



中国认可  
国际互认  
检测  
TESTING  
CNAS L6069



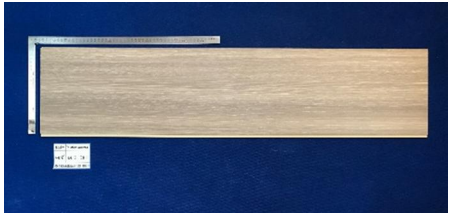
# Test Report

**Report No.** TC.24.01.000258

**Date of Issue** 02/21/2024

**Applicant:** CHANGZHOU DACHUAN ENVIRONMENTAL PROTECTION TECHNOLOGY DEVELOPMENT CO., LTD.  
**Applicant address:** NO.2, CHUANGSHENG ROAD, INDUSTRIAL CONCERNTRATION AREA, LUOYANG TOWN, WUJIN DISTRICT, CHANGZHOU, JIANGSU CHINA

**Description of the test subject:**

Sample	Description	Photo
001	Sample Description: SWF	

**Receipt Date of Sample:** 01/15/2024

**Date of Testing:** From 01/15/2024 to 01/22/2024

**Sample Submitted:** The sample(s) was (were) submitted by applicant and identified.

## Conclusion:

Test Items			Conclusion
No.	Items	Standard	
1	Burning behaviour	EN 13501-1:2018	A2 <sub>fl</sub> - s1

**Remark:** This Report is the English Version of Test Report No. TC.24.01.000142.

Note: (1) The TÜV SÜD SW Rail Transportation Technology (Jiangsu) Co., Ltd. General Terms & Conditions applied, for full content please visit <https://www.tuvsud.cn/zh-cn/terms-and-conditions>. (2) The results relate only to the sample(s) as received. (3) The test report shall not be reproduced except in full without the written approval of the company.

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## Test Results

### EN 13501-1:2018 Fire classification of construction products and building elements- Part 1: Classification using data from reaction to fire tests

#### 1. EN ISO 9239-1:2010 Reaction to fire tests for floorings —Part 1: Determination of the burning behavior using a radiant heat source

##### 1.1 Sample details:

Specimen size	1050mm×230mm
Thickness	About 7.8 mm

Precondition	Temperature (°C)	Humidity (%)	Duration
	23±2	50±5	Adjust to constant weight

##### 1.2 Test results:

Specimen	Direction 2	Direction 1			Average
	4	1	2	3	
Maximum flame front distance(cm)	0	0	0	0	0
Critical radiant flux at extinguishment-CHF(kW/m <sup>2</sup> )	≥11.0	≥11.0	≥11.0	≥11.0	≥11.0
HF-10(kW/m <sup>2</sup> )	--	--	--	--	--
HF-20(kW/m <sup>2</sup> )	--	--	--	--	--
HF-30(kW/m <sup>2</sup> )	--	--	--	--	--
Maximum light attenuation (%)	3.6	3.5	3.1	3.1	3.2
Integrated smoke value (% x min)	12.43	11.92	10.47	10.88	11.09
Transitory flaming(Yes/No)	No	No	No	No	--
Melting(Yes/No)	No	No	No	No	--
Blistering(Yes/No)	No	No	No	No	--
Glowing combustion(Yes/No)	No	No	No	No	--
Penetration(Yes/No)	No	No	No	No	--

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**1.2 EN ISO 1716:2010 Reaction to fire tests for products —Determination of the gross heat of combustion (calorific value).**

**1.2.1 Sample details:**

Conditioning	Temperature (°C)	Humidity(%)	Duration(h)
	23±2	50±5	≥48

**1.2.2 Test results:**

Result	1	2	3
m,(g)	1.0014	1.0009	1.0021
Q <sub>PCS</sub> ,( MJ/kg)	0	0	0
AVG Q <sub>PCS</sub> ,( MJ/kg)	0		

**Remark:**

m– Mass of the test specimen,  
Q<sub>PCS</sub> – Is the gross heat of combustion.

**EN 13501-1:2018 table 2 - classification:**

Classification	Test method	Classification criteria
A2 <sub>fl</sub>	EN ISO 1716 and	PCS ≤ 3.0 MJ/kg <sup>a</sup> and PCS ≤ 4.0 MJ/m <sup>2</sup> <sup>b</sup> and PCS ≤ 4.0 MJ/m <sup>2</sup> <sup>c</sup> and PCS ≤ 3.0 MJ/kg <sup>d</sup>
	EN ISO 9239-1	Critical flux ≥ 8.0 kW/m <sup>2</sup>
Additional classification	Smoke	s1 Smoke ≤ 750 %×minutes
		s2 Not s1

<sup>a</sup> For homogeneous products and substantial components of non-homogeneous products.

<sup>b</sup> For any external non-substantial component of non-homogeneous products.

<sup>c</sup> For any internal non-substantial component of non-homogeneous products.

<sup>d</sup> For the product as a whole.

**Conclusion:**

Test standard	Record	Conclusion
EN ISO 1716	PCS= 0 MJ/kg	A2 <sub>fl</sub> - s1
EN ISO 9239-1	Critical flux: ≥11.0 kW/m <sup>2</sup> Smoke: 11.09(% × min)	

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**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 smoke and toxicity hazard of the product in use. Test results are just for internal reference.

TÜV SÜD SW Rail Transportation Technology (Jiangsu) Co., Ltd.

Drafted by:

Approved by:

Jinqiang Zhou

Wayne Wang

-End of Report-

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