over the quality or condition of the substrate or the various factors affecting the use and application of the product, we do not accept any responsibility or liability arising out of use of the product.

The company reserves the right to modify data contained herein without prior notice. Any change in data would normally be followed by issue of a new data-sheet. The user should check with the nearest sales office of the company and confirm the validity of the information, prior to using the product.

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