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Precisely Right.

Report No.:	**0244142787a 001**	Page 1 of 5
Client:	**Dalian Jiabao Science &Techonology Development Co., Ltd**	
	14F, YifangBldg, No.9 Yan'an Rd	
Identification/ Model No(s):	SPC FLOORING	
Sample Receiving date:	2019-05-16	
Testing Period:	2019-05-16 - 2019-06-05	

Test specification:

Customer's requirement:
1. Volatile Organic Compounds (VOC)

Test result:

Please refer to page 3-4

For and on behalf of
TÜV Rheinland (Shanghai) Co., Ltd.

Sven Posselt

2019-06-06 Sven Posselt / Department Manager

Date *Name/Position*

Test result is drawn according to the kind and extent of tests performed.
This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

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Material list:

Item: SPC FLOORING

Material No.	Material	Color	Location
M001	Synthetic material	grey	Refer to photo

Test method(s)

ISO 16000-3:2011	Indoor air – Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air – Active sampling method
ISO 16000-6:2004	Indoor air – Part 6: Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA® sorbent, thermal desorption and gas chromatography using MS/FID
ISO 16000-9:2006	Indoor air – Part 9: Determination of the emission of volatile organic compounds from building products and furnishing – Emission test chamber method

Test chamber conditions

Test chamber:	Corresponding to ISO 16000-9
Test chamber volume:	1 m^3
Temperature of supply air:	23 °C ± 2 °C
Relative humidity of supply air:	50 % ± 5 %
Exchange of air:	1.25 h^{-1} ± 0.1 h^{-1}
Loading factor:	0.4 m^2/m^3
Loading conditions:	(*For Wooden Flooring:*) From x samples received in to the laboratory, one test specimen has been prepared in order to reconstruct a surface of infinite size scenario. The underside and open edges of the panels have been sealed with aluminium foil. Only the upper surface is exposed to the air of the emission test chamber. The total emitting surface is equal to 0.4 m^2 (*For PVC flooring:*) A test specimen with an emitting surface of 0,4 m^2 has been prepared keeping a ratio between unsealed edges and surface of 1.2 m/m^2. The backsides of the panels have been sealed with aluminium tape.
Inflow velocity:	0.3 m/s

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1. Labelling of construction and decoration products with their volatile pollutant emissions (VOC and formaldehyde) – final classification

The emission of the substances are classified according to a scale with 4 classes ranging from A+ to C, A+ indicating a very low emission level and C indicating a high level of emission. The emission level is indicated by the exposure concentration in µg/m³. Result of the tested sample after 7 days is shown below in table 1.

Table 1. Result

Parameter	CAS no	Limit values of emission classes (µg/m³)				Concentration After 7 days (µg/m³)	Emission Class
		A+	A	B	C		
Formaldehyde	50-00-0	< 10	< 60	< 120	> 120	2	A+
Acetaldehyde	75-07-0	< 200	< 300	< 400	> 400	n.d.	A+
Toluene	108-88-3	< 300	< 450	< 600	> 600	n.d.	A+
Tetrachlorethylene	127-18-4	< 250	< 350	< 500	> 500	n.d.	A+
Xylene	1330-20-7	< 200	< 300	< 400	> 400	n.d.	A+
1,2,4-Trimethylbenzene	95-63-6	< 1000	< 1500	< 2.000	> 2000	n.d.	A+
1,4-Dichlorbenzene	106-46-7	< 60	< 90	< 120	> 120	n.d.	A+
Ethylbenzene	100-41-4	< 750	< 1000	< 1500	> 1500	n.d.	A+
2-Butoxyethanol	111-76-2	< 1000	< 1500	< 2000	> 2000	n.d.	A+
Styrene	100-42-5	< 250	< 350	< 500	> 500	n.d.	A+
Total VOC (TVOC) (C_6 – C_{16})	--	< 1000	< 1500	< 2000	> 2000	24	A+

2. Legal requirements relating to the emission of CMR substances

Only the concentrations of the following CMR substances have been qualified:

Parameter	CAS no	Legal limit (µg/m^3)	Concentration (µg/m^3)
Trichloroethylene	79-01-6	< 1	n.d.
Benzene	71-43-2	< 1	n.d.
Bis phthalate (2-ethylhexyl) (DEHP)	117-81-7	< 1	n.d.
Dibutyl phthalate (DBP)	84-74-2	< 1	n.d.

Abbreviation:

VOC = Volatile Organic Compound
TVOC = Total Volatile Organic Compound
n.d. = not detected
CMR = Carcinogenic; Mutagenic; Reprotoxic
µg/m^3 =micrograms per cubic meter
n.d. = not detected (< 1 µg/m^3)

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Sample Photo(s)

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