

PRODUCT DATA SHEET

Sikadur[®]-52 (IN) SLV - Mortar

3-PART THIXOTROPIC EPOXY PATCH REPAIR / FILLING MORTAR

DESCRIPTION

Sikadur[®]-52 (IN) SLV - Mortar is solvent-free, 3 component thixotropic mortar based on a combination of epoxy resin and selected quartz aggregates. After mixing it becomes an easy to use multipurpose repair and adhesive mortar.

USES

Sikadur[®]-52 (IN) SLV - Mortar may only be used by experienced professionals.

Sikadur[®]-52 (IN) SLV - Mortar is typically used:

- As bonding mortar on stone, concrete, mortar, plaster work, etc.
- For vertical and overhead filling of cavities
- For damaged stair-nosings and spalled concrete
- As abrasion resistant protective layer
- Suitable for bearing pad for bridges and heavy machinery

CHARACTERISTICS / ADVANTAGES

- Easy to mix and apply
- Solvent-free
- Suitable for dry and damp concrete surfaces
- Usable at low temperatures
- Very good adhesion to most construction materials
- Unique, high mechanical and structural strengths
- Good abrasion resistance

APPROVALS / STANDARDS

*Testing according to ASTM, C881, Type I & IV, Grade 1, Class C specifications, Except for gel time. * Neat Resin system (Resin +Hardener).

PRODUCT INFORMATION

Chemical Base	Epoxy Resin	
Packaging	Part A+B+C Pre-batched	108 kg
	Part A	14 kg in HDPE Container
	Part B	4 kg in Metal Container
	Part C	3 x 30 kg in HDPE Inner line
Colour	Part A	Colourless
	Part B	Amber
	Part C	Grey
	Part A+B+C mixed	Concrete Grey Mortar
Shelf Life	12 months from date of production	
Storage Conditions	Store properly in unopened, undamaged and sealed original packaging, in dry conditions at temperatures between +4°C and +40°C.	

Density	Neat Resin	Mortar (1:5)
	1.1 ± 0.05 kg/L (Part A+B mixed)	1.96 ± 0.1 kg/L (Part A+B+C mixed)
All density value at +27°C		

TECHNICAL INFORMATION

Compressive Strength	Curing Time	Neat Resin	Mortar	(ASTM D 695)
	1 day	≥ 10 N/mm ²	≥ 40 N/mm ²	
	3 days	≥ 65 N/mm ²	≥ 65 N/mm ²	
	7 days	≥ 70 N/mm ²	≥ 70 N/mm ²	
Above values are for curing at +15°C				
	Curing Time	Neat Resin	Mortar	(ASTM D 695)
	1 day	≥ 70 N/mm ²	≥ 65 N/mm ²	
	3 days	≥ 75 N/mm ²	≥ 70 N/mm ²	
	7 days	≥ 80 N/mm ²	≥ 75 N/mm ²	
Above values are for curing at +25°C				
Tensile Strength	Neat Resin	Mortar	(ASTM D 638)	
	≥ 50 N/mm ²	≥ 12 N/mm ²		
Curing Time 7 days, Curing Temperature +15°C				
	Neat Resin	Mortar	(ASTM D 638)	
	≥ 50 N/mm ²	≥ 15 N/mm ²		
Curing Time 7 days, Curing Temperature +25°C				
Elongation at Break	Neat Resin	Mortar	(ASTM D 638)	
	~2%	~0.3%		
Curing Time 7 days, Curing Temperature +15°C				
	Neat Resin	Mortar	(ASTM D 638)	
	~2%	~0.3%		
Curing Time 7 days, Curing Temperature +25°C				
Tensile Adhesion Strength	Curing time	Neat Resin	Mortar (1:5)	(ASTM C 882)
	2 days (moist cure)	≥ 7 N/mm ²	≥ 7 N/mm ²	
	14 days (moist cure)	≥ 10 N/mm ²	≥ 10 N/mm ²	
	2 days (dry cure)	≥ 7 N/mm ²	≥ 7 N/mm ²	
	14 days (dry cure)	≥ 10 N/mm ²	≥ 10 N/mm ²	
	Above values are at curing temperature +15°C			
	Curing time	Neat Resin	Mortar (1:5)	(ASTM C 882)
	2 days (moist cure)	≥ 7 N/mm ²	≥ 7 N/mm ²	
	14 days (moist cure)	≥ 10 N/mm ²	≥ 10 N/mm ²	
	2 days (dry cure)	≥ 7 N/mm ²	≥ 7 N/mm ²	
	14 days (dry cure)	≥ 10 N/mm ²	≥ 10 N/mm ²	
	Above values are at curing temperature +25°C			
Heat Deflection Temperature	≥ 50°C (7 days at +25°C)			(ASTM D 648)
Water Absorption	Neat Resin	Mortar (1:5)	(ASTM D 570)	
	~0.25%	~0.56%		
Water immersion for 24 hours after 7 days cure				

