# VELOSIT® LE 910

# Latex Emulsion For Mortars and Adhesives



# **Application fields**

VELOSIT LE 910 is a latex emulsion for the modification of mortars, adhesives and concrete mixes. It can also be used as a primer for typical construction substrates like dry wall, concrete and masonry. Typical application fields besides others are as follows:

- Priming underneath adhesives and mortars
- Densification of weak or sandy substrates
- Job site mix of bonding bridges or splatter coats
- Adhesion promoter for mortars, plasters, screeds and concrete
- Elastificator for VELOSIT-repair mortars and tile adhesives
- Waterproofer and salt barrier
- Improvement of workability
- Improvement of chemical resistance

# **Properties**

VELOSIT LE 910 is a concentrated cement stable latex emulsion.

Used a sealer/primer VELOSIT LE 910 meets the requirements of EN 1504-2 as an impregnation (I) and can be used according to principle 1 acc. to EN 1504-9.

VELOSIT LE 910 is applied by brush or roller if used as a primer. As mortar additive it is added to the mixing water.

- Improved adhesion on absorptive substrates in interior applications
- Drying time of 2 3 hours at 23 °C (73 °F) and 60 % relative humidity
- Solvent-free, low odor
- Excellent cement stability
- Improves flexibility of mortars and adhesives
- Significantly higher adhesive strength
- Reduction of water absorption
- Reduced shrinkage



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- Improved water retention
- · Increased flexural strength

# **Application**

#### 1.) Substrate preparation

VELOSIT LE 910 is designed for mineralic substrates like concrete, masonry or absorptive natural stones, but also for gypsum or gypsum fiber boards.

Substrate must be prepared to remove all bond breaking substances. Detailed substrate preparation is described on the respective data sheet of the final product.

#### 2.) Processing

#### a) as primer / sealer

Depending on substrate absorptiveness VELOSIT LE 910 can be diluted with up to 5 parts water. Product is applied by brush or roller to the substrate. Avoid puddling.

#### b) as boding emulsion / splatter coat

VELOSIT LE 910 is diluted 1:2 with water. This mixing liquid is used to mix a cement/sand mortar (1:1 to 1:3) with plastic consistency. For splatter coats use sand with max. 4 mm grain size, for bonding bridges max. 2 mm. Apply  $2-4\ kg/m^2$  of the bonding bridge to the substrate. Splatter coats are applied at coverage of approx. 50 % of the surface area.

#### c) as concrete / mortar additive

VELOSIT LE 910 is diluted with water in the required amount. The concentration of the added polymer determines the achievable properties.

Concentrations of one third (1:2) lead to a significant increase of the adhesive and flexural strength of the mortar. Higher concentrations lead to a gradual transition to a flexible product where the polymer properties become more predominant. Using

undiluted VELOSIT LE 910 results in an elastic product with reduced compressive strength but crack bridging properties.

#### d) as elastification agent for tile adhesives

VELOSIT LE 910 can be used to improve the flexibility of tile adhesives like VELOSIT TA 704. A dilution of 1:4 is in most cases sufficient to fulfill the requirements for class S1 acc. EN 12002. At 1:1 even the properties required for class S2 may be achieved.

#### 3.) Curing

VELOSIT LE 910 does not require curing.

# **Estimating**

As primer/sealer: Consumption depends on surface roughness and absorptivity. Typical application rates are at 0.03-0.1 l/m<sup>2</sup> (0.7-2.5 gal per 1,000 ft<sup>2</sup>) As mortar additive 5-100 % of the mixing water.

## Cleaning

VELOSIT LE 910 can be removed in the fresh state with water. Once it has cured only mechanical cleaning is possible.

## **Quality features**

Color: white Density: 1.01 kg/l Solid content: 47 % Min. film formation temp.:  $0 \, ^{\circ}\text{C}$  Substrate temperature:  $5 - 35 \, ^{\circ}\text{C}$   $(40 - 95 \, ^{\circ}\text{F})$ 

Capillary water absorption\*:  $0.1 \text{ kg/m}^2 \text{ x h}^{0.5}$ 

Penetration depth\*: > 5 mm

\* 0.1 l/m<sup>2</sup> on concrete



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# **Packaging**

VELOSIT LE 910 is available in 10 kg (22 lb.) or 25 kg (55 lb.) jugs

# **Storage**

VELOSIT LE 910 can be stored in unopened original packs for 24 months at 5 - 25 °C (40 - 77 °F) in a dry storage place protected against sunlight. Higher storage temperatures reduce the shelf life.

# Safety

Please observe the actual valid material safety data sheet and follow the described safety measures for handling of the product.

#### Recommendations

VELOSIT LE 910 is only available for professional applicators.

All described product features are determined under controlled laboratory conditions according to the relevant international standards. Values determined under job site conditions may deviate from the stated values.

Please always use the latest version of this data sheet available from our website www.velosit.de.

#### Manufacturer

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