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# PRODUCT DATA SHEET SikaLatex<sup>®</sup>-100 Power LK

High performance SBR based multipurpose polymer for waterproofing, repair and bonding

# DESCRIPTION

SikaLatex®-100 Power LK is a latex-based, water-resistant multipurpose admixture for use in areas subject to humidity, dampness and continuous water contact. When added to cement mixtures, it improves water resistance and bonding strength by forming a reinforcing polymer that increases long term durability and flexibility of the mix. It is fully soluble in water and is to be added directly to the gauging water of mortar, concrete or cementitious grout.

# USES

SikaLatex<sup>®</sup>-100 Power LK is used as bonding agent, waterproof coating and site-mix mortar admixture for the following applications:

- Bonding of rendering and coating layers
- Bonding between successive concrete casts
- Cement grouting and screeds
- Polymer modified repair mortars
- Masonry mortars
- Renders
- Tile fixing and panelling

- Waterproof plastering
- Waterproofing of roof slabs, sunken slabs, basements, retaining walls, water tanks, sunshades etc
- Treatment for leaching and saltpetre action

# **FEATURES**

- Multipurpose 7-in-1 application
- Makes the mortar waterproof
- Improves resistance to salt permeation Improves toughness and flexibility and reduces cracking
- Good adhesion to substrates like concrete, stone, brick etc.
- Reduces viscosity of cement injection grout and improves bond of cured injected materials with substrates
- Dilute with water up to 6 times depending on the type of application
- Reduces surface dusting of concrete
- Improves chemical resistance of concrete
- Improves frost resistance
- Good resistance to water and water vapour Reduces water cement ratio for equivalent workability
- Mixes may be applied in much thinner sections

# **PRODUCT INFORMATION**

| Composition           | Styrene butadiene rubber (latex) emulsion  |  |  |
|-----------------------|--|--|--|
| Packaging             | 5L and 20L container   |  |  |
| Shelf life            | 18 months from date of production  |  |  |
| Storage conditions    | The product must be stored properly in undamaged and unopened original sealed packaging, in dry conditions at temperatures between +5 °C and +35 °C. Protect from frost and direct sunlight. |  |  |
| Appearance and colour | Liquid / Milky white   |  |  |
| Specific gravity      | ~1.02 kg/L   |  |  |
| pH-Value              |  |  |  |

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# **APPLICATION INFORMATION**

| Consumption             | Application area   | Mixing ratio  | Consumption of mixture   | Consumption of<br>SikaLatex®-100<br>Power |  |  |
|-------------------------|--|---|--------------------------|---|--|--|
|                         | Waterproofing coating  | SikaLatex <sup>®</sup> -100<br>Power LK: Water<br>: Cement = 1 : 3 :<br>8                               | ~350 g/m2 per<br>coat    | ~30 g/m2 per<br>coat                      |  |  |
|                         | Bonding coat   | SikaLatex <sup>®</sup> -100<br>Power LK : Water<br>: Cement = 1 : 2 :<br>6                              | ~350 g/m2 in single coat | ~40 g/m2                                  |  |  |
|                         | Repair mortar  | SikaLatex <sup>®</sup> -100<br>Power LK : Water<br>: Cement : Sand =<br>1 : 4 : 8 : 32                  | ~2000 kg/m3              | ~45 g/m2 per<br>mm thickness              |  |  |
|                         | Masonry jointing   | SikaLatex <sup>®</sup> -100<br>Power LK : Water<br>: Cement : Sand =<br>1 : 5.5 : 10 : 40               | ~1950 kg/m3              | ~35 g/m2 for 10<br>mm thick mortar        |  |  |
|                         | Crack filling  | SikaLatex <sup>®</sup> -100<br>Power LK : Water<br>: Cement : Sand =<br>1 : 4 : 10 : 30                 | ~100 g/m                 | ~5 g per linear<br>meter of crack         |  |  |
|                         | Polymer concrete<br>or Screed  | SikaLatex <sup>®</sup> -100<br>Power LK : Water<br>= 1 : 4 (Cement,<br>sand, aggregate<br>as per grade) | ~2300 kg/m3              | ~10 % by weight<br>of cement              |  |  |
|                         | Polymer cement injection grout   | SikaLatex®-100<br>Power LK : Water<br>= 1 : 6 (Cement,<br>sand, aggregate<br>as per grade)              | ~1800 kg/m3              | ~7 % by weight of cement                  |  |  |
|                         | NOTE: The above stated consumption depends on substrate condition,<br>porosity, level, application skills and mixing ratios. Mix consistency may<br>change with the quality of sand and cement, hence gauging water may be<br>adjusted slightly based on site conditions. Additional plasticising admixture<br>may be necessary for concrete, screed or grouting applications to maintain<br>desired workability |   |                          |   |  |  |
| Ambient air temperature | +5 °C min. / +40 °(  | +5 °C min. / +40 °C max   |                          |   |  |  |
| Substrate temperature   | +5 °C min. / +40 °C  | +5 °C min. / +40 °C max.  |                          |   |  |  |
| Application time        | ~20 to 30 minutes agent  | ~20 to 30 minutes at +30 °C when used as coating, mortar or bonding agent                               |                          |   |  |  |

# **BASIS OF PRODUCT DATA**

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

# ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS

provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

# **APPLICATION INSTRUCTIONS**

# SUBSTRATE QUALITY

The substrate shall be sound, clean, homogeneous,





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free from oils and grease.

## SUBSTRATE PREPARATION

- Dust, loose or friable particles, rust, scale, paint, cement laitance, old coatings and any other contaminants or deleterious materials which reduces bond or contributes to corrosion shall be removed by suitable means before application.
- Smooth substrates must be mechanically roughened by scabbling, needle gun or grit blasting to provide an adequate key.
- Cementitious substrates should be pre-saturated surface dry (SSD) with clean water at least 2 hours before any application.

