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Date
11 September 2017

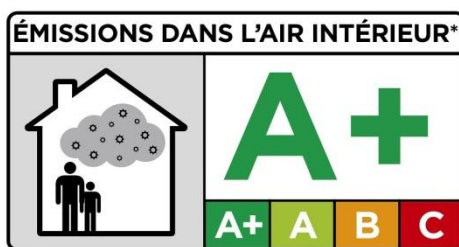
VOC Emissions Test report

1 Sample Information

Sample identification	FOREXclassic & FOREXprint
Product type	PVC panel
Batch no.	A 5520 CLA 19 mm
Production date	10/04/2013
Date when sample was received	29/04/2013
Testing (start - end)	01/05/2013 - 29/05/2013

2 Resulting VOC Emissions Class Label

This recommendation is based on French regulation of March 23, 2011 (décret DEVL1101903D) and of April 19, 2011 (arrêté DEVL1104875A). For details please see www.eurofins.com/france-voc



*Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

The product was assigned a VOC emission class without taking into account the measurement uncertainty associated with the result. As specified in French Decree no. 2011-321 of March 23, 2011, correct assignment of the VOC emission class is the sole responsibility of the party responsible for distribution of the product in the French market.

3 Conclusion of CMR substances

The tested product meets the requirements of the French regulation DEVP0908633A of 30 April 2009 and DEVP0910046A of 28 May 2009.

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

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4 Test Method

Method	Principle	Parameter	Quantification limit	Uncertainty	
ISO 16000 parts -3, -6, -9, -11 Internal method numbers: 9810, 9811, 9812, 2808, 8400	GC/MS HPLC/UV	VOC Volatile aldehydes	2 µg/m ³ 3 µg/m ³	22% (RSD) Um = 2 x RSD = 45 %	
ISO 16000 parts -3, -6, -9, -11 Internal method numbers: 9810, 9811, 9812, 2808, 8400, 2616	HPLC/UV	4 CMR	< 1 µg/m ³		
Test parameters in the emission chamber					
Chamber volume, l	119	Temperature, °C	23±1	Relative humidity, %	50±5
Air change rate, 1/h	0.5	Loading ratio, m ² /m ³	1		
Test condition: Sample stayed in test chamber during the whole 28 days testing period.					
Sample preparation					
Edges and back were covered with aluminium foil.					

5 Results

5.1 Comparison with limit values of the French VOC regulation

	Concentration after 28 days $\mu\text{g}/\text{m}^3$	C	B	A	A+
TVOC	56	>2000	<2000	<1500	<1000
Formaldehyde	<3	>120	<120	<60	<10
Acetaldehyde	<3	>400	<400	<300	<200
Toluene	<2	>600	<600	<450	<300
Tetrachloroethylene	<2	>500	<500	<350	<250
Ethylbenzene	<2	>1500	<1500	<1000	<750
Xylene	<2	>400	<400	<300	<200
Styrene	<2	>500	<500	<350	<250
2-Butoxyethanol	<2	>2000	<2000	<1500	<1000
Trimethylbenzene	<2	>2000	<2000	<1500	<1000
1,4-Dichlorobenzene	<2	>120	<120	<90	<60
CMR		Maximum allowed concentration ($\mu\text{g}/\text{m}^3$)			
Benzene	< 1	<1			
Trichloroethylene	< 1	<1			
Dibutylphthalate (DBP) *	< 1	<1			
Diethylhexylphthalate (DEHP) *	< 1	<1			

< Means less than
> Means higher than

5.2 Emission Test after 28 days

	CAS No.	Retention time min	ID-Cat	Concentration $\mu\text{g}/\text{m}^3$	Emission rate $\mu\text{g}/(\text{m}^2\cdot\text{h})$	Toluene equivalent $\mu\text{g}/\text{m}^3$
TVOC (C₆-C₁₆)				56	28	56
VOC with NIK						
1-Ethoxy-2-propanol *	1569-02-4	3.98	2	2.6	1.3	2.6
2-Ethyl-1-hexanol	104-76-7	9.12	1	2.3	1.1	< 2
Not identified *	-	14.24	4	2.1	1.1	2.1
Butylhydroxytoluen BHT *	128-37-0	14.52	1	47	24	51
Total VVOC (< C₆)				< 2	< 1	< 2
n.d.	-	-	-	< 2	< 1	< 2
Total SVOC (> C₁₆)				< 2	< 1	< 2
n.d.	-	-	-	< 2	< 1	< 2

n.d. Not detected

< Means less than

* Not a part of our accreditation. See **Error! Reference source not found. Error! Reference source not found.**

Categories of Identity:

- 1: Identified and specifically calibrated
- 2: Identified by comparison with a mass spectrum obtained from library and supported by other information. Calibrated as toluene equivalent
- 3: Identified by comparison with a mass spectrum obtained from a library. Calibrated as toluene equivalent
- 4: Not identified, calibrated as toluene equivalent



Janne Rothmann Norup
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