Product Data Sheet



Triton Fastcoat 2-Part Humidity Primer

Primer for use with Triton TWS Fastcoat on substrates with moisture content greater than 4%.

Description

Triton Fastcoat 2-Part Humidity Primer is designed for use with the Triton TWS Fastcoat liquid applied, external waterproofing system. Damp surfaces are troublesome when treated with any synthetic resin because of immediate adhesion difficulties as well as problems arising afterwards because of moisture vapour migrating to the surface and causing blistering.

In many cases, material and time constraints force applicators to work in less-than-optimal substrate conditions, and a moisture tolerant primer is needed in order to:

- · Minimize adhesion failures
- · Avoid blistering due to the water vapour pressure from below
- Provide an initial seal, to avoid air bubbles caused by the release of air trapped within the substrate (mostly encountered in elastic membrane treatments).
- · Deal with the incompatibility of the substrate with one-component, moisture-cured polyurethane resins.

Triton Fastcoat 2-Part Humidity Primer is the best solution as a primer for waterproofing or flooring polyurethane application on substrates with moisture content greater that 4%. Nevertheless, this product cannot be used if the substrate is totally saturated, subject to hydrostatic pressure or is 'shiny' wet. The surface to be primed should at least look dry, even if there is moisture underneath.

Triton Fastcoat 2-Part Humidity Primer is a 2-component, water-based epoxy resin. Components once mixed, are totally compatible with moist substrates, and the resulting polymerized product is a crystalline material with high adhesion and tensile strength. It effectively blocks residual moisture flow and prevents blistering of the polyurethane coating applied on top.

Application

This product is useful for any kind of waterproofing project, involving polyurethane sealing, such as:

- · Roof and wall refurbishments
- · Waterproofing treatment of tanks and other water management facilities
- · Floorings in moisture-affected environments

Packaging & Coverage

Pack sizes are 5kg (15-20 sqm coverage, one coat) and 18kg (55-72 sqm coverage, one coat).

Certifications

ETA: European Technical agreement document No 06/0263 - CE marking: 10 and 25 years.

Substrate Requirements

In order to achieve good penetration and bonding, the substrate must be:

- 1. Flat and levelled (Product is self-levelling).
- 2. Compact and cohesive (pull off test must show a minimum resistance of 1,4 N/mm²).
- 3. Even and regular surface.
- 4. Free from cracks and fissures. If any, they must be previously repaired.
- 5. Clean and look dry, free of dust, loose particles, oils, organic residues or laitance.

Technical data

Information on the product before application.

	Component A		Component B	
Chemical description:	Epoxy Resin		Aqueous polyamine Solution	
Physical State:	Liq	uid	Liquid	
Packaging:	Metal Container	5.2 kg or 1.4 kg	Plastic Container 12.8 kg or 3.6 kg	
Non volatile content (%):	Approx	. 100%	31%	
Flash Point:	>100°C		>100°C	
Colour:	Colourless		Slightly Yellow	
VOC Content:	860 g/L		860 g/L	
Density:	Temp: 25°C	Density: 1.14 g/cm ³	Temp: 25°C	Density: 1.05 g/cm ³
Viscosity (Approximate Values Brookfield):	(°C) 35 25 15 5	(mPa.s) 70 150 300 500	(° C) 35 25 15 5	(mPa.s) 170 280 500 1800
VOC:	0		2 g/L, 2%	
A/B mixing ratio:	A=100, B=244 by weight A=100, B=266 by volume			
Mixture properties:	Density: 1.07g/cm³ at 23°C Viscosity: 1300 mPa.s at 23°C Colour: milky white			
Pot Life:	Temp (°C) 10 25 35		Pot Life (100, min) 92 45 30	
Storage:	Keep between 10° and 30°C. Frost sensitive. Component A may crystallize if stored for protracted periods under certain conditions. If this occurs, it can be restored to its original condition by heating to 70-80°C and stirring thoroughly.			
Use before:	12 months after manufacturing date.			

Information on the final product

Final State:	Solid, hard film
Colour:	Light Yellow
Hardness (shore):	64D
Mechanical Properties:	Maximum elongation: 3.2% Tensile strength: 39 MPa (EN-ISO 527-3)
Tear Resistance:	7.2 N/mm.
Solid Film Density:	1.3 g/cm ³
UV Resistance:	This product shows a very slight yellowing upon UV exposure, without loss of mechanical properties.

