

# **BELGISCH VERPAKKINGSINSTITUUT byba** INSTITUT BELGE DE L'EMBALLAGE spri



**DATE**: Zellik, 01/07/2016

## TEST REPORT

REPORT NR.:

LVE/Ive/CFP-16.118

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**OBJECT:** 

Determination of the overall migration of a coated aluminium plate: 'Aquapox VL'

Receiving date of the samples:

22/06/2016

Testing date:

23/06 - 29/06/2016

BY ORDER OF:

Rewah

Nijverheidsweg 24

2240 Zandhoven - Belgium

For the attention of Mr. Robin Van den Eynde

General Manager

Analyst – Consultant

Consumer Food Packaging

Eng. M. WITTEBOLLE

Eng. L. VAN ELSEN

The results of this report are exclusively related to the submitted samples This report shall not be reproduced except in full, without written approval of the laboratory Q: accredited test (ISO 17025)

Accuracy of the test results available on request

BTW/TVA: BE 0468 585 422

#### BELGISCH VERPAKKINGSINSTITUUT

Besloten Venootschap met Beperkte Aansprakelijkheid

#### INSTITUT BELGE DE L'EMBALLAGE

Société Privée à Responsabilité Limitée

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## Report CFP-16.118

### 1. Received samples

Coated aluminium plate: 'Aquapox VL'

Application:

coating of floors, walls, ...

(contact with all kinds of foodstuffs)

The samples were taken and sent by 'Rewah' to the Belgian Packaging Institute.

## 2. Executed tests

Determination of the overall migration (Q)

All materials intended to come into contact with food have to be tested on their migration behaviour, in accordance with the Belgian Legislation RD 02/06/2015 and the European Regulation No 1935/2004.

In conformity with the European Regulation No  $\underline{10/2011}$  and amendments the simulants and test conditions presented in Table 1 were selected.

Table 1: selected simulants and test conditions

Simulant	Contact duration	Contact temperature	
simulant A: 10% (v:v) ethanol	2 hours	70°C	
simulant B: 3% (w:v) acetic acid	2 110418		
simulant D2: 95% ethanol instead of olive oil (*)	2 hours	60°C	
simulant D2: isooctane instead of olive oil (*)	30 minutes	40°C	

Contact method: bringing the food contact side (coated side) of the samples into contact with the simulants

(\*) Due to practical problems, the test method for the determination of the overall migration into olive oil was not suitable. In accordance with the European Standard EN 1186-1, the substitute simulants 95% ethanol and isooctane were selected.

The test methods were based on EN 1186-1, EN 1186-5 and EN 1186-14.

After the contact period, the simulants were evaporated and the residual weights were determined.

Regulated by the above mentioned legislations the overall migration limit is 10 mg/dm<sup>2</sup>.

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#### 3. Results

Determination of the overall migration (Q)

The results are mean values of two measurements. No reduction factor was used for simulant D2.

All results are expressed in  $mg/dm^2$  and are presented in Table 2. The overall migration limit is  $10 \ mg/dm^2$ .

Table 2: results for the overall migration into simulants A, B and D2

Sample	Simulant A 10% ethanol	Simulant B 3% acetic acid	Simulant D2 95% ethanol	Simulant D2 isooctane
Coated aluminium plate: 'Aquapox VL'	3,9	94,5	7,9	1,2

Additionally, it is confirmed that no changes in sensory properties were observed.

#### 4. Conclusion

The results show that the overall migration of the tested sample is less than the maximum limit of 10 mg/dm² for simulant A (10% ethanol, representing all aqueous foodstuffs) and simulant D2 (95% and isooctane instead of olive oil, representing all fatty foodstuffs) using the given conditions. Nevertheless, the limit is exceeded for simulant B (3% acetic acid, representing all foodstuffs with a pH below 4,5).

In accordance with the European Regulation No 10/2011 and amendments, conformity with the overall migration limit for simulants A and D2 demonstrates suitability for contact with all kinds of foodstuffs excepting acidic foods.

Consequently, the delivered tested samples are suitable for short contact with all kinds of foodstuffs excepting acidic foods, including contact at temperatures up to 70°C for up to 2 hours or contact at temperatures up to 100°C for up to 15 minutes.

A certificate of test can be delivered.

Eng. Liesbeth Van Elsen

Analyst - Consultant

Consumer Food Packaging