

No.: XMCCM140300164-2.2

Date: Apr.09, 2014

Page: 1 of 5

MANUFACTURER SUPPLIED TEST REPORT LOCAL PRODUCT IDENTIFICATION: TITAN CLICKLOC

The following sample(s) was/ were submitted and identified on behalf of the client as:

Sample Name

Vinyl Floor

Material

PVC

SGS Ref. No.

SDHG1403003351FB

Date of Receipt

: Mar.21, 2014

Test Period

Mar.21, 2014 to Apr. 04, 2014

Test Result Summary

No.	Test(s) Requested	Result(s)
1	EN 13501-1:2007+A1:2009(E)	Classification: B _{ff} —s1
For f	urther details, please refer to the following page(s)	

******* To be continued******

Signed for and on behalf of SGS-CSTC Ltd.

Civi Huang

Xiamen Materials Lab Technical Supervisor

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-an

No.31 Xianghong Road, Xiang'An Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 中国•福建•厦门•火炬(翔安)产业区翔虹路31号

邮编:361101 t (86-592) 5765857

f (86-592) 5765380 www.sgsgroup.com.cn f (86-592) 5765380 e sgs.china@sgs.com



No.: XMCCM140300164-2.2

Date: Apr.09, 2014

Page: 2 of 5

I. Test Conducted

This test is conducted as per EN 13501-1:2007+A1:2009(E) Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests, Class B_{fl}. And the test methods as following:

- 1. EN ISO 9239-1:2010 Reaction to fire tests for floorings—Part 1: Determination of the burning behaviour using a radiant heat source.
- 2. EN ISO 11925-2:2010 Reaction to fire tests Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test.

II. Details of classified product

Description: The details of the tested specimen given below have been prepared from information provided by the sponsor of the test. All values quoted are nominal, unless tolerances are given.

Name	VINYL FLOOR	
Color	Light Grey	
Area density:	9.7 kg/m ²	
Thickness (mm)	About 5 mm	

III. Test Result

1. EN ISO 9239-1:2002 Reaction to fire tests for floorings - Part 1: Determination of the burning behaviour using a radiant heat source

Specimen No.	Furthest extent of spread of flame(mm)	Critical Heat Flux (CHF or HF-30) kW/m ²		
1	100	≥11	Transitory flaming and extinguished before 30 minutes	
2	90	≥11	Transitory flaming and extinguished before 30 minutes	
3	100	≥11	Transitory flaming and extinguished before 30 minutes	

The mean value for the critical heat flux (CHF and/or HF-30) from the three specimens from the same orientation: ≥11 kW/m2

Smoking measurement

Integrated smoke value: 2.32 %×min

******* To be continued******

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions

icity of testing /inspection report & certificate, please contact us at telephone; (86-755)83071443, or email; CN.Doccheck@sgs.com



No.: XMCCM140300164-2.2

Date: Apr.09, 2014

Page: 3 of 5

2. EN ISO 11925-2: 2002 Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test

Ignition Position	Face Ignition and Edge ignition	
Flame Application Time	15s	

	Specimen No. & Result					
Expression of results	Face Ignition			Edge ignition		
	1	2	3	4	5	6
Whether ignition occurs (Yes/No)	No	No	No	Yes	Yes	Yes
Whether the flame tip reaches 150 mm above the flame application point, and the time at which this occurs (No/Time)	No	No	No	No	No	No
Whether ignition of the filter paper occurs (Yes/No)	No	No	No	No	No	No

IV. Classification and direct field of application

This classification has been carried out in accordance with EN 13501-1:2007+A1:2009.

Classification

The product, "VINYL FLOOR", classification is as following,

Fire behaviour		Smoke produ	
B _{fl}	_	S	1

Reaction to fire classification: B_{ff}-s1

The classes with their corresponding fire performance are given in annex A.

Reaction to fire classification is based on the 7-step scale of A1_{fl} to F_{fl}, where A1_{fl} is good and F_{fl} is bad.

Statement:

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

****** To be continued******

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-an

No.31 Xianghong Road, Xiang'An Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 f (86-592) 5765380 www.sgsgroup.com.cn 中国•福建•厦门•火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857 e sgs.china@sgs.com



No.: XMCCM140300164-2.2

Date: Apr.09, 2014

Page: 4 of 5

Warning:

This classification report does not represent type approval or certification of the product.

