



Viscacid[®] EPOXY CONSTRUCTION RESIN RAPID

Article No. 0907

Solvent-free, unfilled, fast-curing epoxy resin.

Viscacid Epoxy Construction Resin Rapid is an unpigmented, modified epoxy resin binder for the production of primers, scraped stopper coatings and repair mortars.

Range of use:

Viscacid Epoxy Construction Resin Rapid is an epoxy resin binder for coating cementitious surfaces such as concrete and cement screed. It can also be used as a primer for floor coatings. Its special formulation allows it to be used as a binder for scraped stopper coatings and epoxy mortars.

System constituents:

Viscacid Epoxy Construction Resin Rapid Art. No. 0907
 Viscacid Construction Resin Filler Art. No. 4047
 Acolan Select Mix SLB Quartz Sand 0.1-0.4 mm
 Acolan Select Mix 05/08

Characteristic data of the product in the packaged state:

	Comp. A	Comp. B	Mixture
Appearance:	clear colourless	yellowish	slightly yellow
Odour:	nearly odourless	amine	slightly amine
Density (20°C):	1.13 g/cm ³	1.03 g/cm ³	1.12 g/cm ³
Viscosity (20° C):	900 mPas	170 mPas	700 mPas
Flash point:	> 100 °C	> 100 °C	/

Mixing ratio:

2.5 : 1 parts by weight
 100 : 40 parts by volume

Container pot-life:

1 kg container at 23 °C 10 min
 1 kg container at 8 °C 19 min

Higher temperatures and larger quantities reduce working time, lower temperatures increase working time.

Compressive and tensile bending strength:

Mixture: Viscacid Epoxy Construction Resin Rapid with Viscacid Construction Resin Filler in a mixing ratio of 1 : 7 parts by weight after storing for 7 days at 20 °C:

Compressive strength: 65 N/mm²

Tensile bending strength: 22 N/mm²

Adhesive pull strength: 4.6 N/mm² (concrete failure)

Loading (primer, blinded 0.2-0.7 mm):

Foot traffic: at 20 °C after approx. 1 hour
 at 8 °C after approx. 2 hours

Full mechanical and chemical loading capacity is achieved after 7 days.

The surface can be worked over after 4 hours at room temperature

Note:

All of the tests given are under laboratory conditions. Slightly deviating values may occur when worked at the building site.

Substrate:

The minimum compressive strength of the substrate must be 25 N/mm², minimum adhesive pull strength 1.5 N/mm². Floor slabs are to be protected in a suitable manner against rising damp. The surfaces to be treated must be clean, dry and absorbent.

Soiling, surface laitance or silicate layers, substances with a separating effect such as e.g. oils, grease, paraffin, dust from rubber tyres, release and curing agents, coating remains, etc. are to be removed by steel ball jetting (Blastrac) or a grinding process.

Remove dust from the surfaces thoroughly afterward with an industrial vacuum cleaner. Moisture content in the outer 2 cm thick layer should not exceed 4% by weight (for further information, see DBV Code of Practice - The Use of Reactive Resins in Concrete Construction, part 2).

Directions:

The two components are packaged in special containers in the proper mixing ratio. The mixture should be produced in compliance with the DBV Code of Practice "The Use of Reactive Resins in Concrete Construction - part 3.2 - Using Reactive Resins on Concrete". The hardener component (B) should be completely added to the resin component (A). For smaller amounts (up to 10 litres), use a mixer on a counter-current principle. A drill can be used as a drive using a maximum speed of 400 rpm for mixing.

Technical Information Sheet

A minimum mixing time of 2 minutes should be observed. The larger the quantity of material to be mixed and/or the more viscous the components, the longer the material must be mixed. Streaks indicate insufficient mixing. Especially in the case of components with differing viscosities, the lesser mixed material on the sides and bottom of the container as well as on the mixing tools should be scraped off several times and returned to the mixture.

Insufficiently mixed material leads to the formation of blisters and causes soft, incompletely cured spots. The material is then applied in the intended method. Because the resin cures rapidly, it should be distributed evenly over the surface immediately.

If subsequent coatings cannot be applied within 36 hours, the primer should be blinded with max. 2.0 kg quartz sand 0.1 - 0.4 mm. When used as a scraped stopper coat, 1 part by weight Acolan Select Mix SBL is added and mixed into the mixed material and applied with a smoothing trowel.

Epoxy mortars, e.g. for concave moulding or mortar repairs can be produced by adding Viscacid Construction Resin Filler, Acolan Select Mix 05 or 08 after mixing the A and B components. Depending on the filler selected, 5.8 to 10 parts by weight can be added. The mortar is then applied to the fresh primer, compacted, levelled to the correct height and smoothed.

The ambient and substrate temperature should not fall below + 4°C. Curing is accelerated at higher temperatures and delayed at lower temperatures. The formation of condensation on the surface to be coated which often occurs if the temperature falls below the dew point considerably reduces adhesive strength. In the case of multiple-layered construction, subsequent layers should never be applied if the temperature of the substrate is less than or equal to the dew point temperature. For this reason, the dew point temperature must be at least 3° below the temperature of the substrate to be coated. (To determine the dew point temperature, relative humidity and air temperature are measured, e.g. with a thermo-hydrometer, and determined with the aid of a dew point table.) If the temperature relationship is unfavourable, heating equipment or a de-humidifier will be required.

