

# Teknolatem 500

Adhesion Promoter and Waterproofing Admixture



CE EN 934-5

Public Pos. No: 04.613/1-I

## Product Description

Acrylic dispersion based, adherence enhancing primer and self levelling, plaster and concrete admixture for waterproofing

## Areas of Usage

- It's used as an adherence additive in mortars prepared for the repair of damaged concrete surfaces, self levelling and plaster,
- As a primer under self levelling
- As an additive to increase the water impermeability of reinforced concrete silos, water reservoirs, pools, inner and outer mortars of treatment plants,
- To prevent dusting and cracking in screeds Self – levelling
- To increase adherence before application of plaster and ceramics on smooth concrete surfaces and for the preparation of rough rendering.
- To provide new concrete adherence with old concrete.
- In engineering structures such as subways, highways, tunnels, dams,

## Features and Benefits

- It reduces surface absorbency when applied to absorbent surfaces.
- It provides excellent adherence and elasticity.
- It provides high resistance to oil and salt solutions.
- It dries crack-free and is resistant to abrasion.
- It does not cause corrosion and soaping.
- It increases the chlorine impermeability.
- It provides water impermeability.

## Application Instructions

To increase the adherence and water impermeability in concrete:  
The mixing properties of a concrete sample decided to be cast on the construction site are as follows.

Concrete Class	C 25
Maximum Grain Diameter	22 mm
Water	181 kg
Cement (CEM I 42,5 R)	370 kg
Water / Concrete (W / C) Ratio	0,49
Crushed Sand (0-5 mm)	454 kg
Stone Dust	335 kg
Aggregate (5-12 mm)	468 kg
Aggregate (12-22 mm)	454 kg
Super Plasticiser	3,7 kg
Air content	%1,5
Slump	16 cm
<b>Determination of the amount of TEKNOLATEX 500 to be used</b>	
Determination according to the water in the concrete (TEKNOLATEX 500: Water -1: 1 to 1: 4) 1: 4 is used in the sample.	45,25 kg

TEKNOLATEX 500 is used from 1: 1 to 1: 4 of the water used in concrete. It is poured into the truck mixer arriving into the building site. The concrete mixer is stirred for 5 minutes at high speed. The concrete is placed in the mold. Concrete prepared with TEKNOLATEX 500 is recommended to be used in very special works. It minimizes the chlorine and water impermeability.

To increase the adherence and water impermeability in screed:

At the building site, 50 kg of cement for 150 kg of sand is prepared as a dry mixture. TEKNOLATEX 500 is poured into a clean barrel in 30 kg bins. Then 4 bottles of water are poured into the barrel. Depending on the humidity in the sand, the TEKNOLATEX 500: Water ratio can be changed from 1: 1 to 1: 4. The barrel is mixed homogeneously. The prepared dry mortar is opened by mixing with TEKNOLATEX 500 and water mixed liquid form. It is recommended to use TEKNOFLOW SUPER together by hand or mortar machines to increase the flow while screeding.

To increase the adherence of the old concrete to the new concrete or to use it as a base coat before the plaster:

It is used to prevent cold joint formation on new concrete or screed applications on old concrete and to increase adherence.

A: 1 kg of cement and 3 kg (0 - 3 mm) washed stream sand is mixed.

B: 1 kg of Teknolates 500 is mixed with 2 kg of water.

Mixtures A and B are mixed so as to have boza consistency. The prepared mixture is applied on the surface soaked with a brush for 12 hours beforehand to a thickness of 2 mm. Plaster, screed, concrete are added into mortar within 20 minutes before it dries.

If it is to be used as rough before plastering; prepared mortar is sprinkled rapidly on concrete surface with trowel. Rough or fine plaster is applied next day after the rough rendering is dried.

To increase the water impermeability in the plaster:

At the building site, 50 kg of cement for 150 kg of sand is prepared as a dry mixture. TEKNOLATEX 500 is poured into a clean barrel from 30 kg bins. Then 4 bottles of water are poured into the barrel. Depending on the humidity in the sand, the TEKNOLATEX 500: Water ratio can be changed from 1:1 to 1: 4. The barrel is mixed homogeneously. The prepared dry mortar is opened by mixing with TEKNOLATEX 500 and water mixed liquid form. Then the application is started with trowel. It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above +35 °C), rain and frost. Hands should be cleaned thoroughly with water and detergent before concrete or mortar is fully cured and hardened.

#### Application Notes / Restrictions

- During the application of the product, work clothes suitable for occupational health and safety rules should be worn and suitable glasses and mask should be used.
- TEKNOLATEX 500 can be used together with cement and sand, or it can be used on absorbent concrete like mineral surfaces alone or diluted with water.
- Filled primers such as TEKNOLATEX 300 should be preferred on very bright surfaces such as ceramic surfaces

#### Technical Data

General Information	
Chemical Structure	Acrylic Emulsion
Color	White Liquid
Density (kg/ltr)	1,02 (±0,03)
Packaging	30 kg bucket
Shelf Life	12 months in unopened original packaging
Pot Life	~ 60 minutes (20°C)
Drying Time (min.)	135
PH	7-9

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative air humidity.

