



Status 10/2024

# NEODUR Grouting mortar/concrete

**mineral, hydraulic setting, highly flowable expansive grouting mortar/concrete for all kinds of grouting and assembly works**

## DESCRIPTION

NEODUR VM 1, VM 3, VM 5 (acc. to DAfStb guideline VeBMR) and VB 8 grouting mortar/concrete are ready to use, non-shrink and high-early strength grouting mortars for all kinds of grouting and assembly works, based on high-grade KORODUR aggregates.

- NEODUR VM 1: grain size 0 - 1 mm
- NEODUR VM 3: grain size 0 - 3 mm
- NEODUR VM 5: grain size 0 - 5 mm
- NEODUR VB 8: grain size 0 - 8 mm

## APPLICATION

For full bond grouting works, e.g. for anchor and assembly holes, grouting underneath of machines, turbines, craneway rails, steel and concrete supports, railing posts, pipe culverts and channels for heavy-loads for traffic areas.

Due to their final strengths NEODUR grouting mortars/concretes are suitable for highest dynamic and static stress.

## PROPERTIES

- highly flowable
- non-shrink
- high early and final strengths
- solid bond to concrete and steel
- frost and de-icer resistant
- waterproof
- chloride-free
- easy to mix
- pumpable
- for indoors and outdoors

## TECHNICAL DATA

<b>Quality</b>	NEODUR VM 1 NEODUR VM 3 NEODUR VB 8	C55/67 C55/67 C55/67
<b>Grain size</b>	NEODUR VM 1 NEODUR VM 3 NEODUR VM 5 NEODUR VB 8	0 - 1 mm 0 - 3 mm 0 - 5 mm 0 - 8 mm
<b>Compressive strength [N/mm<sup>2</sup>]</b>	NEODUR VM 1 NEODUR VM 3 NEODUR VB 8	after 24 hours $\geq 35$ N/mm <sup>2</sup> after 28 days $\geq 65$ N/mm <sup>2</sup>
<b>Grouting height/width</b>	NEODUR VM 1 NEODUR VM 3 NEODUR VM 5 NEODUR VB 8	approx. 5 - 20 mm approx. 10 - 50 mm approx. to 200 mm approx. to 250 mm
<b>Slump</b>	NEODUR VM 1 NEODUR VM 3 NEODUR VB 8	$\geq 550$ mm after 5 minutes
<b>Swelling value</b>	all qualities	$\geq 0,1$ Vol. %
<b>Water addition</b>	all qualities	approx. 3,0 l/25 kg
<b>Yield</b>	all qualities	approx. 12 - 13 l/25 kg
<b>Temperature</b> processing, ambient and sub-base temperature	all qualities	$\geq 5$ °C

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## NEODUR VM 5

<b>Quality</b>	C80/95						
<b>Compressive strength</b>	≥ 95 N/mm <sup>2</sup>						
<b>Slump</b>	a3 > 700 mm						
<b>Shrinkage class</b>	SKVB I						
<b>Humidity classes</b> based on concrete corrosion due to alkali-silica reaction  The aggregates of the NEODUR products comply with DIN EN 12620 of alkali sensitivity class E1 from harmless resources.	<b>Humidity class</b>						
	WO	WF	WA	WS			
	fulfilled						
<b>Exposure class</b> acc. to. DIN EN 206-1 / DIN 1045-2	XO	XC	XD	XS	XF	XA**	XM
		1234	123	123	1234	123***	1
	fulfilled						

\*\* at sulfate attack up to 1.500 mg/l    \*\*\* with additional safety measures acc. to DIN 1045-2, proof of sulfate resistance acc. to DIN 19573, Appendix C.

## APPLICABLE NORMS/ GUIDELINES

DAfStb guideline (VeBMR) production and use of cementitious grouting mortar and grouting concrete, DIN EN 1504-3, DIN 12620 and DIN EN 206.

## PROCESSING

### Sub-base

For full bond the sub-base must be free from cracks, flat, free from loose debris, dust, cement slurry, oils and greases. Pre-wet the sub-base thoroughly, avoiding formation of puddles.

### Processing

Mix a complete bag NEODUR grouting mortar/concrete with the specified amount of water for approx. 3 minutes in suitable pan type mixer or with stirrer (approx. 400 rpm) or pump with suitable mixing and pumping equipment, for example with S 5 EV EVTm from Putzmeister, PA-BEC from Bau-Maschinen Beckschulte, Project CP 30 BASIC from EUROMAIR, or with EMT 75 from ESKA-Maschinentechnik. Grouting must be carried out without cavities and without interrupting work. Ventilation must be ensured.

## AFTER-TREATMENT

Differing temperatures may influence the setting and hardening process. NEODUR grouting mortar/concrete must be protected from too rapid drying out acc. to DIN EN 13670 / DIN 1045-3.

## SUPPLY

25 kg special paper packaging (NEODUR VM 1, VM 3, VM 5 and VB 8)  
loose in silo (NEODUR VM 1, VM 3 and VM 5)  
big bag (NEODUR VM 1, VM 3 and VM 5)

## STORAGE

Dry, like cement. Shelf-life approx. 12 months.

**HINTS:** This product contains cement and has an alkaline reaction with moisture/water. Therefore protect skin and eyes. In case of contact with eyes, consult a doctor. The specifications provided in this data sheet for application and processing are based on tests carried out by KORODUR under ideal conditions in the laboratory and acc. to the relevant technical regulations. Therefore, the indicated data don't represent directions for application or a quality agreement in the meaning of § 434 (1) BGB, no regulation in the meaning of § 434 (2) sentence 2 BGB (German Civil Code) and no guarantee for practical application. Due to the differing conditions on site, preliminary own tests and suitability checks are required before application. Please consider the currently valid product information as well as the relevant safety data sheet acc. to Regulation (EC) No. 1907/2006 in the latest version – also published on the internet: [www.korodur.de](http://www.korodur.de).