

LADR GmbH

Medizinisches Versorgungszentrum Dr. Kramer und Kollegen

Abt. Wasser-Abwasser-Umwelthygiene

21502 Geesthacht

Lauenburger Str. 65-67

Telefon: (04152) 803-0

Telefax: (04152) 803-351

* akkreditiert durch:



DAP-PL-3022.00

GROUTTECH

Voltweg 2

NL-8071 CZ Nunspeet

Niederland

Geesthacht, 08. December 2009

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 2008.

Applicant: GROUTTECH
Voltweg 2
NL-8071 CZ Nunspeet
Niederland

Product: PURE-Injectionfoamresin
GROUTTECH 157

Test type: Product testing

According to the test report dated December 08, 2009 the test boards Lab.-No. 29718/00/01 **GROUTTECH 157** fulfill the requirements of the KTW recommendations for the following

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

if the material is suitable for these in technical terms.

Head of laboratory: *S. Dageförde*

(Dr. S. Dageförde)

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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 October 2008.

Laboratory-No.:	29718/00/01	KTW-classification:	D1 "Large-surface sealants "
Manufacturer:	GROUTTECH	Proportion of surface and volume:	1:25 cm ² /cm ³
Type of sample:	PURE- Injectionfoamresin	Test sample surface:	54.22 cm ²
Sample name:	GROUTTECH 157	Test water volume:	1356 mL

Test results:

Parameter	after 3 days	after 6 days	after 9 days	KTW-requirements after 9 days
pH	7.86	8.34	8.19	6.5–9.5 DIN 38404 C5
absorption coefficient „colour“ (436nm)1/m	0.4	0.2	0.2	n.c.i. (≤0.5) DIN EN ISO 7887
Turbidity TE/F	0.1	<0.1	<0.1	n.c.i. (≤1.5) DIN EN ISO 7027
Tendency of foam formation	n.c.i.	n.c.i.	n.c.i.	n.c.i.
Threshold odour number (20°C)	1	1	1	≤2
TOC (mg C/m ² *day)	157	58	37	≤60 DIN EN 1484
Oxidation reaction with chlorine (mg Cl ₂ /m ² *day)	26	25	22	≤75 DIN EN ISO 7393-2

n.c.i. = not considerably influenced

Assessment:

The test samples of **GROUTTECH 157** provided fulfill the requirements according to the KTW recommendations of the Federal Health Department for the application range D1 "Large-surface sealants" (surface/volume = 1:25 cm²/cm³). No aromatic amines are verifiable qualitatively.

Head of laboratory:
(Dr. S. Dageförde)