



(Certified English Translation)

LADR GmbH

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- State approved
- Accredited by:



DAP PL-3022-00

WEBAC Chemie GmbH
Fahrenberg 22

22885 Barsbüttel near Hamburg

Geesthacht, 12 April 2011

Test Certificate

according to KTW recommendations
(Federal Health Gazette 20, 1977)

Applicant: WEBAC Chemie GmbH
Fahrenberg 22
22885 Barsbüttel near Hamburg
Germany

Product: WEBAC® 4110
Epoxy Injection Resin

Test type: Product Testing

According to the test report of 12 April 2011, **laboratory number 38096-00-01**, the test samples of **WEBAC® 4110** provided fulfill the requirements of the KTW recommendations for the following

Application Range(s):

Temperature Range(s):

	Cold water	Warm water	Hot water
A Pipes	---	---	---
B Containers	---	---	---
C Equipment gear	---	---	---
D1 Large-surface sealants	fulfilled	---	---
D2 Other sealants and adhesives	---	---	---

if the material is suitable for these in technical terms.

Head of Laboratory: (signature)
(Dr. S. Dageförde)



¹ Medical Supply Center Dr. Kramer and Colleagues
² Dept. of Water-Sewage-Environmental-Hygiene

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Test Report

(This test was implemented in accordance with the requirements of the KTW recommendation dated October 2005.)

Laboratory No.:	38096-00-01	KTW classification:	D1 "large-surface sealants"
Manufacturer:	WEBAC Chemie	O/V ⁵ ratio:	1:25 cm ² /cm ³
Type of sample:	Epoxy injection resin	Test sample surface:	53.6 cm ²
Name of sample:	WEBAC [®] 4110	Test water volume:	1340 ml

Test results:

Parameter	Day 1-3	Day 4-6	Day 7-9	KTW requirement after 9 days
pH	8.53	8.49	8.52	6.5-9.5
Color (436 nm 1/m	<0.1	<0.1	<0.1	DIN 38404 C5 n.n.b. (≤0.5 for 436 nm)
Turbidity TE/F	<0.1	<0.1	<0.1	DIN EN ISO 7887 n.n.b. (≤1.5)
Tendency to foam formation	n.n.b.	n.n.b.	n.n.b.	DIN EN ISO 7027 n.n.b.
Threshold odor number (20° C)	1	1	1	≤2
TOC (mg C/m ² *day)	4.9	3.3	1.6	≤60
Oxidation reaction with chlorine (mg Cl ₂ /m ² *day)	11.5	10.7	9.1	≤75 DIN EN 1484 DIN EN ISO 7393-2

n.n.b. = no detectable influence

Assessment:

The test samples of WEBAC[®] 4110 provided fulfill the requirements according to the KTW recommendations of the Federal Health Dept. for the application range D1 "large-surface sealants" (O/V ratio 1:25 cm²/cm³).

Head of Laboratory: (signature)
(Dr. S. Dageförde)

In my capacity as a public translator for the English language, duly commissioned and sworn by the President of the Regional Court of Heidelberg (Landgericht Heidelberg), I hereby confirm that the foregoing is a true and complete translation of the German document submitted to me in the original.

Heidelberg, Germany
2 May 2011



³ Medical Supply Center Dr. Kramer and Colleagues

⁴ Dept. of Water-Sewage-Environmental-Hygiene

⁵ surface/volume