Chemical Resistance

	Chemical	% weight gain
Permanent contact (3 days, 80°C)	Water	5
	Methoxypropyl Acetate	25
	Isopropyl alcohol	15
	Skydrol	0
	Xylene	10
	Ammonia (3%)	10
	Acetone	35
	Diesel	5
	Hydrogen Peroxide	10
	Sodium Hydroxide (40 g/L)	10
	Bleach	5
	Sulphuric Acid (10%)	30
	Sulphuric Acid (30%)	30
	Sulphuric Acid (50%)	30
	Acetic Acid (10%)	15

	Chemical	Result
Surface contact (24h room temperature,	Water	5
5=ok, 0=not recommended)	Ethyl Alcohol	5
	Engine Oil	5
	Vinegar	5
	Hydrogen Peroxide	5
	Sulphuric Acid (10%)	4
	Sulphuric Acid (30%)	4
	Sulphuric Acid (50%)	4
	Isopropyl Alcohol	5
	Xylene	4
	Ammonia (3%)	5
	Diesel	5
	Methoxipropyl Acetate	5
	Acetic Acid (10%)	3
	Bleach	5
	Sodium Hydroxide (40 g/L)	5
	Acetone	2
	Skydrol	5
	Surface	Adhesion Strength (mPa)
	Concrete	>4.9
Use temperature	Stable up to 80°C	
Gloss (60°)	14	

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Use temperature	Stable up to 80°C	
Gloss (60°)	14	

Recommended Environmental Conditions

Substrate temperature should be between 15°C and 40°C. At higher temperatures, specific precautionary measures must be taken. Please follow manufacturer's advice. Application under low temperature and high humidity conditions is not recommended.

Substrate Preparation

Concrete surfaces must be previously prepared by sandblasting or any other suitable means. Remove all dust and loose material before priming. Fastcoat 2-Part Humidity Primer can be applied to screed or cement render, as well as concrete.

Mixing

Add the two components together and mix thoroughly until free of streaks, using a low-speed stirrer. The mixture turns to a whitish, milky dispersion. After application, the milky layer should turn to a colourless film in a one to two hours period, depending on temperature, humidity and thickness. Do not allow to pool or apply too thickly, the coating may not clarify.

Application

Apply 350 to 250g per sqm (15-20 sqm per 5kg pack), by brush or roller. Higher loadings may lead to white/translucent areas and poor appearance. We recommend the application of two thinner coats to achieve surface sealing, than one overly thick one.

On very hot absorbent substrates, dilution is allowed. Use 10 to 20% water. On hot surfaces (e.g. recently exposed to sun), moisten the surface before starting application.

Application in excess can lead to resin shrinkage upon water evaporation. Do not exceed the recommended application quantities. If some white spots appear after curing, they must be removed before application of following coats.

Curing Time

Application in high humidity or very cold weather is not recommended as this delays the reaction rate and causes the initial milky film to remain white and sticky.

Data for 500g per sqm application.

Conditions	Dry to touch (H)
25°C, 5%hr	6
25°C, 90%hr	10 (milky)
35°C, 20%hr	2
6°C, 50°C	>100
-15°C	>100, always milky

Reapplication

A second coat may be applied, if needed, from the moment when the first coat is dry to touch, and not later than 24 hours.

Return to Service

When used as a primer for polyurethane waterproofing on flooring jobs where appearance is important, it is recommended to ensure Triton Fastcoat 2-Part Humidity Primer is fully cured and dry, by measuring the moisture content on the primer film if necessary. If some of the initial water remains when moisture-curing polyurethane is applied, some blisters may develop.

Tool Cleaning

Component A can be cleaned using Fastcoat Solvent. Component B and the unreacted AB mixture can be cleansed with water.

Safety

Epoxy components are potentially sensitizing. Always follow instructions provided in the Material Safety Data Sheet. As a general rule, suitable skin and eye protection must be worn. This product is intended to be used only for the uses and in the way here described. This product is to be used only by industrial or professional users. It is not suitable for DIY use.

Environmental Precautions

Empty containers must be handled with the same precautions as if they were full. Treat empty containers as hazardous waste, and transfer them to an authorised waste manager. If the containers still have some material left, do not mix with other products before considering the risk of potential dangerous reactions. Never mix in volumes larger than 5 litres.

The information provided in this Product Data Sheet is intended for general guidance only and is given in good faith based on Triton Systems' current knowledge and experience. No warranty in respect of fitness for a purpose, or any other liability whatsoever can be inferred from the information contained within this data sheet. Users should determine the suitability of the materials for their particular application and should always refer to the most recent issue of the Product Data Sheet for the product concerned. All materials are supplied in accordance with our standard trading terms and conditions.

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