

# TECHNICAL DATA SHEET

## AQUA ZERO™ PurCoat 300CP

2K Cold Polyurea Waterproofing Membrane



### DESCRIPTION

**Aqua Zero™ PurCoat 200MS** is a 2 part, hand applied and solvent free polyurea based liquid waterproofing membrane which creates a seamless, highly durable waterproofing layer with strong adhesion to various types of surfaces with high mechanical properties. It is specially developed for general waterproofing, repairing, protection and sealing purposes.



### TECHNICAL DATA

|                                   | METHOD     | DATA                      |
|-----------------------------------|------------|---------------------------|
| Chemical Structure                |            | A: Prepolymer<br>B: Amine |
| Pot Life (min)                    |            | 30 min                    |
| Tack Free Time (min)              |            | 150 min                   |
| Open to Foot Traffic (hr)         |            | 24 hours                  |
| Recoat Time (hr)                  |            | 4-12 hours                |
| Full Curing Time (day)            |            | 5 days                    |
| Density (gr/cm3)                  | ASTM D792  | 1.44                      |
| Tensile Strength at break (N/mm2) | ASTM D412  | >7                        |
| Elongation at Break (%)           | ASTM D638  | >400%                     |
| Hardness (Shore A)                | ASTM D2240 | 65                        |
| QUV Accelerated Weathering Test   | ASTM G53   | No cracking               |
| Service Temperature               |            | -4 to 176°F               |

### PRODUCT INFORMATION

|   |                     |
|---|---------------------|
| Consumption (pound/ft2) – (1mm thickness) | 0.23 (1 layer)      |
| Shelf Life                                | 9 Months            |
| Packaging (pound/set)                     | 47.6 lbs (112 Gal.) |
| Colour                                    | Various RAL colours |

### KEY FEATURES

- ✓ 2 Component, cold applied, self-leveling membrane
- ✓ Easy to apply (brush, roller, airless gun)
- ✓ Excellent mechanical properties
- ✓ Thermoset (do not soften at high temperature)
- ✓ Excellent resistance to weather conditions
- ✓ Fast cure and service time

### APPLICATIONS

- ✓ Terraces, balconies, verandas and walkable light traffic roofs
- ✓ Metal roofs
- ✓ Wet rooms, kitchen and bathrooms
- ✓ Under tiling applications
- ✓ Repairing asphalt membranes
- ✓ On polyurethane insulation foams

NUCLEUS INCORPORATION



P: +1 (202) 748 6050  
E: [contact@nucleusincorp.com](mailto:contact@nucleusincorp.com)  
W: [www.nucleusincorp.com](http://www.nucleusincorp.com)

13901 Willard Rd. Chantilly, VA 20151

# TECHNICAL DATA SHEET

## AQUA ZERO™ PurCoat 300CP

2K Cold Polyurea Waterproofing Membrane



## SURFACE PREPARATION

Surface preparation must be done properly to achieve maximum efficiency of the waterproofing coating system. Surfaces must be clean, weak parts should be removed and surface defects such as voids must be fully exposed. Concrete and other cementitious substrates must have a minimum compressive strength of 25 MPa minimum pull off strength of 1.5 MPa. Any laitance present on the surface must be removed mechanically. Shot blasting is the preferred method. Release oil and other contaminants which may impair adhesion must be removed prior to the application of the primer. All kinds of cracks, gaps and segregations on the surface should be repaired with suitable epoxy or cement based repair mortars. Temperature of the product should not be higher than 86°F to avoid short working time. Relative humidity must be less than 80% and ambient temperature should be between 41-86°F.

## PRIMING

Aqua Zero™ Prime 300 can be applied before main coat in order to avoid performance issues due to substrate moisture.

## APPLICATION

Aqua Zero™ PurCoat 300CP is a 2K set of prepolymer and amine which is packed in exact application ratios. Partial mixtures are not recommended. Before mixing 2 components, precondition of the both A and B components to a temperature of approximately 68°F is highly crucial. Open the container of component A and stir it mechanically at low speed to prevent air entrainment. The homogenization of component A should be done in 2 minutes. After that process, stir component B at low speed for 1 minute. The mix these 2 components and mix with a mechanical drill and paddle at a low speed (approximately 300 rpm) for at least 3 minutes until homogenization of the mixture. Scrape the sides and bottom of the container several times to ensure complete mixing. Keep the mixer bladed fully submersed in the coating to avoid air bubbles. Over mixing should be avoided. Mixed resin is poured onto the prepared surface and quickly spread with notched trowel or a spreader. It is recommended to wear spiked shoes and use a spiked roller to achieve a smooth and regular surface. The curing time of the material is influenced by the ambient, material and substrate temperatures. After mixing use entirely the mixture. Usually needed thickness can be obtained in one single coat. If necessary, a second coat can be applied up to 12 hours after the first layer gets dry, depending on environmental conditions.

## SHELF LIFE & STORAGE CONDITIONS

Aqua Zero™ PurCoat 300CP should be stored between 41 to 86°F in dry conditions and places where there is no direct sunlight. Shelf life of the unopened original packaging is 9 months from manufacturing date.

## SAFETY

Take precautions during application and use appropriate PPE including working clothes, gloves, mask, eye & face protection. Adequate ventilation of the working area is recommended. Keep products from sources of ignition. Refer to SDS sheet prior to use.

## DISCLAIMER

The technical data contained herein is based on our present knowledge and experience and we cannot be held liable for any errors, inaccuracies, omissions or editorial failings that result from technological changes or research between the date of issue of this document and the date the product is acquired. Before using the product, the user should carry out necessary tests in order to ensure that the product is suitable for the intended application. Moreover, all users should contact the seller or the manufacturer of the product for additional technical information concerning its use, if they think that the information in their possession needs to be clarified in any way, whether for normal use or a specific application of our product. Our guarantee applies within the context of the statutory regulations and provisions in force, current professional standards and in accordance with the stipulations set out in our general sales conditions. The information detailed in the present technical data sheet is given by way of indication and is not exhaustive. The same applies to any information provided verbally by telephone to any prospective or existing customer.