

Report 06 F3 062 from Analyscentrum Date October 17, 2006

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RAPPORT

utfärdad av ackrediterat laboratorium
REPORT issued by an Accredited Laboratory

FORMALDEHYDE EMISSION 0.225 m³ CHAMBER TEST

METHOD	EN 717-1:2004, "Wood-based panels – Determination of formaldehyde release – Part 1: Formaldehyde emission by the chamber method"
Chamber Size	0.225 m ³
Temp.	23 ± 0.5°C
R.H.	45 ± 3%
Air Exchange Rate	1 / h
Loading Factor	1 m ² / m ³
Sample Size	Two pieces 0.280 x 0.200 x 0.018 m. The sample was planed before cutting of the test pieces. Total exposed area: 0.225 m ² .
Edge Sealing	The edges were partly sealed; 1.5 m open edge/m ² (0.168 m open/piece).

SAMPLE

Type and identification	EGP sample, art. No. 99999, "Our Glue, 1241/2542".		
Producer	Binder Holzbausysteme Unternberg		
Received from	Anton Prähauser		
Arrival date	August 23, 2006		
Glue used	1241	Total spread	190 g/m ²
Hardener used	2542		
Glue/hardener ratio	100:30		
Total exposed glueline	1120 mm		
Sampled	August 17, 2006		
Test Period	September 18, 2006 until October 13, 2006		

TEST RESULT

Steady-state emission value	0.02 mg formaldehyde / m ³ air. Emission curve in Figure 1.
Test duration	432 hours

NOTES

- In order to determine the steady state concentration, one analysis per day during a period of 18 days have been made. The emission value is calculated from the power function extrapolated to 28 days, see figure 1. The shorter sampling period has negligible effect on the resulting emission value; see report 99 AC 428.
- The measurement uncertainty is 15 % (including a coverage factor of 2).
The evaluation of the uncertainty is based on the principles given in *The Guide to the Expression of Uncertainty in Measurement*, 1993 (GUM) and has been made according to SP Rapport 2000:17 (see report 02 AA 032-rev 1).
- According to EN 14342:2005 (Wood flooring) and EN 13986:2002 (Wood based panels), the requirement for formaldehyde class E1 is $\leq 0.124 \text{ mg/m}^3$.

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Unused samples will be stored for one month after the date of report if nothing else is agreed

Client	Philipp Riedl	
Company	Casco Adhesives AB, c/o Akzo Nobel Coatings GmbH, Aubergstrasse 7, A-5161 Elixhausen	
Distribution	Christian Nedomlel	
Project number	6361-06	Primary data Formaldehyd 207
Keywords	Emission;formaldehyd;kammartest;EN 717-1;EGP; Binder Holzbausysteme Unternberg	
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Figure 1.

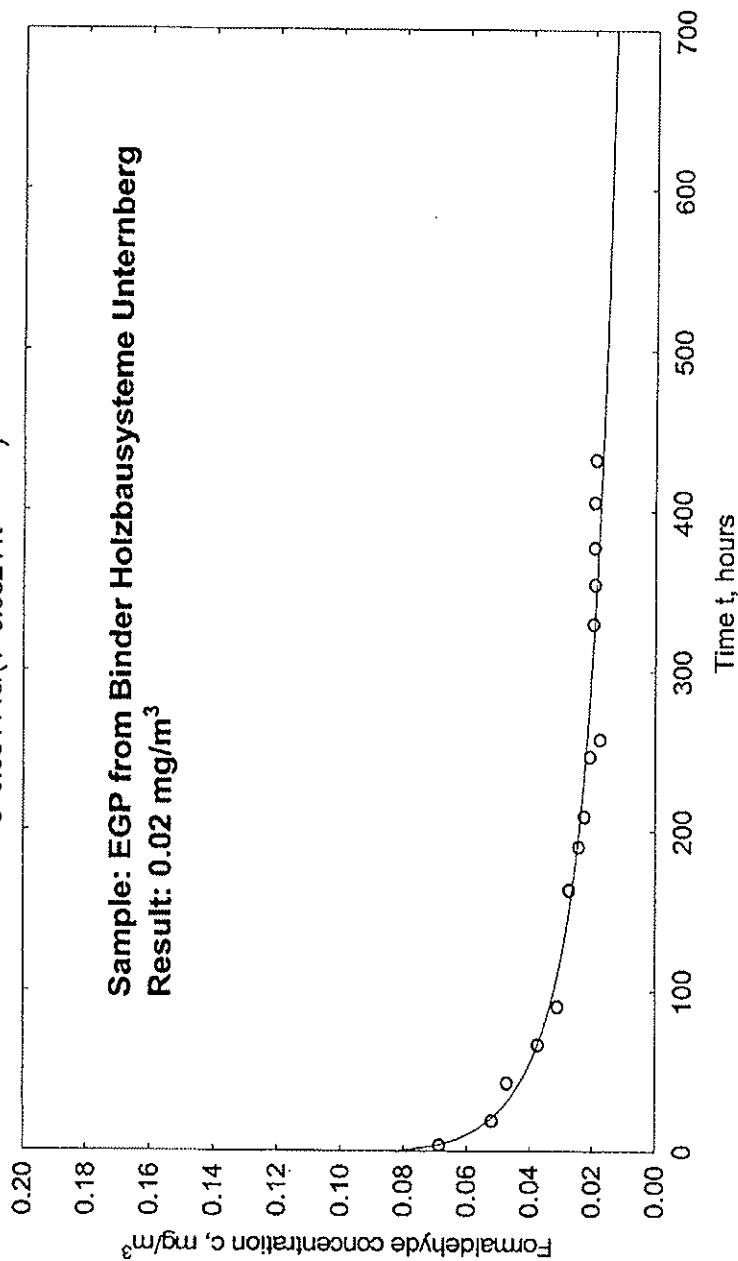
Formaldehyde emission according to EN 717-1

Project number: 6361-06

Model: $c = A/(1+Bt^p)$

$c=0.081149/(1+0.08211t^{0.630947})$

Sample: EGP from Binder Holzbausysteme Unternberg
Result: 0.02 mg/m³



6361, Our glue-pf. 2006-10-16

AW