



High flexible for Water Proofings on Concrete

Preliminary Datasheet

SILIKAL® RU 320 resin is a modified methacrylate resin of high flexibility which is suitable for water proofings on interior and exterior concrete surfaces.

SILIKAL® RU 320 resin is permanent flexible and can follow thermic movements of the concrete. As a result of the high flexibility water proofings appear a little bit tacky on its own surface and might lead to a certain absorban-
cy of air dust-pollution like any other materials. This fact can be ignored when the membrane layer anyway will be
overlayed by another concrete screed or tiles. For better light stability always add a small amount of 2-5 % SILI-
KAL® Pigment Powder.

In order to work out an individual solution for your job please contact our Technical Department for detailed infor-
mations.

Application

Membranes or water proofings requiring an approval for overlays made of concrete screed or tiles i.e. for balconies, swimming pools, bath rooms or other concrete floor constructions.

After preparing the concrete surface according to the technical rules (ball blasting, grinding, cleaning etc) apply first the primer SILIKAL® R 51 resin as normally. After curing apply the coating mixture according to the formulati-
on given in table 1. Depending on your skill and experience different tools to spread the coating material can be
used, such like Mohair-rollers, comb trowel or smooth trowel. It is important to avoid blisters during the applicati-
on. Two layers of 1 – 1,5 mm each will be necessary. Also consider to apply the material up the walls, columns or
fixed machineries atleast 5-10 cm to avoid water leakage. In case of overlaying with tiles the last coating surface
must be sprinkled fully with SILIKAL® Filler QS 0,7 – 1,2 mm to provide a good bond to the tile adhesive mortar.
Self stable concrete screeds of more than 5 cm thickness can be layed on directly without sand sprinkling. The
total thickness of the water proofing membrane will be appr. 2 – 2,5 mm.

For these application areas we can provide German Approvals for the following classes:

Application Area A:	Water spillage on wet surfaces on floors (A2) and walls (A1) caused by cleaning water or water of natural use, such like swimming pool surroundings or in public bath or shower rooms.
Application Area B:	Interior and exterior wall and floor surfaces of swimming pools filled with water of drinking category. For special salt waters used for medical purpose an individual approval will be necessary.
Application Area C:	Walls- and floor surfaces in commercial establishments, also in connection with light chemicals (i.e. car wash, kitchens, canteens, food precessing) except for those chemicals which require special and additional approvals (regulations concerning the ground water protection act § 19 WHG).

SILIKAL® RU 320 waterproofing also meets the technical requirements underneath of SILIKAL coating system B and C which is not included in the approval as the above mentioned approval does not cover this application.

Water proofings made of **SILIKAL® RU 320 resin** on concrete roofs without additional coverings made of concrete screeds or tiles will have to pass additional national testings and approvals depending on the country's regu-
lations and requirements. SILIKAL can not provide approvals for this applications.

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Guide formulation for factory batches

Item	Component	Formulation (parts by weight- %)	Remarks	Batch size for 972 kg 1000 Ltr. Container	
1	SILIKAL® RU 320 resin	74 %	4 drums a 180 kg	720 kg	
2	Filler Plastorit 0000 (1)	20 %	8 bags a 25 kg	194 kg	
3	Silikal® Pigment	5 %	2 bags a 25 kg	48 kg	
4	Silikal® TA2 anti-flow additive	1 %	1 bag a 10 kg	10 kg	
	total:	100 %	Average consumption: appr. 1,3 kg/m² per mm	972 kg	appr. 750 ltr
5	Silikal® - Hardening Powder	1 - 6 % related to item. 1 0,75 - 4,5 % on total	See „Hardener dosages“table for quantities	75 - 450 g per 10 kg can	10 kg = 7,7 Ltr.

Suppliers: (1) **Naintsch**

The mixing device (dissolver) must be EX-proof. Stir moderately to avoid self heating during the process (max. +35°C).

Characteristics of RU 320 resin as delivered

Property	Measuring method	Appr. value
Viscosity at 20 °C	DIN 53 015	2000 – 3000 mPas
Flow time at 20 °C		80 – 100 sec. / ISO 6 mm
Density D ₄ ²⁰	DIN 51 757	0,99 g/cm³
Flash point	DIN 51755	+ 10 °C
Temperature stability after curing without loadings		-30°C to +60°C
Application temperature of surface		0 °C to +30 °C
Ultimate elongation at break after curing		180 % at +23 °C

Table of Hardener dosages

Temperature	Hardening Powder pbw.-% *	Pot life approx. min.	Hardening time approx. min.
0 °C	6	20	80
5 °C	5	20	60
10 °C	4	15	40
15 °C	3	15	40
20 °C	2	15	40
25 °C	1,5	10	30
30 °C	1	8	25

* The quantity of hardening powder is always related to the quantity of pure resin.

For further informations, please refer to the separate product information sheet „**SILIKAL® Hardening Powder**“.

Other applicable documents	Data sheet	Page
SILIKAL® Hardening Powder	SILIKAL® Hardening Powder	80-81
General Processing information	AVH	83-86
The substrate	DUG	87-89
Fillers and pigments	FUP	90-91
Chemical resistance	CBK	92-93
Information on safety and protection	SUS	94-95
Storage and transport	LUT	96-98
General Cleaning advice	ARH	99-100
RU 320 approval		