

BituCoat[®] EM12

Water-based Emulsion Bituminous Coating

BituCoat is an emulsion bituminous in water that does not only have the adhesion property and suitable cover but also creates waterproof property. This substance can be used in different fields including as a barrier layer against evaporation, an absorbent shell, potable water pipes and tank cover as well as protecting underground concrete structures, concrete curing and protecting steel surfaces against corrosion. This product is produced based on some requirements of ASTM D8099 standard. The physical and chemical properties of BituCoat EM12 is produced through the following table.

Physical state	Dense gel
Color	Brown-Black
Specific weight	1/05 ± 0/03 g/cm3
Flammability	Non-Flammable
Thermal resistance in 80°C	Without blister
Flexibility in 0°C	Without crack
Water resistance	Without blister and emulsification

Usage and the effect of emulsion cover

The usage of emulsion cover

 As insulation to seal walls, roofs, basements, tunnels, cold storage facilities, swimming pools, toilets, tanks, foundations, pottery, and protecting them from Chlorine ion penetration
Rustproof and waterproof cover for concrete and steel structures

The advantages of emulsion cover

- It is resistant to moisture, a water repellant and creates a flexible layer
- It is single component and dilutes with water
- It can be used on wet surfaces
- It dries rapidly
- It dries after using and evaporating water, and forms a flexible elastic layer
- It is moisture resistant after drying and does not dissolve in water
- It has an excellent water retention property to cure hardened concrete
- The perfect adhesion to most surfaces of the building
- Due to dilution with water while implementing, a plastic broom, a brush or spray (Pistol with large nozzle) can be used to implement it on the surface

Instruction to use the emulsion cover

Allowable range and instructions to use

- 1- Surface preparation: it is necessary to clean the desired surface off the contaminations like dust, oil and loose particles and modify possible honeycombed areas or cracks on the concrete surface with the repair substance (SoftCoat) of Capco Company.
- 2- Dosage: One Kg of this product can be used to cover 1.5 to 3 m². However, the dosage can be increased with respect to the condition and in case of any surface roughness.
- Implementation: apply this product on the surface by a brush, a spray, or a roller. To implement the second layer, it is necessary to wait for 8 to 12 hours so that the first layer obtains required adhesion



property with the second laver. Implement the second laver perpendicular to the first layer (in case of using concrete mortar on the second layer it is better to mix it with some sand and/or pour sand on it). Drying time is at 5 to 35 degree centigrade within 8 to 12 hours and the time of full utilization from the surface is approximately 24 hours. However, this period of time varies based on different climate.

4- Performance: It is necessary to wait for 1 to 3 weeks to evaluate the complete performance of this product.

Safety tips in using the emulsion cover

This product is not categorized into dangerous substances; however, it can be allergic in contact with skin. Therefore, it is necessary to use suitable cover, goggles and mask while working. It is also recommended to consider the following tips:

- Avoid inhaling vapors of the product when opening the container
- Blink in water for at least 15 minutes in case of eye contact
- Wash your skin with clean water for 15 minutes in case of any contact with skin.
- The contaminated clothes must be washed with suitable detergents to be usable for further works.
- It is necessary to visit a doctor if the injured individual still feels uncomfortable

Other necessary notes regarding the emulsion cover

In case of the necessity to implement primer beneath the work this product can be diluted with water by 1 to 1 ratio and used as a primer.

It is necessary to protect this product from freezing before applying and hardening.

It is not possible to apply this product on a frozen surface. The equipment and tools are only washable before hardening the substance otherwise thinner can be used to clean the equipment and tools. However, this product is not resistant to the negative water pressure

The corrosion of emulsion cover

This product does not start or extend corrosion in the buried bars in concrete, the pre-stressed steel, floor systems and the roof made by galvanized steel.

Transportation and storage of the emulsion cover

The conditions and maintenance temperature of transportation

The allowable transportation and maintenance temperature of this product is between 5 and 30. It is also necessary to consider the following tips:

- Avoid putting the container having cleaning substance in direct exposure of sunlight.
- Prevent the cleaning substance from freezing
- This product becomes stiff in cold weather and must be put in a warm environment or warm water before using it.

The emulsion substance lifetime

If the containers of this product are conserved and stored in a standard condition, they will be usable for 12 months.

The emulsion cover packaging

This product is supplied in 20 Kg buckets

Complementary information

Contact the technical section of Capco Company for complementary information. You can also refer to the performance form of BituCoat EM12-PPI for more information on the performance of this product.