## MIXING

MIXING

- 1. Mix SikaLatex<sup>®</sup>-100 Power LK with the correct amount of water to produce a gauging solution.
- 2. Pour part of the gauging solution into a suitable mixing container.
- While stirring slowly, add the cement or cements and mix to the gauging solution and mix thoroughly until a smooth, uniform and lump-free mix is achieved.
- 4. Within the mixing time add additional gauging solution to adjust to the desired consistency. Mix either by hand or with a low speed drill for not more than 2 minutes.

NOTE: When a concrete-mixer is used, pour the mortar as soon as its consistency is cohesive. Do not run the mixer too long.

## **APPLICATION METHOD / TOOLS**

## Waterproofing coating

- 1. Thoroughly pre-wet the prepared substrate. Keep the surface wet and do not allow to dry.
- 2. Before application remove excess water e.g. with a clean sponge. The surface shall appear a dark matt appearance without glistening and surface pores and pits shall not contain water.
- 3. Prepare the waterproofing coating as indicated in the consumption table. Using a stiff clean brush spread the coating vigorously onto the substrate, forming a thin layer.
- 4. After 2 to 6 hours, apply the second coat in crosswise direction to first coat. Standard coating system can be further reinforced by placing glass fabric layer Sika® Fabric-50 in between first and second coat.

5. Protect with screed on top for longer life. NOTE: In areas of severe water penetration, three coats might be required.

#### Bonding coat IMPORTANT

Never use pure SikaLatex<sup>®</sup>-100 Power LK or SikaLatex<sup>®</sup>-100 Power LK-water mix directly onto the substrate as bonding agent, always add cement and sand to the mix.

- 1. Thoroughly pre-wet the prepared substrate. Keep the surface wet and do not allow to dry.
- Before application remove excess water e.g. with a clean sponge. The surface shall appear a dark matt appearance without glistening and surface pores and pits shall not contain water.
- 3. Prepare the bonding coat as indicated in the consumption table. Using a stiff clean brush work the mix vigorously onto the substrate, forming a thin layer filling all unevenness, pits and pores.
- When the bond coat is still fresh and sticky, apply the mortar or concrete. Vibrate carefully to achieve satisfactory interpenetration of mortar and concrete.
   Polymer mortar or Waterproof plaster

# Polymer mortar or Waterproof plaster

- 1. Prepare the polymer mortar as indicated in the consumption table.
- 2. Apply a thin layer of polymer mortar as given above.
- Apply the mortar onto the surface in a layer of max.
  20 mm thickness.
- Cured mortar or plaster with SikaLatex<sup>®</sup>-100 Power LK would harden faster and would be watertight. For higher thickness, apply in multiple layers at intervals of 12 hours

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## Masonry jointing

- 1. Thoroughly pre-wet the prepared substrate. Keep the surface wet and do not allow to dry.
- Before application remove excess water e.g. with a clean sponge. The surface shall appear a dark matt appearance without glistening and surface pores and pits shall not contain water.
- 3. Prepare the jointing mortar as indicated in the consumption table.
- 4. Apply the bonding coat as indicated in the consumption table. Using a stiff clean brush work the mix vigorously onto the substrate, forming a thin layer filling all unevenness, pits and pores.
- 5. When the bond coat is still fresh and sticky, apply the jointing mortar.
- 6. Finish as required soon after application.

## Crack filling

- 1. Open the crack lines to form a V groove of ~10 mm.
- 2. Prepare the crack filler as mentioned in the consumption table to make a putty by using marble dust
- or very fine sand. 3. Apply to the cracks and finish with level to the surface.

## Polymer concrete or Screed

- 1. Thoroughly pre-wet the prepared substrate. Keep the surface wet and do not allow to dry.
- 2. Before application remove excess water e.g. with a clean sponge. The surface shall appear a dark matt appearance without glistening and surface pores and pits shall not contain water.
- 3. Prepare the bonding coat as indicated in the consumption table. Using a stiff clean brush work the mix vigorously onto the substrate, forming a thin layer filling all unevenness, pits and pores.
- 4. Prepare the concrete or screed as indicated in the consumption table. When the bond coat is still fresh and sticky, apply the concrete. Vibrate carefully to achieve satisfactory interpenetration concrete or screed.

## Polymer cement injection grout

- Open the crack lines to form a V groove of ~10 mm. Seal the cracks with Sika MonoTop®-108 Water Plug mortar or Sikadur®-31.
- 2. Fix appropriate nozzles spaced at regular intervals along groove length with Sika MonoTop®-108 Water Plug mortar or Sikadur®-31.
- Prepare a cement grout slurry as indicated in the consumption table.
- 4. Inject the grout as per standard grouting practice.

## **CURING TREATMENT**

- Avoid rapid evaporation of the water from mortars prepared with SikaLatex<sup>®</sup>-100 Power LK. Cover the surface with a polyethylene film, use wet burlap, gunny bag or hessian cloth or water misting or apply Sika Antisol<sup>®</sup> curing compound.
- Cure for minimum 3–5 days. DO NOT pond with water before 5 days of curing.

#### Sika Lanka (Private) Limited

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## APPLICATION

## IMPORTANT

Avoid application in direct sun and/or strong wind. IMPORTANT Protect freshly applied material from rain etc.

IMPORTANT During application, the mixture of SikaLatex®-100 Power LK and cement needs to be continuously stirred to prevent the cement particles from settling

## **CLEANING OF EQUIPMENT**

Clean all tools and application equipment with water immediately after use. Hardened or cured material can only be removed mechanically.

# **LEGAL NOTES**

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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