Technical leaflet

## ADIPLAST



### Polymer latex for multiple improvement of mortars

#### Description

ADIPLAST is a polymer latex, used as an admixture to significantly improve the properties of mortars in several ways:

- Increases bonding to the substrate.
- Improves elasticity.
- Increases impressively abrasion resistance.
- Makes mortars water impermeable.
- Eliminates shrinkage and prevents resulting cracks.
- Improves plasticity, water retention and workability of fresh mixtures.
- Improves resistance to chemicals and petroleum products.

#### Fields of application

- Bonding layer between old and new concrete or mortar.
- Repair mortars and thin layers.
- Wear-resistant, dust-proof floor screeds.
- Waterproof cement mortars, resistant to water pressure.
- Floor screeds with underfloor heating system.
- Plasters with high strength and water impermeability.
- Mortars with resistance to chemicals and petroleum products.
- Adhesive for insulation boards, tiles or other coverings.
- Additive for improvement of wear and weather resistance of water paints (lime emulsions).
- Grouting mortars for natural stones.
- Mortars for forming grooves across wall-floor joints.
- Protection of green (fresh) concrete against premature dehydration.

#### **Technical data**

Color:whiteViscosity:500 mPa/sDensity:0,96 kg/lit

Directions for use

#### 1. Preparation of substrate

The substrate must be clean and free of dust, loose materials, oil, grease or old plaster, paint, cement residues etc. It should be thoroughly dampened but without water accumulation.

#### 2. Application

ADIPLAST latex is added into the mixing water of mortars. The quantity of ADIPLAST depends on the desired effect and technical requirements (see application examples). ADIPLAST solution should be added into the mixer first, before cement and aggregates, to avoid lumps.

Working time of mortars with ADIPLAST is slightly increased.

#### Packaging

ADIPLAST is supplied in plastic containers of 1 kg, 5 kg, 20 kg and in drums of 150 kg.

#### Shelf-life - Storage

18 months from production date if stored in original, unopened packaging, in temperature between  $+5^{\circ}$ C and  $+35^{\circ}$ C. Protect from direct sun exposure and frost.

#### Remark

ADIPLAST should be thoroughly stirred before use.

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#### Application examples

#### (All proportions in parts by volume)

#### • Bonding layers

#### a) Bonding layer for horizontal or sloping surfaces

The properly prepared surface is brushed in a thickness of about 2 mm, with a slurry consisting of:

<u>Dry mortar</u> : cement to sand = 1:1 <u>Mixing liquid</u> : ADIPLAST to water = 1 : 1 <u>Dry mortar : mixing liquid</u> = 2 : 1

New concrete or mortar application should take place up to 15-20 minutes after the bonding layer application, not later (**fresh on fresh**).

Consumption: 0,25 kg ADIPLAST/m<sup>2</sup>/mm.

Applications: Work joints, bonding bridge between old and new concrete or mortar.

### b) Bonding spatterdash (rough cast) for vertical surfaces

A mixture for spatterdash is prepared with:

<u>Dry mortar</u> : cement to sand = 1 : 1 <u>Mixing liquid</u> : ADIPLAST to water = 1 : 1 <u>Dry mortar : mixing liquid</u> = 4 : 1

The spatterdash is applied in the usual way. After hardening (at least 1day) the next layer may be applied

Consumption: 0,16 kg ADIPLAST/m<sup>2</sup>/mm.

Applications: Bonding of plasters and mortars to smooth vertical surfaces, thermal insulation boards etc.

#### • Patching mortars and thin layers

A mortar is prepared consisting of:

<u>Dry mortar</u> : cement to sand = 1 : 2 up to 1 : 4 <u>Mixing liquid</u> : ADIPLAST to water = 1 : 2 up to 1 : 4

Dry mortar : mixing liquid = 4 : 1 up to 4,5 : 1

The mortar is applied on the properly prepared substrate. For heavily loaded surfaces or very smooth ones a bonding layer, as described above, should be applied previously.

Consumption: 0,5-1,0 kg ADIPLAST/m<sup>2</sup>/cm.

Applications: Concrete repair (cavities, corners, grooves, steps etc), cement mortar repair, thin layers for leveling or sloping etc.

#### Wear-resistant, dust-proof floor screeds

A mortar is prepared consisting of:

<u>Dry mortar</u> : cement to sand = 1 : 2 up to 1 : 4 <u>Mixing liquid</u> : ADIPLAST to water = 1:2 up to 1:4

Dry mortar : mixing liquid = 4 : 1 up to 4,5 : 1

The mortar is applied on the properly prepared substrate in layers 10-30 mm thick. Subsequently, it is compacted and mechanically smoothed.

