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akkreditiert durch:



GROUTTECH  
Voltweg 2

NL-8071 CZ Nunspeet  
Nederland

Geesthacht, 08. October 2018

**Test Certificate**  
according to the KTW recommendations  
(Federal Health Gazette 20, 1977ff)

(This test was implemented in accordance with the requirements of the KTW-recommendation of October 2005.)  
Note: The actual state of the KTW recommendations given by the German Federal Environmental Agency (UBA) was published in October 2016.

Applicant: GROUTTECH  
Voltweg 2  
NL-8071 CZ Nunspeet  
Nederland

Product: GROUTTECH SW Protect M  
Epoxy resin

Test type: Product testing

According to the test report dated Oktober 08, 2018 the test boards Lab.-No. 111873/00/01  
**GROUTTECH SW Protect M** fulfill the requirements for use in the drinking water sector of the KTW  
recommendations for the following

Application area(s)	Temperature range(s)		
	cold water	warm water	hot water
A Pipes	--	--	--
B Containers	fulfilled	--	--
C Equipment gear	--	--	--
D1 Large-surface sealants	--	--	--
D2 Small-surface sealants	--	--	--

if the material is suitable for these in technical terms.

**Deputy head of laboratory:**

(Dr. D. Reinhardt)

GROUTTECH  
Vollweg 2  
NL-8071 CZ Nunspeet  
Nederland

Geesthacht, 08. October 2018

**Test report**

(This test was implemented in accordance with the requirements of the KTW recommendation from 1977 dated October 2005.)  
Note: The actual state of the KTW recommendations given by the German Federal Environmental Agency (UBA) was published in March 2016.

Laboratory-No.:	111873/00/01	KTW-classification:	B. "Containers "
Manufacturer:	GROUTTECH	Proportion of surface and volume:	1:4 cm <sup>2</sup> /cm <sup>3</sup>
Type of sample:	Epoxy resin	Test sample surface:	55.2 cm <sup>2</sup>
Sample name:	GROUTTECH SW Protect M	Test water volume:	220 mL

**Test results:**

Parameter	after 3 days	after 6 days	after 9 days	KTW-requirements after 9 days
<b>pH</b>	8,18	8,25	<b>8,48</b>	<b>6.5–9.5</b> DIN 38404 C5
<b>absorption coefficient „colour“ (436nm)1/m</b>	0,14	0,16	<b>0,16</b>	<b>n.c.i.</b> (≤0.5) DIN EN ISO 7887
<b>Turbidity TE/F</b>	0,23	0,20	<b>0,21</b>	<b>n.c.i.</b> (≤1.5) DIN EN ISO 7027
<b>Tendency of foam formation</b>	n.c.i.	n.c.i.	<b>n.c.i.</b>	<b>n.c.i.</b>
<b>Threshold odour number (20°C)</b>	1	1	<b>1</b>	≤2
<b>TOC (mg C/m<sup>2</sup>*day)</b>	4,3	1,2	<b>1,2</b>	≤10 DIN EN 1484
<b>Oxidation reaction with chlorine (mg Cl<sub>2</sub>/m<sup>2</sup>*day)</b>	0,2	0,2	<b>0,2</b>	≤8 DIN EN ISO 7393-2

n.c.i. = not considerably influenced

**Assessment:**

The test samples of **GROUTTECH SW Protect M** provided fulfill the requirements for use in the drinking water sector according to the KTW recommendations of the Federal Health Department for the application range B "Containers" (surface/volume = 1:4 cm<sup>2</sup>/cm<sup>3</sup>).

**Deputy head of laboratory:**  
(Dr. D. Reinhardt)

