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VOC Emissions Test report

L isolante K-Flex S.r.l

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Date 07/02/2012 Your ref.

1. Sample Information

Sample identification	K-Flex EC
Product type	Insulation
Batch no.	-
Production date	-
Date when sample was received	11/11/2011
Testing (start - end)	14/12/2011 - 11/01/2012

2. Resulting VOC Emissions Class Label

This recommendation is based on French regulation as published on 25 March 2011 (décret DEVL1101903D) and on 13 May 2011 (arrêté DEVL1104875A). For details please see www.eurofins.com/france-voc



3. Conclusion on CMR emissions

The tested product fulfills the requirements of the French regulation DEVP0908633A of 30 April 2009 and DEVP0910046A of 05 May. For details please see www.eurofins.com/france-voc.





4. Test Method

Method		Principle	Parameter		Detection limit	Uncertainty				
ISO 16000 parts -3, -6, -9, -11		GC/MS	VOC		5 μg/m³	22% (RSD)				
Internal method numbers: 9810, 9811, 9812, 2808, 8400		HPLC/UV	Volatile alde- hydes		5 µg/m³	Um = 2 x RSD= 45 %				
Test chamber parameter										
Chamber volume (L):	119	Temperature (C): 23		23	Relative humidity (%):		50			
Air change rate (per hour):	0.5	Loading ratio(m²/m³) 1		1						
Test condition: Sample stayed in test chamber during the whole 28 days testing period.										
Sample preparation										
Stainless steel frame										





5. Results

	Concentration after 28 days µg/m³	С	В	A	A+			
TVOC	94	>2000	<2000	<1500	<1000			
Formaldehyde	5.9	>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 compounds		Maximum allowed air concentration						
Benzene	<0.2	<1						
Trichloroethylene	<0.2	<1						
Dibutylphthalate (DBP) *	<0.2	<1						
Diethylhex- ylphthalate (DEHP) *	<0.5	<1						

Means less than

Thomas Neuhaus

Head of product emission test centre

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Means higher than

Not a part of our accreditation (EN ISO/IEC 17025:2005) by DANAK (no. 522))