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EXAMINATION REPORT

Evaluation considering of organic materials in contact with drinking water

Product

FlexproofX1

Company
StekoX® GmbH Abdichtungstechnik, Blumenstraße 42/1
71106 Magstadt

Contents

1. Sample Preparation

1.1. Preface

The samples were pretreated for the migration test by rinsing, stagnation and prewashing.

1.2. Samples to be tested at (23 ± 2)℃

1.2.1 Rinsing

The test specimens were rinsed with flowing drinking water for (60 ± 5) min with a flow speed of 3 m/min.

1.2.2. Stagnation with testing water

The test specimens were put into testing water for a period of (24 ± 1) h at (23 ± 2) ℃. Subsequently the water was drained.

1.2.3. Prewashing

The test specimens were prewashed as described under (1.2.1) and afterwards were rinsed for 2 min with testing water.

2. Examination procedure

2.1 Migration of substances

Eight parallel tests were done at the same time.

The first migration test was started immediately after the sample preparation.

The test specimens were put into testing water. The vessels were filled completely with testing water; therefore losses of volatile substances were made impossible.

The migration period lasted (72 ± 1) h at (23 ± 2)°C.

At the end of the migration period the water was drained and fresh testing water was substituted. The waters of the first, second and third period were analysed and the concentration a_n^T was determined.

3. Blank

Blanks were evaluated for each period under the same testing conditions. At the end of the migration period the concentration b_n^T was determined.

4. Analyses

The concentration of TOC (total organic carbon) was determined at the end of each migration period.according to DIN EN 1484 (H3).

5. Calculation of examination results

5.1 Calculation of substances concentrations in the migration water

The concentration was calculated with the following formula for each migration water:

$$c_n^T = a_n^T - b_n^T$$

Explanation:

c_n^T Concentration of analysed substance in mg/L

a_n^T Concentration of substance in mg/L, as determined in migration water

b_n^T Concentration of substance in mg/L, as determined in blank

This is valid for the condition:

T examination temperature (23 ± 2) °C

n respective migration period

5.2. Calculation of the migration rate of analyzed substance

calculation of the migration rate M_n^T from concentration c_n^T

$M_n^T = c_n^T/(S/V \times t)$ [mg dm^{-2} d^{-1}]

Explanation:

M_n^T Migration rate for migration period n

T Duration of migration period in days (72 ± 1) h at (23 ± 2)

S/V ratio surface – volume dm^{-1}

Calculation of average migration rate

The average migration rate $\overline{M}_n^T$ was calculated as the arithmetic average of the parallel results of M_n^T for each migration water.

6 General Information

Name and adress of the analytical laboratory:	Eurofins Institut Jäger GmbH, Ernst-Simon-Str. 2-4, 72072 Tübingen
Report ID:	Order No.: 112-01055
Name and adress of customer:	StekoX® GmbH Abdichtungstechnik, Blumenstraße 42/, 71106 Magstadt
Test specimen ID:	FlexproofX1
Application range of product :	in drinking water applied sealant
Authorized signee:	Herr Lars Dohl
Date of report:	20.12.2012
Publication of results:	This report cannot be published or duplicated in parts without prior authorization.
Distinct assignment of examination results:	The examination results refer exclusively to the mentioned test specimen and application range.
Trade name of product:	FlexproofX 1

Details of sample production:	silane-modified component alternatively two-component sealant
Product producer:	StekoX® GmbH Abdichtungstechnik
Place and date of production:	20.12. 2012
Name of sample provider:	StekoX® GmbH Abdichtungstechnik
Name of production manager:	Herr Andreas Kogel
Description of sampling:	done by hand

7 Information concerning the examination procedure

Applied norm:	DIN EN 12873-1:2004
Number of test specimens:	4 per testing period
Volume test water (V) in dm^3:	0,56
Surface (S) of test specimen in dm^2:	2,80
Applied S/V-ratio:	5 dm^{-1}
Disinfection procedure:	No
Origin of test water:	clean-up on the spot, reverse osmosis (< 2 mS/m LF, < 0,2 mg/l TOC)
Test temperature:	(23 ± 2) °C
Deviations from test procedure:	None

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