



**Test Report**  
**Société OBER**  
**Formaldehyde Emissions Test**  
**according to EN 717-1**

February 2007

**Client:** **Société OBER**  
31 Route de Bar  
F-55014 Bar Le Duc  
France

**Date:** 28<sup>th</sup> February 2007

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The results are only valid for the tested sample(s).

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## Introduction

On 18<sup>th</sup> January 2007 Eurofins Environment A/S received three samples named

**Bruit, D'Ober, BRU 070111**

**Oberflex, ENZ 070111**

**Oberflex, SMUR 070111**

for emissions testing according to EN 717-1. The sample was clearly labelled, properly packaged and not damaged. Testing was carried out in the laboratories of Eurofins Environment A/S. Before starting the testing procedure on 22<sup>nd</sup> January 2007 the sample had been stored unopened at room temperature.



## 1 Description of the Applied Testing Method

The applied testing method complies with the test method according to EN 717-1. The test method is based on the published methods: ISO 16000-3, 16000-9, 16000-11. The internal method numbers are: 9810; 9811, 9812, 8400.

### 1.1 Test Specimen

Two samples were sent by the client to the laboratory of Eurofins Environment A/S in airtight packages. The packages were opened and two test specimens (17 x 17 cm) were cut out. Edges were covered with aluminium tape according to EN 717-1. The specimens were transferred vertically into to a test chamber immediately (internal method no.: 9810).

### 1.2 Test Chamber

The test chamber was consisting of stainless steel and had a volume of 119 litres. The air clean-up was realized in multiple steps. Before loading the chamber a blank check of the empty chamber was performed. The operation parameters were 23 °C, 50 % relative air humidity (in the supply air) with an air exchange rate of 1 per hour. The total loading of the test chamber was 1 m<sup>2</sup> test specimens per m<sup>3</sup> air volume (internal method 9811).

### 1.3 Sampling and Analysis

#### 1.3.1 Testing of Formaldehyde

The presence of formaldehyde was tested by drawing air samples from the chamber outlet through DNPH-coated silicagel tubes. Analysis was done by solvent desorption, HPLC and UV-/diode array detection (ISO 16000-3, internal methods no.: 9812 / 8400).

The absence of formaldehyde was stated if the specific wavelength UV detector response was lacking at the specific retention time in the chromatogram. Otherwise it was checked whether the detection limit (3 µg/m<sup>3</sup>) was exceeded. In this case the identity was finally checked by comparing full scan sample UV spectra with full scan standard UV spectra. The uncertainty amounted to ± 20% (RSD).

#### 1.3.2 Deviations from EN 717-1

No deviations.

#### 1.3.3 Accreditation

The testing methods described above have been accredited (ISO 17025-1) by DANAK (no. 168).



## 2 Results

	Formaldehyde concentration in test chamber, mg/m <sup>3</sup>		
	BRU 070111	ENZ 070111	SMUR 070111
<b>Background concentration</b>	< 0.003	< 0.003	< 0.003
After 1 day	0.49	0.14	0.13
After 2 days	0.38	0.14	0.12
After 3 days	0.34	0.14	0.13
After 4 days	0.30	0.14	0.13
After 7 days	0.22	0.13	0.12
After 8 days	0.21	0.13	0.12
After 9 days	0.20	0.12	0.12
After 10 days	0.18	0.12	0.12
After 15 days	0.15	-	-
After 16 days	0.14	-	-
After 17 days	0.14	-	-
After 18 days	0.13	-	-
After 21 days	0.12	-	-
After 22 days	0.11	-	-
After 24 days	0.10	-	-
After 28 days	0.094	-	-

The results are average values of two samplings from the test chamber per day.

The results are rounded values with 2 significant digits.

< less than

- not determined

### Steady-state Emission

	BRU 070111	ENZ 070111	SMUR 070111
<b>Steady-state Emission, mg/m<sup>3</sup></b>	<b>0.094 **</b>	<b>0.12 *</b>	<b>0.12 *</b>

\* determined after 10 days storage in a test chamber

\*\* determined after 28 days storage in a test chamber