Consumption: 0,5-1,0 kg ADIPLAST/m<sup>2</sup>/cm.

Applications: Dust-proof industrial floors, floors in laboratories, warehouses, garages etc.

#### Waterproof, water-pressure resistant cement mortars

A bonding layer (as above) is followed by 2 layers of trowelled mortar (dry pack), consisting of:

<u>Dry mortar</u> : cement to sand = 1 : 2 up to 1 : 3 <u>Mixing liquid</u> : ADIPLAST to water = 1 : 2 up to 1 : 3

Dry mortar : mixing liquid = 4 : 1 up to 4,5 : 1

Consumption: 0,7-1,0 kg ADIPLAST/m<sup>2</sup>/cm.

Applications: Waterproofing of tanks and basements even from the interior (negative pressure) side.



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## • Weather-resistant, water-impermeable plasters

A plaster is prepared consisting of: <u>Dry mortar</u> : Binding material (cement + lime) to sand = 1 : 2,5 up to 1 : 4 <u>Mixing liquid</u> : ADIPLAST to water = 1 : 4 up to 1 : 5

Dry mortar : mixing liquid = 4,5 : 1 up to 5,5 : 1

In case that plaster is applied on thermal insulation boards, a bonding splatterdash layer, as described above, should be previously applied.

Consumption: 0,4-0,5 kg ADIPLAST/m<sup>2</sup>/cm.

Applications: Protective plasters for adverse weather conditions.

### • Mortars resistant to chemicals and petroleum products

A mortar is prepared consisting of:

<u>Dry mortar</u> : cement to sand = 1 : 2 up to 1 : 4 <u>Mixing liquid</u> : ADIPLAST to water = 2 : 1 <u>Dry mortar : mixing liquid</u> = 4 : 1 up to 4,5 : 1

Consumption: 1,7-2,0 kg ADIPLAST/m<sup>2</sup>/cm.

Applications: Cement mortar rendering or screeding for sewage tanks or wells, petroleum tanks, boiler room floors etc.

#### Adhesive mortars

A mortar is prepared consisting of:

<u>Dry mortar</u> : cement to sand = 1 : 2 up to 1 : 3 <u>Mixing liquid</u> : ADIPLAST to water = 1 : 2 <u>Dry mortar : mixing liquid</u> = 5 : 1

Consumption: 0,8 kg ADIPLAST/m<sup>2</sup>/cm.

Applications: Fixing of thermal insulation boards, tiles etc.

## Improvement of water paints (lime emulsions)

Approximately 1 to 2 kg of ADIPLAST are added per 10 liters of ready-to-use water paint.

Applications: An economic solution for painting industrial rooms, warehouses, stock farm buildings and exterior surfaces in general.

#### • Grouting mortars for natural stones

A mortar is prepared consisting of: <u>Dry mortar</u> : cement to sand = 1 : 2 up to 1 : 3 <u>Mixing liquid</u> : ADIPLAST to water = 1 : 2 up to 1 : 4

Dry mortar : mixing liquid = 4 : 1 up to 4,5 : 1

Consumption: 6-10 g ADIPLAST/m, for joints of 1 cm width and 1 cm depth.

Applications: Grouting of exposed brickwork, cement-tiles etc.

#### Mortars for groove formation across wall-floor joints

A mortar is prepared consisting of:

Dry mortar : cement to sand = 1 : 2 up to 1 : 4 Mixing liquid : ADIPLAST to water = 1 : 2 up to 1 : 4

Dry mortar : Mixing liquid = 4 : 1 up to 4,5 : 1

Consumption: 0,16-0,26 kg ADIPLAST/m of groove length, having a triangle cross-section with 5-6 cm sides.

Applications: Forming of grooves across wallfloor joints.

### • Protection of green (fresh) concrete against premature dehydration.

A solution consisting of ADIPLAST to water = 1:1, is sprayed or brushed on the surface of green concrete, which should be free of water accumulation, immediately after setting has started.

Consumption: 0,05-0,07 kg ADIPLAST/m<sup>2</sup>.





Volatile organic compounds (VOCs)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory h, type WB is 30g/I (2010) for the ready to use product.

The ready to use product ADIPLAST contains max <30 g/l VOC.

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