

PRODUCT DATA SHEET

Sika® Compound-50

Hydraulic special binder for polystyrene insulating fills

DESCRIPTION

Sika® Compound-50 is a hydraulic special binder for levelling and insulating fills with recycled polystyrene granules.

In combination with supervised and CE-certified Sika Recyclingstyropor PS (0-8)R Sika® Compound-50 is used to produce the CE-certified premix SikaCrete® Silent-90 on construction site.

USES

Binder for recycling-polystyrene-granulate for the following uses:

- Level compensation, footfall sound and thermal insulation in residential construction, especially for high insulation thickness in low-energy buildings and passive houses
- Backfilling of swimmingpools and bathtubs
- Insulation of flat roofs (even with arbitrary slopes)
- Insulation of pitched roofs
- Attic insulation
- Levelling and thermal insulation under monolithic base plate (special mix required)

CHARACTERISTICS / ADVANTAGES

Sika® Compound-50 binder:

- Low dosage of binder
- Large specific surface
- High water retention capability
- Excellent water binding capability
- Reduced Chrom-IV according 2003/53/EG (reduce allergic risks)
- Fast adhesion
- Fast drying time (gauging water 4 - 6 Vol.-%)

Leveling with Sika® Compound-50:

- Jointless leveling in one working step without thermal or sound bridges
- High laying performance, special advantage on rough surface and in case of exposed cables or pipes
- Tested compression of maximum 0,5 mm
- Jointless up to 30 cm layer thickness
- No blend or waste
- No special equipment required (works with screed pumps)

Thermal or sound insulation as SikaCrete Silent-90:

- High thermal insulation (rated value 0,045 W/m.K)
- High foot sound insulation (minimum 27 dB)
- Low dead weight (dry: 96,8 kg/m³ ±10%)
- Dynamic stiffness (EN 29052-1) at 7 cm insulation thickness < 20 MN/m³ (after load)
- Placable with arbitrary slope
- Walkable after 24 to 72 hours (depending on temperature)
- Ready for laying for screeds after 2 to 7 days (depending on humidity, temperature, aeration, quantity of gauging water and layer thickness). If layer thickness exceeds 20 cm extended drying time has to be considered.
- Ready for laying dry screed after 10 days
- Explicit recommendation for floor heating
- Suitable for wet rooms (e.g. bathrooms)
- Sustainable due to use of recycled polystyrene granulate out of packaging waste

APPROVALS / CERTIFICATES

- See SikaCrete Silent-90

PRODUCT INFORMATION

Packaging	24 kg bag for 200 litres of polystyrene granulate Sika PS 0-8)R 10 kg bag for 210 liters of polystyrene granulate Sika PS 0-8)R
Appearance / Colour	yellow powder
Shelf life	minimum 9 months from date of production
Storage conditions	Store properly in unopened, undamaged packaging. Protect from humidity. Not frost sensitive.
Density	fresh raw density of compressed fill 133 kg/m ³ (EN 1015-6) dry raw density nominal 90 kg/m ³ (dry fill)
Bulk density	~ 0,9 kg/liter (binder Sika® Compound-50)

TECHNICAL INFORMATION

Specific advice	Values of thermal conductivity	
	dry value $\lambda_{(10, dry, 90/90)}$	0,0429 W/m.K (ÖNORM B 6015)
	par value $\lambda_{D(23/50)}$	0,044 W/m.K +23°C / 50 % r.F. (EN ISO 10456:2008)
	rated value	0,045 W/m.K Austria (ÖNORM B 6015-5:2003)
		0,048 W/m.K Germany
	Heat transition coefficient	Thickness of filling with Sika® Compound-50
	0,50 W/m ² .K	7 cm
	0,40 W/m ² .K	9,2 cm
	0,30 W/m ² .K	13 cm
	0,20 W/m ² .K	20 cm
	All values calculated including 5 cm cement screed and 20 cm steel concrete slab in consideration of heat transfer coefficient for basement ceilings of 0,34 m ² .K/W downwards.	
	Impact sound reduction	
	minimum 27 dB	5 cm insulating fill on massive slab with 5 cm cement screed

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

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) con-

taining physical, ecological, toxicological and other safety-related data. Further notes and information data sheets on product safety and disposal can be found on the Internet at www.sika.de.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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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