

CONGUARD EPSW

Non-toxic chemical resistant epoxy polysulphide-based coating

DESCRIPTION

CONGUARD EPSW is two-component, blue colored high build epoxy based solvent free coating modified with polysulphide resin. This flexible and toughened epoxy is specially designed to protect concrete and steel. **CONGUARD EPSW** is specifically developed as lining and waterproofing coating for potable water retaining structures. Its flexibility and ease of application also makes it ideal for use as crack sealing coating.

USAGES

- Internal protection and lining of concrete and steel tanks containing sewage water, sludge, oils, and fuels
- Chemical industries flooring
- Vehicle ramps, garages
- Hospitals, heavy industries and marine areas

STANDARDS

CONGUARD EPSW is formulated to comply with all requirements of ASTM D16.

ADVANTAGES

- Flexible with crack bridging ability
- Surface anti-slip roughness control by adding or broadcasting silica-sand if needed
- Hygienic, anti-bacterial & fungus growth
- Resistant to a wide range of industrial chemical and fuels
- Waterproof and dustproofing
- Easily applied by brush or roller
- Non-toxic
- Good weather resistance

TECHNICAL DATA

CONGUARD EPSW

Typical values

Mixed Appearance	Blue liquid
Solid Content	100 %
Pot life @30°C (ASTM D2471)	30 min
Adhesion to Steel	Excellent
Adhesion to Concrete	Concrete failure
Full Cure Time @25°C (ASTM D1640)	7 days
Overcoating Interval @25°C	8 – 12 hours
Tensile Strength (ASTM D412)	6.5 N/mm ²
Elongation @break (ASTM D412)	50%
Shore Hardness (ASTM D2240)	80

USAGE INSTRUCTIONS

1. Surface preparation

For Concrete

All substrates shall be sound, clean, free from dust, grease & oil.

And in case resin-based flooring or primer were applied more than 3 days prior to application of **CONGUARD EPSW**, it is recommended to abrade the substrate with emery paper or grinder to provide a mechanical key prior to application.

Concrete floors should have compressive strength not less than 25 MPa. and if new concrete floor, it must be over 28 days old before applying any resin-based product.

Any cracks or grooves should be filled using **PIOMORTAR FC** before priming.

For Steel

Mechanically prepare steel surfaces to SA21/2, NACE No 2 or SSPC-SP 10 prior to applying **CONGUARD EPSW**, 50 – 75 microns profile to steel surfaces is desirable to ensure a good mechanical bond to the substrate.

2. Priming

Apply one coat of **PIOPRIME 38** depending on concrete porosity, ensure that the surface to be primed is clean, dry and free from oil, grease or other contamination.

CONGUARD EPSW	Coverage
PIOPRIME 38	9 m ² /liter
CONGUARD EPSW	4m ² /liter/250μ

All coverage rates given are theoretical and subject to actual site conditions. We recommend trial areas are done to establish a practical estimation to material consumption.

3. Mixing

Stir component A only separately, then the entire content of component B could be poured into the Component A container, both should be mixed at least for 3 minutes using mechanical mixer (drill mixer). Insufficient mixing may lead to color variation and bubble formation.

4. Application

Transfer the mixed material into a suitable container for application, apply material using a short pile roller to achieve the required film thickness, it is recommended to apply two coats within 24 hours.

5. Cleaning

Clean all tools and application equipment with a suitable thinner immediately after use.

Hardened or cured material can only be removed mechanically.

PACKAGING

CONGUARD EPSW is supplied in 10 liters set, component A & B.

LIMITATION

Don't apply **CONGUARD EPSW** if;

- The temperature of the surface is below 10 °C or over 50 °C
- The flooring concrete compressive strength is less than 25 MPa
- The flooring concrete moisture content must be less than 4%

HEALTH & SAFETY

Before applying **CONGUARD EPSW**, all safety protections should be worn during application, such as safety goggles and rubber gloves to avoid any harmful accidents.

If **CONGUARD EPSW** is splashed to skin, it must be washed off by water and soap at once, and if to the eyes seek medical attention immediately.

STORAGE & SHELF LIFE

CONGUARD EPSW shall be stored in its sealed container under dry and shaded place in a temperature from 5°C - 35 °C, shelf life of the material is 12-months.

CHEMICAL RESISTANCE

CONGUARD EPSW	Concentration
Chlorine	100%
Kerosene	100%
Gasoline	100%
Nitric Acid	40%
Sulphuric acid	50%
Ammonia (Salt Water)	30%
Acetic acid	30%
Detergents	100%
Alum	100%
Formic acid	40%
Hydrochloric acid	50%
Phosphoric acid	20%
Sodium Hydroxide	50%
Soda Solution	100%

TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:
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