

Viscacid[®] CR



Article No. 6160-6179

Chemical resistant, solvent-free, 2-component floor coating on a special epoxy resin/polyamine combination base.

Product:

Seamless, chemical resistant coating system on an epoxy resin base for medium to heavy loads.

System constituents:

- e.g Viscacid Epoxy Construction Resin (Art.No. 0905)
- Viscacid Epoxy CR Coating (Art.No. 6160-79)

Range of use:

Because of its well-balanced property profile, Viscacid CR can be used for a wide range of applications. It is especially for coating floors when high chemical resistance is required, e.g. workshops, workplaces and warehouses.

Colours:

Standard colours:	
Pebble grey	Art.No. 6161
Silver grey	Art.No. 6162
Colour collection:	Art.No. 6160
Special colours:	Art.No. 6179

Characteristic data of the product in the packaged state:

	Comp. A	Comp. B	Mixture
Appearance:	Coloured	Yellowish	Coloured
Odour:	Nearly odourless	Amine	Weakly amine
Density (20°C):	2.1 g/cm ³	1.05 g/cm ³	1.98 g/cm ³
Viscosity (25° C):	10500 mPas	430 mPas	4200 mPas
Flash point:	> 100°C	> 100°C	> 100°C

Characteristic data of the product during application:

Notice: The following data were determined under laboratory conditions. During application on site, deviating values may be obtained.

Mixing ratio Binder:

By weight	84.3 : 15.7
By volume	74.5 : 25.5 (20°C)

Pot-life:

150 g, (23-40°C): approx. 30 minutes

Working time for one pack:

1 kg, (10-50°C):	approx. 50 minutes
1 kg, (20-50°C):	approx. 30 minutes
1 kg, (30-50°C):	approx. 15 minutes

Dust dry:	after 8 hours (20°C)
Passable:	after 12 hours (20°C)
Full loading capacity:	after 7 days (20°C)
Early water resistance:	after 72 hours (20°C)

Working temperatures:

Substrate:	min. 10°C	max. 30°C
Product:	min. 10°C	max. 30°C
Air:	min. 10°C	max. 30°C

Moisture content:

Substrate:	max. 4 % by weight
Air:	min. 40°C r.f. max. 85 % r.f.

Waiting time between working operations

(coating and seal coat):

10°C	min. 16 hours	max. 4 days
20°C	min. 12 hours	max. 48 hours

Characteristic data of the product after hardening:

Shore A hardness:	90
Shore D hardness:	50
Compressive strength:	52 N/mm ²
Flexural/tensile strength:	47 N/mm ²
E-modulus:	10400
Adhesive strength:	> 2.5N/mm ²
Tensile strength:	2000 N
Abrasion resistance (1000 rev and 1000 g load, CS 17):	0.2 g
Linear shrinkage:	< 2 %
Solvent-free according to DBC:	yes
Fire rating:	B 2

Substrates:

All sufficiently load bearing, cement-bound materials such as concrete and cement screed are suitable substrates. Minimum compressive strength of the substrate must be 25 N/mm², minimum tear strength 1.5 N/mm². Floor slabs must be protected against rising capillary moisture in a suitable manner. The surfaces to be treated must be clean, dry and absorbent. Soiling, surface laitance or silicate layers, substances with a parting effect such as e.g. oils, fats, paraffin, abraded rubber, parting and curing agents, the remains of coatings, etc. are to be removed by steel ball jetting (Blastrac), sandblasting, flame blasting or grinding. Remove dust thoroughly afterward with an industrial vacuum cleaner.

Technical Information Sheet

Then prime the prepared surfaces until saturation with at least 0.4 kg/m² e.g. Viscacid Epoxy Construction Resin. Greater unevenness, surface roughness and defective areas must be levelled or repaired with e.g. Viscacid Epoxy Construction Resin and quartz aggregate or Viscacid Epoxy Repair Mortar (see relevant technical information sheet).

Working directions:

The two components are packaged in a special container in the proper mixing ratio. The mixture should be produced according to the DBV Code of Practice "The use of cold-cured resins in concrete construction – part 3.2 – Using cold-cured resin on concrete". The hardener component (B) is to be completely added to the resin component (A). Mixing can be done e.g. with a Beba 050 compulsory mixer. Observe the minimum mixing time of 3 minutes. The larger the amount to be mixed and/or the more viscous the components, the longer the material must be mixed. Streak formation indicates insufficient mixing. Especially for varying viscous components, the material adhering to the edge and bottom of the container as well as on the mixing tools should be scraped off and added to the mixture several times. Afterward, fill the mixture into a separate container and mix again. The mixture is then ready to use. When mixing bigger quantities of filled systems (mortar), use suitable mixing equipment, e.g. the Beba positive mixer. Insufficiently mixed material leads to the formation of blisters and causes soft, incompletely cured spots.

Viscacid Epoxy CR Coating can be applied as a flow coat. If higher layer thickness is required, that material can be filled in a mix ratio of 2 : 1 with Quartz Aggregate 0.1-0.4 mm. Then apply the material in the intended manner and spike roll it within 15 minutes. If applied as a roller coat, the material is applied with an epoxy roller.

Viscacid Epoxy CR Coating is applied without the admixture of a solvent. The use of solvents reduces the chemical resistance.

Working guidelines:

Ambient and substrate temperature should not fall below 10° C. Hardening is accelerated at higher temperatures and delayed at lower temperatures. The formation of condensation on the surfaces to be coated which often occurs if the temperature falls below the condensation point temperature also considerably reduces adhesive strength. For multiple-layered construction, subsequent layers should never be applied if the temperature of the substrate is less than or equal to the condensation point temperature. For this reason, the condensation point temperature should at least be 3° C below the temperature of the substrate to be coated (to determine the condensation point temperature, relative humidity and air temperature are measured with e.g. a thermohygrometer and determined with the aid of a condensation point table). If the temperature relationship is unfavourable, heating equipment will be required.

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	6.3	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 maybe interpolated linearly.

Notes:

Because of raw material composition, slight colour difference between different batches may occur. Hence, only drums of the same batch should be used for application on larger surfaces.

Viscacid Epoxy CR Coating is applied without the admixture of a solvent. The use of solvents reduces the chemical resistance.

Tools and cleaning:

Smoothing trowel, notched trowel blade nr. 25, mixing equipment according to the counter-current principle. Clean tools and equipment and splashed material immediately while fresh with V 101 thinner (Art.No. 0978). In the hardened state, cleaning can only be done mechanically.

Packaging, application rate and storing:

Packaging: 5 kg and 10 kg tin cans

Application rate:

Depending on the unevenness of the substrate:

As roller coating: at least 0.6 kg/m²

As flow coat without filler: at least 1.0 kg/m²

As filled flow coat (2:1 parts by weight*): at least 3.0 kg/m²

(* mixing ratio Viscacid Epoxy CR Coating to Quartz Aggregate 0.1-0.4 mm)

Shelf-life:

At least 6 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 for disposal is found in the latest Safety Data Sheet.

GISCODE: RE 1

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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.

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