

EPOSHIELD W40

Non Toxic Water Based Epoxy Coating

Description:

EPOSHIELD W40 is a two-component water-based epoxy coating. It is formulated as zero VOC, zero HAP low odor resin. It has very good characteristics of adhesion to several substrates including concrete, metal, ceramics, etc. After curing, the product transforms into an absolutely nontoxic, continuous coating, waterproofing and with good resistance against chemical solutions.

EPOSHIELD W40 complies with international regulatory sanitation performance standards, for food establishment facilities and meets the green environmental standard for paints and coating, based on performance requirements and reduced use of hazardous substances and reduced volatile organic components (VOC).

Uses:

- EPOSHIELD W40 can be used as an impermeable coating in wide range of applications where a protective non-toxic continuous covering is required such as: swimming pools, wall coating in food industries (winery, packing house, etc.), laboratories, operating rooms, canteens and kitchens.
- Protective and hard-wearing floor coating in warehouses and industrial areas.
- Waterproofing for concrete or metal tanks containing drinking water.

Advantages:

- Durable and very good resistance to abrasion.
- Very good adhesion to the support surfaces.
- Non-toxic. Can be applied in food processing factories.
- Odorless. Ideal for internal application.
- Water based, green product, with zero VOC
- Good resistance against chemicals
- Ideal for maintenance application, in food and medical facilities.
- Approved for use with potable water.
- The applied coating is impervious to moisture and easily cleaned and sanitized.

Instructions for Use:

Surface Preparation:

The surface must be perfectly clean, solid, sound, uncontaminated, free from oil, grease, old friable varnish, etc.

New concrete should be allowed to cure for 21 days before application of any coating. Prepare floor using mechanical preparation methods such as: grinding, captive blasting, or sand blasting. If the substrate is restricted to access, utilise preparation by handy mechanical tools.

Old concrete should be sound, clean to achieve maximum adhesion. Dust should be removed by vacuum or brush. Oil and grease should be removed by chemical etching treatment followed by water cleaning. It is recommended to shot blast the concrete substrate in order to provide a suitable clean surface. All necessary repairs should be made prior to application by using MATEX concrete repair products.

Perform necessary repairs to cracks, damaged substrate or voids filling by means of proper repair products. Consults MATEX technical Department for further advice. Apply a rich coat of ARMOPRIME WB-two component epoxy water-based primer to enhance the adhesion between the coating and the substrate in case of porous surfaces.

Metal surface should be completely cleaned by blasting or grinding to remove all rust and corrosion. If the surfaced is not corroded, it is strongly recommended to clean the surface with solvent or a strong detergent to ensure surface is free from grease or oil. Immediately after surface cleaning is completed, apply ARMOPRIME WB to prevent further oxidization to the surface.

Priming:

Concrete surface must be treated with ARMOPRIME WB. For water tank treatment, concrete corners between wall-wall and floor-wall must be rounded with LAVAREP F60-concrete repair mortar. For ceramic or steel supports use EPOFIX for rounding the corners.

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Mixing:

Mix the content of component A (Base) with a low speed mixer for two minutes to homogenize the material of the container. Slowly add the content of part B (Hardener) to Part A container. Mix the material thoroughly for an interval of 3-4 minutes to obtain a homogenous, color consistent, lump free mixture

Application:

After mixing the product, allow the mix to rest for 1-2 minutes to release entrapped air. EPOSHIELD W40 can be applied by brush, roller or spray machine. After preparation of the work area, apply first coat with the desired thickness. The minimum dry film thickness of product recommended is 100 microns. Application thickness can reach up to 200 micron per coat.

TECHNICAL PROPERTIES	
Appearance	Liquid Coating
Colours	Standard Matex Color Chart
Density at 25°C	1.3 ± 0.03 kg/lit
Potlife at 25°C	60 minutes
Temperature of Application	+5°C to +35°C
Bond Strength (ASTM D4541)	>2.0 N/mm ² cohesive failure in concrete
Tack Free Time at 25°C	3 hours
Full Cure at 25°C	7 days
Time Between Coats	24 hours
Service Temperature	-5°C to 80°C
Chemical Resistance	Mild acids, alkalis, solvents, seawater

*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

Coverage:

EPOSHIELD W40 coverage rate is 3 - 4 square meter per liter per coat depending on the porosity of the support.

*Coverage rate is an approximate value, and subject to actual site conditions.

Packaging:

EPOSHIELD W40 is available in 4 and 15 liter set of two parts metal containers.

Storage:

EPOSHIELD W40 to be stored in original packing in dry conditions away from direct sunlight.

Shelf Life:

EPOSHIELD W40 can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

Cleaning:

Tools and equipment should be cleaned with water immediately after use. Hardened material should be removed mechanically. Spillages should be absorbed with sand or sawdust and disposed off in accordance with local regulations.

Recommendations:

- Partial mixing of the product components should not be allowed under any conditions.
- Extra care should be taken when applying at high temperature as pot life of the mixed product will shorten automatically.
- It is recommended to shade the working area while mixing and applying EPOSHIELD W40.
- EPOSHIELD W40 should not be applied onto surfaces with relative humidity more than 80% and temperature below +5°C.

Health and Safety:

- Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

FIRST AID:

- Eyes: In the event of accidental splashes, flush with warm water and seek medical advice.
- Skin: Wash skin thoroughly with soap and water
- Inhalation: Remove to fresh air, keep patient rested
- Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to EPOSHIELD W40 Material Safety Data Sheet.

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