

PRODUCT DATA SHEET

Sika MonoTop®-723 N

R3 Pore Sealer and Levelling Mortar

DESCRIPTION

Sika MonoTop®-723 N is a polymer modified surfacing/finishing mortar, ready to mix, meeting the requirement of class R3 of EN 1504-3.

USES

- Thin layer render
- Use as a concrete pore sealer / levelling mortar
- Repairing of minor defects (pores and honeycombed concrete)
- Suitable for restoration work (Principle 3, method 3.1 and 3.3 of EN 1504-9)
- Suitable for preserving or restoring passivity (principle 7, method 7.1 and 7.2 of EN 1504-9)

CHARACTERISTICS / ADVANTAGES

- Easy to apply and excellent finishing
- Suitable for hand or wet spray application
- Can be applied up to 5 mm thick per application layer
- Class R3 of EN 1504-3
- Restoration work
- Sulphate resistant
- Low cracking sensitivity
- Very good resistance to water and chloride penetration
- Compatible with Sikagard® overcoat systems
- A1 fire rating

PRODUCT INFORMATION

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| Chemical Base | Portland cement, selected aggregates, additives and polymer modified |
| Packaging | 20 kg bag |
| Appearance / Colour | Grey powder |
| Shelf Life | 12 months |
| Storage Conditions | Store properly in undamaged original sealed packaging, in dry cool conditions. |
| Density | Fresh density of mortar ~2.0 kg/l |
| Maximum Grain Size | d_{\max} : 0.4 mm |

TECHNICAL INFORMATION

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| Compressive Strength | Class R3 ~40 MPa after 28 days | (EN 12190) |
| Modulus of Elasticity in Compression | ≥ 15 GPa | (EN 13412) |
| Tensile Adhesion Strength | ≥ 1.5 MPa | (EN 1542) |

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| Thermal Compatibility | ≥ 1.5 MPa (Part 1: Freeze- thaw) | (EN 13687-1) |
| Coefficient of Thermal Expansion | ~10.5 x 10 ⁻⁶ 1/K | (EN 1770) |
| Reaction to Fire | Euro Class A1 | (EN 1504-3) |
| Diffusion Resistance to Water Vapour | ~120 μH ₂ O | |
| Capillary Absorption | ≤ 0.5 kg/(m ² h ^{0.5}) | (EN 13057) |
| Permeability to Carbon Dioxide | ~2 700 μCO ₂ | |
| Carbonation Resistance | d _k ≤ control concrete (MC(0.45)) | (EN 13295) |

SYSTEM INFORMATION

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| System Structure | Sika MonoTop®-723 N is part of the range of Sika mortars complying with the relevant part of European Standard EN 1504 and comprising of: | |
| | Bonding Primer / Reinforcement | |
| | Corrosion Protection | |
| | Sika MonoTop®-910 N | Normal Use |
| | SikaTop® Armatec® 110 EpoCem® | Demanding requirements |
| | Repair Mortar | |
| | Sika MonoTop®-412, 352 | Concrete repair mortars |
| Levelling Mortar | | |
| Sika MonoTop®-723 N | Normal use | |

APPLICATION INFORMATION

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| Mixing Ratio | ~ 3.6 litres of water for 20 kg powder |
| Consumption | This depends on the substrate roughness and thickness of layer applied. As a guide, ~ 1.7 kg of powder per m ² per mm thick |
| Yield | 20 kg yields approximately 11.7 litres of mortar when mixed with 3.6 litres water |
| Layer Thickness | min. 1 mm / max. 5 mm |
| Ambient Air Temperature | +5°C minimum; +35°C maximum |
| Substrate Temperature | +5°C minimum; +35°C maximum |
| Pot Life | ~40 minutes at 20°C |
| Waiting Time / Overcoating | As a guide, depending on weather conditions overcoat 4 days after application (3 days curing + 1 day drying) with Sikagard® range of protective coatings. For other emulsion paints, refer to the relevant manufacturer's data sheet/ documentation. |

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

The concrete shall be thoroughly clean, free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials. Reference shall be made to EN1504-10 for specific requirements.

MIXING

Sika MonoTop®-723 N can be mixed with a low speed (<500 rpm) hand drill mixer or for machine application, using a force action mixer 2 to 3 bags or more at once depending the type and size of mixer. Pour the recommended water in a suitable mixing container. While stirring slowly, add the powder to the water and mix thoroughly at least for 3 minutes to the required consistency.

APPLICATION

Sika MonoTop®-723 N can be applied either manually using traditional techniques or mechanically using wet spray equipment. Thoroughly pre-wet the prepared substrate a recommended 2 hours before application. 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.

When manually applying the mortar first make a scratch coat by firmly scrapping the repair mortar over the substrate surface to form a thin layer and fill any pores or pits in the surface. The surface can be finished according to the requirements using a float or with a relevant wooden or plastic float or damp sponge.

CURING TREATMENT

Protect the fresh mortar immediately from premature drying using an appropriate curing method e.g. moist geotextile membrane, polythene sheet etc.

CLEANING OF TOOLS

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

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LIMITATIONS

- Refer to the Method Statement for Concrete Repair using Sika MonoTop® system for more information or refer to recommendations provided in EN 1504-10
- Avoid application in direct sun and/or strong wind.
- Do not add water over recommended dosage
- Apply only to sound prepared substrate, min 25 N/mm² compressive strength
- Do not add additional water during the surface finishing as this will cause discolouration and cracking
- Protect freshly applied material from freezing

BASIS OF PRODUCT DATA

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

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

ECOLOGY HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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