Dew point table:

Air temp. °C	Condensation point temperature ¹⁾ in °C with a relative humidity of:															
	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%		
30	10.5	12.9	14.9	16.8	18.4	20.0	21.4	22.7	23.9	25.1	26.2	27.2	28.2	29.1		
29	9.7	12.0	14.0	15.9	17.5	19.0	20.4	21.7	23.0	24.1	25.2	26.2	27.2	28.1		
28	8.8	11.1	13.1	15.0	16.6	18.1	19.5	20.8	22.0	23.2	24.2	25.2	26.2	27.1		
27	8.0	10.2	12.2	14.1	15.7	17.2	18.6	19.9	21.1	22.2	23.3	24.3	25.2	26.1		
26	7.1	9.4	11.4	13.2	14.8	16.3	17.6	18.9	20.1	21.2	22.3	23.3	24.2	25.1		
25	6.2	8.5	10.5	12.2	13.9	15.3	16.7	18.0	19.1	20.3	21.3	22.3	23.2	24.1		
24	5.4	7.6	9.6	11.3	12.9	14.4	15.8	17.0	18.2	19.3	20.3	21.3	22.3	23.1		
23	4.5	6.7	8.7	10.4	12.0	13.5	14.8	16.1	17.2	18.3	19.4	20.3	21.3	22.2		
22	3.6	5.9	7.8	9.5	11.1	12.5	13.9	15.1	16.3	17.4	18.4	19.4	20.3	21.3		
21	2.8	5.0	6.9	8.6	10.2	11.6	12.9	14.2	15.3	16.4	17.4	18.4	19.3	20.2		
20	1.9	4.1	6.0	7.7	9.3	10.7	12.0	13.2	14.4	15.4	16.4	17.4	18.3	19.2		
19	1.0	3.2	5.1	6.8	8.3	9.8	11.1	12.3	13.4	14.5	15.5	16.4	17.3	18.2		
18	0.2	2.3	4.2	5.9	7.4	8.8	10.1	11.3	12.5	13.5	14.5	15.4	16.3	17.2		
17	-0.6	1.4	3.3	5.0	6.5	7.9	9.2	10.4	11.5	12.5	13.5	14.5	15.3	16.2		
16	-1.4	0.5	2.4	4.1	5.6	7.0	8.2	9.4	10.5	11.6	12.6	13.5	14.4	15.2		
15	-2.2	-0.3	1.5	3.2	4.7	6.1	7.3	8.5	9.6	10.6	11.6	12.5	13.4	14.2		
14	-2.9	-1.0	0.6	2.3	3.7	5.1	6.4	7.5	8.6	9.6	10.6	11.5	12.4	13.2		
13	-3.7	-1.9	-0.1	1.3	2.8	4.2	5.5	6.6	7.7	8.7	9.6	10.5	11.4	12.2		
12	-4.5	-2.6	-1.0	0.4	1.9	3.2	4.5	5.7	6.7	7.7	8.7	9.6	10.4	11.2		
11	-5.2	-3.4	-1.8	-0.4	1.0	2.3	3.5	4.7	5.8	6.7	7.7	8.6	9.4	10.2		
10	-6.0	-4.2	-2.6	-1.2	0.1	1.4	2.6	3.7	4.8	5.8	6.7	7.6	8.4	9.2		

¹⁾ Approximations may be interpolated linearly.

Notes:

Because of the short pot-life, the material should be distributed over the surface immediately after mixing. The same applies when producing repair mortars which should also be used quickly.

Tools and cleaning:

Smoothing trowel, scraper, epoxy roller, paint brush, suitable mixing equipment

Tools and any spilled material should be cleaned immediately while fresh with V 101 Thinner. Once the material has reacted, it can only be removed mechanically.

Packaging, application rate and storage

Packaging: 1 kg, 8 kg and 24 kg tin containers

Application rate:

Primer: at least 0.30 kg/m²
Blinding: max. 2 kg quartz sand 0.1-0.4 mm/m²

Mortar: Mixing ratio 1:5 with SelectMix 0.5 - 0.4 kg/l cavity volume
Mixing ratio 1:8 with SelectMix 0.8 - 0.25 kg/l cavity volume
Mixing ratio 1:80 with Construction Resin Filler – 0.2 kg/m² per mm layer thickness

Shelf-life: 9 months in unopened and unmixed, original containers stored frost-free.

Safety, ecology, disposal:

Further information concerning safety during transport, storage and handling as well as on disposal and ecology is found in the latest Safety Data Sheet.

GISCODE: RE 01

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Any statements made beyond the contents of this information must be confirmed in writing by the producer.

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With the publication of this Technical Information Sheet all previous editions are no longer valid.

Remmers Baustofftechnik GmbH • 49624 Lönningen • Germany • Tel.: +49 (0) 5432 83-0 • Fax: +49 (0) 5432 3985 • www.remmers.de
Remmers (UK) Limited • Crawley • United Kingdom • Tel: +44 (0) 845 373 0103 • Fax: +44 (0) 845 373 0104 • www.remmers.co.uk
Remmers (Far East) Pte. Ltd. • Singapore • Tel: +65 6 7410277 • Fax: +65 6 7417158