APPLICATION INFORMATION

Mixing Ratio	Part A : Part B : Part C = 7 : 2 : 45 (by weight)			
	Resin (Part A + Part B) : Powder (Part C) = 1 : 5 (by weight)			
Consumption	Layer	Components	Consumption	
	Primer	Part A+B	0.1 - 0.2 kg/m ²	
	Mortar	Part A+B+C	~2.2 kg/m ² per mm of thickness	
Product Temperature	+15°C min. / +45°C max.			
Ambient Air Temperature	+4°C min. / +45°C max.			
Relative Air Humidity	75% max			
Substrate Temperature	+4°C min. / +45°C max.			
Pot Life	Temperature	Neat Resin	Mortar	(FIP 5.1)
	+15°C	~75 minutes	~150 minutes	
	+25°C	~24 minutes	~65 minutes	
	100 g mass			

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Sound, clean, free from oil and grease and surface treatments etc.

SUBSTRATE PREPARATION

Concrete, mortar, stone should be thoroughly prepared by high pressure water jetting or mechanical means such as grinding, chiselling etc. Cracks must be cleaned to remove dust with compressed air.

MIXING

Mixing for primer

Weigh the resin (comp. A) and hardener (comp. B) part as per mixing ratio (by weight) and mix together for 3 minutes at slow speed (400-500 rpm) with a mixing spindle attached to an electrical drill. Continue mixing until the material becomes uniform in color. Avoid aeration while mixing. Mix only that quantity which can be used within its pot life.

Apply one coat primer on substrate to ensure excellent bonding between substrate and coating or mortar layer.

Mixing for Mortar system

To prepare an epoxy mortar slowly add 5 - 6 parts by weight of filler (comp. C) to 1 part of mixed Part A + Part B and mix until uniform in consistency.

APPLICATION METHOD / TOOLS

Successful application depends on very careful preparation. The surface to be treated must be structurally sound, free from standing water, oil, grease, surface contaminants. Dirt, dust and other foreign materials must be removed. Concrete which is fully contaminated with oil / grease, must be removed to the depth

of sound & uncontaminated concrete.

Mortar Application

Prime prepared surface with neat Part A & Part B of Sikadur®-52 (IN) SLV / Sikadur®-52 (IN) SLV - Mortar. Place prepared epoxy mortar before primer becomes tack-free. Place the epoxy mortar using trowels. Finish with finishing trowel.

CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Colma-Cleaner immediately after use. Hardened / cured material can only be mechanically removed.

LIMITATIONS

- Minimum substrate and ambient temperature +4°C.
- Do not thin with solvents.
- Maximum epoxy mortar thickness is 38 mm per lift.
- Do not seal exterior slabs on grade.
- Minimum age of concrete must be 21 - 28 days, depending on curing and drying conditions for mortar and to seal slabs.
- Porous substrates must be tested for moisture vapor transmission prior to application.
- Not an aesthetic product. Color may alter due to variations in lighting and/or UV Exposure.

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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

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.

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Product Data Sheet

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