

WATERPROOFING



Vetourea PUA792

Two-component, solvent free, flexible, pure polyurea waterproofing membrane

Uses

- Waterproofing of reservoirs, bridge decks, basins, aeration tanks, etc.
- Pickup and bedliners.
- Ship coating and marine industries.
- Foundation and curtain concretes.
- Parking lots, factories, hospitals and other industrial floors.
- Refineries, petrochemical and energy industry.

Product Description

Vetourea PUA792 is a two-component, pure polyurea, solvent free, low odor, high performance, fast curing and flexible polyurea waterproofing membrane that is applied using plural component spray machines. The product exhibits extremely high physical and mechanical properties is not sensitive to moisture presence where it will react and set even if sprayed on water. Vetourea PUA792 is designed for heavy duty industrial applications.

Advantages

- 100% solids with zero VOC.
- Very fast reaction time providing minimal down time.
- Applicable in any desired thickness.
- Performs in a wide range of application and service temperatures.
- Flexibility and impact resistance compared to traditional epoxy systems.
- High bond, stronger than concrete cohesive strength.
- Can be used on horizontal and vertical surface.
- High abrasion resistance and tensile resistant.

Design Criteria

Vetourea PUA792 requires specialized application equipment based on plural component nozzle mixing spray where the material is heated in the machine and hoses. It is recommended to use Graco Reactor EXP2.

Technical Data

| Vetourea PUA792 | Typical Values @ 25°C, 50% RH |
|---|-------------------------------|
| Color | Gray, black, blue |
| Solid Content (By volume%) | 100 |
| Pot Life (Seconds) | 5 - 10 |
| Mix Ratio | 1:1 |
| Recommended Thickness/ Coat | > 1 |
| Water Permeability | Nil |
| Bond Strength to Concrete ASTM D4541 - (N/mm ²) | > 2 |
| Tensile Strength - ASTM D412 (N/mm ²) | 15 to 20 |
| Elongation (%) ASTM D412 | 400 to 450 |
| Shore D hardness, 7 days, ASTM D2240 | 40 to 50 |
| Flexibility 3 mm mandrel ASTM D1737 | Pass |
| Tear Strength Die C - ASTM D624 (kN/m) | 75 - 80 |
| Taber Abrasion ASTM D4060 CS Wheels (mg loss/1000 cycles) | 15 |
| Application Temperature (°C) | -30 to 70 |
| Service Temperature (°C) | -40 to 120 |

Usage Instructions

Surface Preparation

The surface should be sound, clean, free from loose material, grease, laitance, dirt curing compound, etc.

Laitance and weak surface layer shall be removed using mechanical methods such as blasting to provide a sound well profiled surface, a minimum recommended profile of 500 microns is required to insure mechanical locking with the substrate. All necessary repairs should be made prior to application by using epoxy mortar from Vetorep ER range.

New concrete floors shall be at least 28 days old with moisture content of less than 5% (shall earlier application be required testing of substrate for moisture conditions shall be made), this is required since the material is sprayed hot and if moisture is present in concrete the risk of blistering is present due to off gassing.

Priming

Vetoprime EP491 should be mixed in the proportions supplied. Add the entire contents of the hardener can to the base can. When thoroughly mixed, preferably using a slow speed mixer, the primer should be applied in a thin, continuous film using rollers or stiff brushes. Work the primer well into the surface of the concrete or steel taking care to avoid ponding or over application. Apply Vetourea PUA792 as soon as the primer gets tacky (generally after 1 hour).

Mixing

Vetourea PUA792 is supplied in two pre-weighed packs (A and B) and mix with a suitable air driven or electrical plural component heated spray equipment. Both components must be heated up to minimum +70°C. The accuracy of mixing and dosage must be controlled regularly with the equipment. Thoroughly stir part B using a drum stirrer until a homogenous colour is obtained. Spray trial should be done before commencing any work to setup spray equipment properly.

Application

This material must be applied utilizing high-pressure, heated plural component spray proportioning equipment, such as those manufactured by GlasCraft, Gusmer and Graco". The proportioning equipment utilized must be capable of supplying correct pressure and heat for the appropriate hose length on a consistent basis.

Vetourea PUA792 should always be applied over a Vetoprime EP492 for maximum adhesion. For some steel applications, a primer may not be necessary, please review your specific project with Saveto representatives. For all submersed applications, a primer is essential.

After proper preparation, Vetourea PUA792 should be applied in a cross directional (North, South, East, and West) method.

Recommended thicknesses are a function of the project, please contact a Saveto representative. On horizontal surface applications, a texture "stipple" coat can be applied for non-skid purposes, after reaching the initial desired film thickness.

Cleaning

Remove Vetourea PUA792 product from tools, equipment, and mixers with Vetonit Solvent XX400 immediately after use. Cured material can only be removed mechanically.

Packaging & Coverage

| Product | Pack Size | Theoretical Coverage |
|-----------------|------------------|---|
| Vetourea PUA792 | 440 kg | 1 m ² /kg/coat @ 1 mm thickness |
| Vetoprime EP491 | 4 & 15 liter kit | 10 m ² /liter/coat @ 100 microns thickness |

Stated consumption data are for general guidance. Actual consumption depends on the nature of the substrate, method of application, and wastage.

Shelf Life & Storage

The original sealed kit of Vetourea PUA792 has a shelf life of 12 months, provided it is stored clear of ground in a dry and shaded place below 35°C.

Expansion Joints

Expansion joints in the existing substrate must be retained and continued through the Vetourea PUA792 topping. Saveto have a range of joint sealants. In certain cases, an application of Vetourea PUA792 over the expansion joints is permitted taking special consideration for joint preparation, please refer to Saveto representatives for more information of such applications.

Limitations

- Vetourea PUA792 is UV-stable but are not color stable. The cured coating may exhibit discolor-action when exposed to sunlight. This does not influence the physical properties of the material.
- Freshly applied Vetourea PUA792 must be protected from damp, condensation and liquid water for at least 30 minutes.
- Do not apply Vetourea PUA792 on substrates with rising moisture.

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Health & Safety

Vetourea PUA792 is irritant and harmful; therefore, avoid direct contact with eyes or skin. It is recommended to use protective gloves and goggles during application. In case of contact with eyes, clean immediately with plenty of clean cold water and seek medical advice. Ensure adequate ventilation when using the product or when using solvent for cleaning purposes and avoid vapors' inhalation. The use of barrier creams provides additional skin protection. In case of skin contact, rinse with plenty of clean water, cleanse with soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately - Do not induce vomiting.

Vetourea PUA792 and Vetoprime EP491 are non-flammable.

Vetonit Solvent XX400 is flammable.

Refer to the product Material Safety Data Sheet for further information.

Refer to product MSDS for further information.

Additional Information

Saveto manufactures a wide range of construction chemicals and specialty products for various applications.

For further information on these products and systems kindly check our website or contact your local Saveto representative.

Legal Disclaimer

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