# AquaArm Ultra Coat

(Formerly known as MYK Ultra-Shield)

High thermal Reflectance & Emittance coating



# **Product Description**

AquaArm Ultra Coat is a single component, water based, high thermal reflectance & emittance coating, it has the ability to reflect the visible, infrared and ultraviolet rays. It significantly lowers the surface temperature of roofs and structural exteriors.

## Uses

- Certified green buildings
- Commercial and residential buildings
- Industrial sheds and godowns
- Concrete & metal storage tanks
- Cold storages and Warehouses

# **Features and Benefits**

- Single component
- Ready to use
- Non-toxic, High emissivity
- Green building compliant
- Washable

#### **Application Methodology**

#### Step no 1: Surface Preparation

Correct substrate preparation is critical for optimum performance of the surface coating. Surfaces should be clean, and free from loose particles, curing membrane or any other contaminant. Grease, oil, mould release agent, loose and flaking paint, rust, algae, fungus or any other material which may impair adhesion and such other contaminants must be removed by mild detergent,

thoroughly scrubbing with a soft brush, and then clean with water. If the wall surface is damp or water is seeping, it is necessary to treat the leakage before coating. One coat of AquaArm Bioblock is recommended to arrest the growth of algae / fungi. It is important to note that the final finish obtained is entirely dependent on the surface finish of the substrate. For a superior finish, fill the substrate surface irregularities such as blow holes, honeycombs, and unevenness etc. Cleaned area to be washed with water. And the concrete surface should be moist (Slightly wet) and clean before application of first coat.

#### Step no 2: Primer

AquaArm Prime CS is ready for use. Application can be done with paint brush or with sponge roller. The material can also be applied with a suitable spray gun.

Further applications of top coat can done only after AquaArm Prime CS is thoroughly dried.(after 2 to3 hrs at 30<sup>o</sup>C temp).

Drying time generally related to air circulation/temperature and film thickness will affected correspondingly.

#### Step no 3: Product Mixing

Stir the contents of the container using a medium speed stirrer for 30 secs to homogenize the coating material before use.

#### Step no 4: Product Application

Apply AquaArm Ultra Coat by a roofing brush or with Medium nap lamb's wool roller on the cleaned and washed surface. The second coat to be applied after a gap of min. 6 hrs. To ensure optimum performance apply the second coat at right angles to the first coat. Ensure that the coated area does not come in contact with water for a minimum 8 hours. After completion of full coating,48 hours are the(self) curing period for this painted surface. Do not apply the first coat onto freshly placed concrete or mortar until its moisture content falls below 8%.



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# Curing:

AquaArm Ultra Coat is self-curing. Curing time depends upon the ambient temperature & humidity, the moisture content of the substrate, thickness of film, etc. High temperature and low humidity accelerate the curing process.

#### Repainting:

For coating on the previously painted concrete / plaster surface, please conduct a trial to check the system suitability with AquaArm Ultra Coat by applying over painted surface in a small area. Remove all the lose dried /delaminated paint before repainting. Check for the bonding /finishing of the material with the substrate before going ahead. If the bonding is not good, then contact MYK Arment technical team for further advice.

#### **Technical Data**

| Physical appearance                        | White Color                                     |
|--|---|
| Density                                    | 1.11 ± 0.1 kg/liter                             |
| % Solids                                   | Approx. 48 %                                    |
| Water Absorption                           | Nil   |
| Impact resistance                          | Very good                                       |
| No. of coats to be applied                 | 2 coats   |
| Dry film thickness                         | 125 microns                                     |
| Dry to touch @ 30 <sup>0</sup> C           | 30 minutes                                      |
| Recoating time @ 30°C                      | 6 hours   |
| Full curing time @ 30°C                    | 48 hrs.   |
| Curing Mechanism                           | By Air evaporation ,<br>Coalescence             |
| Solar Reflectance<br>(ISO 9050/EN410)      | Approx. 0.834                                   |
| Solar Emittance<br>(EN 673)                | Approx. 0.938                                   |
| Solar Reflective index<br>(ASTM E 1980-11) | 105   |
| Abrasion resistance                        | 6000 cycles                                     |
| Adhesion Strength                          | Excellent                                       |
| Lead / Chromate                            | Nil   |
| Service Temp (After curing )               | Min. 4 <sup>°</sup> C<br>Max. 65 <sup>°</sup> C |
| Application temp range                     | 12 <sup>°</sup> C to 45 <sup>°</sup> C          |



#### Consumption

On a smooth dense surface, each pack of 5 kg will covers approximately 17  $m^2$  to obtain DFT of approximate 125 microns in two coats. Actual coverage depends on the numbers of coats, surface profile, loss and wastage.

#### Primer: AquaArm Prime CS:

Approx. 100-150g/m<sup>2</sup> for metal Substrate & approx 100-200g/m<sup>2</sup> for concrete substrate depending upon the porosity.

#### Packaging

AquaArm Ultra Coat is available in 5 & 10, 20 kg pails

#### Storage and Shelf Life

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

Shelf life is 12 months when stored as per above.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.

For specific storage advices please consult MYK Arment Technical Services Department.



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# TECHNICAL DATA SHEET

# **Product Categories Available**



# Limitations:

- 1. Do not dilute the material.
- 2. Always to be kept as final coat. i.e. No over coating over this AquaArm Ultra Coat.
- 3. Do not apply within two hrs of sunset, rain, fog, or freezing temperatures.
- 4. All coating must by dry before exposing to foot traffic.
- 5. For exterior use only.

## Health & Safety

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and food stuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not reuse containers for storage of consumable item. For further information refers to the material safety data sheet.

## Legal Note

The information, and, in particular, the recommendations relating to the application and end-use of MYK Arment products, are given in good faith based on MYK Arment current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MYK Arment's recommendations. In practice, the difference in materials, substrates and actual site conditions are such that no warranty in respect of merchant ability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application & purpose. MYK Arment reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.

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