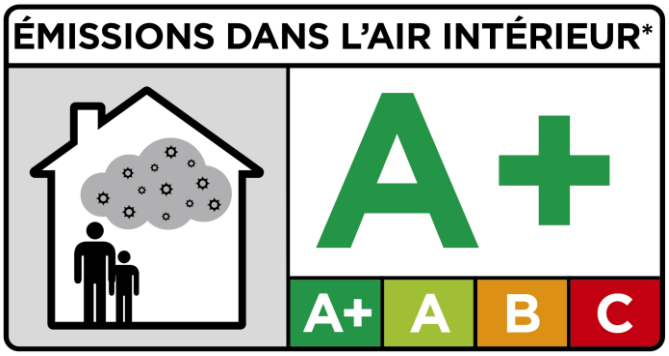
VOC Emission Test report

1. Sample information

Sample identification	R-KEM+, R-KEM+ S, R-KEM+ W, R-KEM II, R-KEM II-S, R-KEM II-W, CFS+: RM50, RM50-S, RM50-W R-KEM+ Grey, R-KEM+ Stone.
Product type	Polyester styrene free resin
Testing laboratory	*Environmental Protection and Wood Chemistry Department* of Wood Technology Institute
Report identification number	U-405-BOŚ/2013
Sample delivered	10.12.2013
Test start, duration	13.12.2013, 28 days

2. Resulting VOC Emission Class Label

Recommendation based on French regulation as published on 25th March 2011 (décret DEVL1101903D) and on 13th May 2011 (arête DEVL 1104875A).



3. Conclusion on CMR substances emission

Product fulfills the requirements of the French regulation published on 30th April 2009 (DEVP 0908633A) and DEVP 0910046A published on 28th May 2009.

4. Test method

Test was carried out in accordance with following ISO standards: 16000-6, -9, -11 using gas chromatography/mass spectroscopy as principle.

Chromatographic analysis conditions:

Chromatograph	Trace 2000 Thermoquest/Finnigan
Column: - diameter - film thickness - length	DB-624 MS 0,25 mm 1,4 µm 30 m
Temperature program	35°C (4 min) 5°C/min → 140°C (0 min) 12°C/min → 230°C (3 min)
Feeder	Thermal desorber – Master TD, 270°C
Carrier gas	Helium (100 kPa)
Detector	MS 220°C

Test chamber parameter:

Chamber volume	0,225 m^3	Temperature	23 ± 2°C	Relative humidity	50 ± 5%
Air change rate	0,5 h^{-1}	Loading ratio	0,007 m^2/m^3	Area specific air exchange rate	0,5 $m^3/m^2 \cdot h$

Sample dimensions: 30 × 27 × 5 mm; One sample in Test chamber.

5. Results

Compounds to be monitored to determine VOC emission class label:

Substance	**Concentration after 28 days [µg/m³]**	**C**	**B**	**A**	**A+**
Formaldehyde	No emission recorded	> 120	< 120	< 60	< 10
Acetaldehyde	No emission recorded	> 400	< 400	< 300	< 200
Toluene	No emission recorded	> 600	< 600	< 450	< 300
Tetrachloroethylene	No emission recorded	> 500	< 500	< 350	< 250
Xylene	No emission recorded	> 400	< 400	< 300	< 200
1,2,4-trimethylbenzene	No emission recorded	> 2000	< 2000	< 1500	< 1000
1,4-dichlorobenzene	No emission recorded	> 120	< 120	< 90	< 60
Ethylbenzene	No emission recorded	> 1500	< 1500	< 1000	< 750
2-butoxyethanol	No emission recorded	> 2000	< 2000	< 1500	< 1000
Styrene	No emission recorded	> 500	< 500	< 350	< 250
TVOC		> 2000	< 2000	< 1500	< 1000
CMR compounds		< 1			
Benzene	No emission recorded				
Dibuthylphthalate (DBP)	No emission recorded				
Diethylhexylphthalate (DEHP)	No emission recorded				