

Solvent – Free, Water Dispersed

DESCRIPTION AND USES

- **SMARTCARE APCOCOAT EPOXY 219 WB TOPCOAT** is a solvent-free, water dispersed, two-part epoxy resin for curing and protection of precast concrete segments immediately after demolding. It is designed and formulated to meet high durability requirement in aggressive environments. Suitable for use in hot and tropical climatic conditions.
- Easy and fast to apply with a roller or spray equipment.
- Water dispersed.
- Solvent free.
- Cosmetic finish.
- Fast curing at high temperature.
- Increased chemical resistance.
- Increased abrasion resistance.
- Tools can be cleaned with water.
- **SMARTCARE APCOCOAT EPOXY 219 WB TOPCOAT** is used to cure and protect precast concrete segments, as an efficient alternative to conventional curing and protection procedures.

PRODUCT PROPERTIES

Composition	Water-dispersed Epoxy and Modified Amine Hardener
Appearance/ color	Can be available in all shade recipe as per SCIB, RAL and NCS Fandack based on request
Density	Part A: 1.53 KG/lit Part B: 1.09 KG/lit 1.36 kg/l (at +20°C, mixed A and B)»
SOLID CONTENT BY WEIGHT	63% (PART A + PART B)
SOLID CONTENT BY VOLUME	47% (PART A + PART B) - (ISO 3233 - 2)
Pull off strength (as system)	3.1 MPA (ASTM D4541)
Abrasion Resistance @ 1000 cycles	142 mg (ASTM D4060-19)
Stain Resistance	Passes (ISO 11998:2006)
CHEMICAL RESISTANCE	Designed to provide specific chemical resistance to concrete against chlorides and sulfates in the ground in aggressive Environments. Passes all the chemicals stated below. - Acetic acid 2% - Sulfuric acid 10% - Sodium hydroxide 15% - Lactic acid 2% - Hydrochloric acid 5% - Nitric acid 5% - Diesel oil - Salt water 10% Tested as per ASTM D543 - 20 Product passes all the test - no blistering, softening or disbanding was observed.

INSTRUCTIONS FOR USE

1. Surface preparation:

- The substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm²
- The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.
- Concrete substrates must be prepared mechanically to remove cement laitance and achieve an open textured surface.
- Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed.
- Repairs to the substrate, filling of blowholes / voids and surface levelling must be carried out using appropriate products from the **Apcoflor** range of materials.
- All dust, loose and friable material must be completely removed from all surfaces before.

2. Mixing

- Prior to mixing stir part A mechanically. When all of part B has been added to part A mix continuously for 3 minutes until uniform mixed has been achieved. Use a low speed electrical stirrer (max. 600 rpm) to avoid air entrapment. To ensure proper mixing pour material into a clean container and stir again.

MIXING RATIO (BY WT)	3:1 (Part A + Part B)
CONSUMPTION	Two coat application to get complete hiding and smooth finish (10-15% Dilution is required to get best application attribute)
RELATIVE HUMIDITY	80%
DEW POINT	Beware of condensation. The substrate must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the surface of the applied product.»
SUBSTRATE TEMPERATURE	+10°c min. / +35°c max
SUBSTRATE MOISTURE CONTENT POT LIFE	The substrate can be either dry or matt-damp green concrete and must be cleaned of loose cement particles and all contaminants such as oils,grease, coatings or surface treatments etc. ~60 minutes at +20°c (caution! End of pot life is not visually noticeable). It can be detected basis reduction in workability of the roller and difficulty in case of material transfer while spraying.
CURING TIME	Temperature: 20°C 30°C Minimum curing time before transportation of segments 12 hours 4 hours Fully cured 10 days 7 days Note: At below 80% Relative Humidity.
OVERCOATING TIME	Min 2 hours (25°c) Max 2 days (25°c) Note: apply second coat only after the first coat is tack-free.

Solvent – Free, Water Dispersed

APPLICATION TOOLS



PACKAGING

20 kg sets (Part A: 15 Kg + Part B: 5 Kg)

Storage and Shelf Life

12 months from date of production

- Store in unopened, undamaged and sealed at original packaging in dry condition at temperatures between +5°C and +30°C. Protect from direct sun- light, heat and moisture

SAFETY PRECAUTIONS

- Please refer to material safety data sheet (MSDS) before using the product.
- Please revert to technical office for application advice.
- For alternative systems may be specified, depending on area of use.