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CUSTOMER NAME: JIANGSU BEIER DECORATION MATERIALS CO., LTD ADDRESS: NO.999 CHAOYANG ROAD, HENGLIN TOWN, CHANGZHOU, 213101,JIANGSU, CHINA

Sample Name	:	LAMINATE FLOORING (BLACK FOREST RANGE)
Material	:	Laminate
Spec.	:	2200*239*12mm

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

Test Required	:	Selected test(s) as requested by client.
SGS Ref. No.	:	GZIN1911063446MR
Date of Receipt	:	Nov.25, 2019
Testing Start Date	:	Nov.25, 2019
Testing End Date	:	Dec.02, 2019
Test result(s)	:	For further details, please refer to the following page(s) (Unless otherwise stated the results shown in this test report refer only to the sample(s) tested) ******** To be continued******

Signed for SGS-CSTC Standards Technical Services Co., Ltd. XM Branch

Civi Huang

Authorized Signatory



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Summary of Results:

No.	Test Item	Test Method	Result
1	Fire classification for burning behavior of flooring material	EN 13501-1:2018 Clause 9 & EN ISO 9239-1:2010 & EN ISO 11925-2:2010.Cor.1:2011	B _{fl} −s1

Original Sample Photo:



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



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Test item: Fire Classification for Burning Behavior of Flooring Material

Sample Description: Floor

Test Method: EN 13501-1:2018 Clause 9 & EN ISO 9239-1:2010 & EN ISO 11925-2:2010.Cor.1:2011 Test result:

I . EN ISO 9239-1:2010 Reaction to fire tests for floorings-Part 1: Determination of the burning behaviour

using a radiant heat source

Specimen: 1050mm × 230mm × 12.2 mm

Flame application time: 10min

Mounting and fixing: Calcium silicate board, with its density about 1016kg/m³, thickness about 21.4mm, is as the substrate. The specimens were fixed mechanically to the substrate.

Specimen Furthest extent of		Critical heat flux	Integrated smoke		
No.	spread of flame, mm	(HF-30), kW/m ²	value , %⋅min		
1	270	7.95	73.31		
2	200	9.35	50.17		
3	220	8.98	45.99		
Average	230	8.8	56.5		

Note:

- 1. Test specimens were cut from the sample.
- 2. Specimens which are extinguished by the operator at 30 min do not have a CHF value, but only a HF-30 value.
- 3. Observations of the burning characteristics: charring.

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



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II. EN ISO 11925-2: 2010, Cor.1: 2011 Reaction to fire tests-Ignitability of building products subjected to

direct impingement of flame-Part 2: Single-flame source test.

Specimen: 250mm × 90mm × 12.2 mm

Flame application time: 15s

Exposure conditions	Edge exposure			Surface exposure		
Specimen No.	1	2	3	1	2	3
Whether ignition occurs	Yes	Yes	Yes	No	No	No
Whether the flame tip reaches 150 mm above the flame application point within 20s	No	No	No	No	No	No
Whether ignition of the filter paper occurs	No	No	No	No	No	No

Note:

1. Test specimens were cut from the sample.

2. Observations of the burning characteristics: Charring.

Conclusion:

According to the test result and classification criteria (See table 1), the submitted sample satisfies Class B_{fl} Reaction to fire classification: B_{fl} -s1

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*******



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Table 1. Classes of reaction to fire performance for floorings

Class	Test method(s)	Classification criteria	Additional classification
A1 _{fl}	EN ISO 1182 ^a	$\Delta T \leq 30 $ °C; and	-
	and	∆ <i>m</i> ≤ 50 %; and	
		$t_{\rm f} = 0$ (i.e. no sustained flaming)	
	EN ISO 1716	$PCS \le 2,0 \text{ MJ/kg}^{a} \text{ and}$	-
		$PCS \le 2,0 \text{ MJ/kg}^{b}$ and	
		$PCS \leq 1,4 \text{ MJ/m}^2$ c and	
		<i>PCS</i> ≤ 2,0 MJ/kg ^d	
A2 fl	EN ISO 1182 ª	$\Delta T \leq 50 ^{\circ} \mathbb{C}$ and	-
	or	$\Delta m \leq 50$ % and	
		<i>t</i> ⊧ ≤ 20 s	
	EN ISO 1716	$PCS \leq 3,0 \text{ MJ/kg}^{a}$ and	-
	and	$PCS \leq 4,0 \text{ MJ/m}^{2}$ and	
		$PCS \leq 4,0 \text{ MJ/m}^{2} \text{ c}$ and	
		$PCS \leq 3,0 \text{ MJ/kg}^{\circ}$.
	EN ISO 9239-1 ^e	Critical flux $\uparrow \ge 8,0 \text{ kW/m}^2$	Smoke production ^g
B fl	EN ISO 9239-1 ^e	Critical flux $^{\dagger} \ge 8,0 \text{ kW/m}^2$	Smoke production ^g
	and		
	EN ISO 11925-2 ":	$Fs \le 150 \text{ mm}$ within 20 s	-
	Exposure = 15 s		
C fl	EN ISO 9239-1 °	Critical flux $f \ge 4,5 \text{ kW/m}^2$	Smoke production ^g
	and		
	EN ISO 11925-2 h:	<i>F</i> s ≤ 150 mm within 20 s	-
	Exposure = 15 s		
		$Critical flux f > 2.0 Id N/m^2$	Cracke production (
	EN 150 9239-1	Critical flux $^{\circ} \ge 3.0 \text{ kVV/m}^{-1}$	Smoke production ^a
Dfl		$F_{0} < 150 \text{ mm}$ within 20 c	
0	$EN 150 + 1925-2^{\circ}$	$FS \leq 150$ mm within 20 S	-
E.	EN ISO 11925-2 h:	<i>F</i> s ≤ 150 mm within 20 s	-
⊏fl	Exposure = 15 s		
Е.	EN ISO 11925-2 h:	Fs > 150 mm within 20 s	-
r − fl	Exposure = 15 s		

^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 $s1 = Smoke \le 750 \%$ 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

Remark: The above tests were carried out by SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch.



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Test Photo:



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



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