The test laboratory has, therefore, play no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability.

Annex A Classes of reaction to fire performance for floorings

Class	Test method(s)	Classification criteria	Additional classification		
A1 _{fl}	EN ISO 1182 a	$\Delta T \le 30$ °C; and $\Delta m \le 50$ %; and $t_i = 0$ (i.e. no sustained flaming)	-		
	EN ISO 1716	$PCS \le 2.0 \text{ MJ/kg}^a$ and $PCS \le 2.0 \text{ MJ/kg}^b$ and $PCS \le 1.4 \text{ MJ/m}^2$ and $PCS \le 2.0 \text{ MJ/kg}^d$	-		
A2 _{fl}	EN ISO 1182 ^a or	$\Delta T \le 50$ °C and $\Delta m \le 50$ % and $t_i \le 20$ s	-		
	EN ISO 1716 and	$PCS \le 3.0 \text{ MJ/kg}^{a}$ and $PCS \le 4.0 \text{ MJ/m}^{2b}$ and $PCS \le 4.0 \text{ MJ/m}^{2c}$ and $PCS \le 3.0 \text{ MJ/kg}^{d}$			
	EN ISO 9239-1 e	Critical flux ¹ ≥ 8,0 kW/m ²	Smoke production ⁹		
Bf	EN ISO 9239-1 ^e and	Critical flux [†] ≥ 8,0 kW/m ²	Smoke production ^g		
	EN ISO 11925-2 h: Exposure = 15 s	Fs ≤ 150 mm within 20 s	-		
C _{fl}	EN ISO 9239-1 ^e and	Critical flux ¹ ≥ 4,5 kW/m ²	Smoke production ⁹		
	EN ISO 11925-2 h: Exposure = 15 s	Fs ≤ 150 mm within 20 s			
D _{fl}	EN ISO 9239-1 ^e and	Critical flux 1 ≥ 3,0 kW/m ²	Smoke production ^g		
	EN ISO 11925-2 h: Exposure = 15 s	Fs≤150mm within 20 s			
E _{fl}	EN ISO 11925-2 h: Exposure = 15 s	Fs ≤ 150 mm within 20 s			
Ff	No performance determined				

****** To be continued******

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-an

icity of testing /inspection report & certificate, please contact us at telephone: (86-755)63071443, or email: CN.Doccheck@sgs.com

SGS-CST Standards Technical Services Co., Ltd.
Tianen Brack Technical Services Co., Ltd.
Tianen Brack Technical Services Co., Ltd.



No.: XMCCM140300164-2.2

Date: Apr.09, 2014

Page: 5 of 5

^a For homogeneous products and substantial components of non-homogeneous products.

^b For any external non-substantial component of non-homogeneous products.

^c For any internal non-substantial component of non-homogeneous products.

d For the product as a whole.

e Test duration = 30 min.

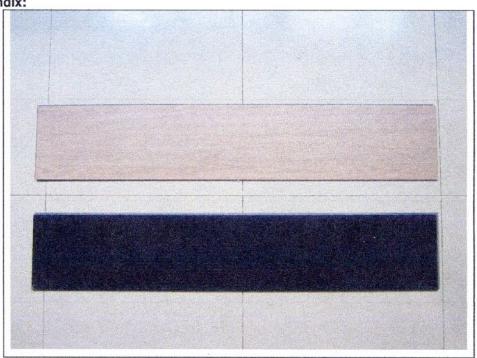
^f Critical flux is defined as the radiant flux at which the flame extinguishes or the radiant flux after a test period of 30 min, whichever is the lower (i.e. the flux corresponding with the furthest extent of spread of flame).

^g **s1** = Smoke ≤ 750 % minutes;

s2 = not s1.

^h Under conditions of surface flame attack and, if appropriate to the end use application of the product, edge flame attack

Photo Appendix:



SGS authenticate the photo(s) on original report only
*******End of report*******

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions

SSS-CST Chandards Technical Services Co., Ltd. Vising Grant Peris Satist Contents Controlled March Landon

0. Ltd. No.31 Xianghong Road, Xiang'An Torch Industrial Zone, Xiamen, Fujian Province, China. 361101 t (86-592) 5765857 中国•福建•厦门•火炬(翔安)产业区翔虹路31号 邮编:361101 t (86-592) 5765857

f (86-592) 5765390 www.sasaroup.com.cn