



TEST REPORT

REPORT NO.: JAT24041802821CPR

Category of Directive: Construction products Regulation (EU) No 305/2011SYTEM4

Name of Equipment: Wood Plastic Composite

Test Model: WPC

Applicant: FOSHAN MEXYTECH CO.,LIMITED

Manufacturer: FOSHAN MEXYTECH CO.,LIMITED



Test report

EN 14041:2018 Clause 4.1 & EN 13501-1:2018, EN 14041:2018 Clause 4.3 & EN ISO 717-1:2020, EN 14041:2018 Clause 4.5 & EN 13893:2002, EN 14041:2018 Clause 4.7 & EN 12667:2001, SVHCs; EN 660-2:1999+A1:2003 & EN 649:2011

Name and address of the testing laboratory	Dongguan Jun'an Testing & Certification Co., Ltd.	
Name and address of the applicant	FOSHAN MEXYTECH CO., LIMITED Room 2-8, Building B, Torch Innovation Park, Jihua 2 Road, Chancheng District Foshan City, Guangdong Province, China	
Name and address of the manufacturer	FOSHAN MEXYTECH CO., LIMITED Room 2-8, Building B, Torch Innovation Park, Jihua 2 Road, Chancheng District Foshan City, Guangdong Province, China	
Product Name	Wood Plastic Composite	
Model/type reference	WPC	
Application model	WPC	
Tested according to	EN 14041:2018 Clause 4.1 & EN 13501-1:2018, EN 14041:2018 Clause 4.3 & EN ISO 717-1:2020, EN 14041:2018 Clause 4.5 & EN 13893:2002, EN 14041:2018 Clause 4.7 & EN 12667:2001, SVHCs; EN 660-2:1999+A1:2003 & EN 649:2011	
Test report no.	JAT24041802821CPR	
Work carried out by	Tanac	Signature
	Director	
Work verified by	Tim You	Signature
	Manager	





Testing Start Date	2024-04-14
Testing End Date:	2024-04-24
This test report consists of: 1. EN 14041:2018 Clause 4.1 & EN 13501-1:2018, EN 14041:2018 Clause 4.3 & EN ISO 717-1:2020, EN 14041:2018 Clause 4.5 & EN 13893:2002, EN 14041:2018 Clause 4.7 & EN 12667:2001, SVHCs; EN 660-2:1999+A1:2003 & EN 649:2011 2. Test Record	
General information: The test results presented in this report relate only to the object tested and information given from applicant or manufacturer. Test case verdicts: Pass = Pass, Fail = Fail, N.A. = Not applicable. Placed in the column marked “Verdict”. This is a Computer generated Test Report. × Information written in “Italic” or “Italic and bold” font style is written by project Engineer during testing. All other information in “Regular” or “Regular and bold” font style is a part of this “Test Report Form”.	

**Summary of test result(s): (Average value)****Sample Description:**

Wood Plastic Composite, see the photos;

No.	Test item(s)	Test method(s)	Test result(s)
1	Reaction to fire	EN 14041:2018 Clause 4.1 & EN 13501-1:2018	Classification: Bfl-s1
2	Formaldehyde emission	EN 14041:2018 Clause 4.3 & EN ISO 717-1:2020	ND Class E1
3	Slip resistance	EN 14041:2018 Clause 4.5& EN 13893:2002	Dynamic coefficient of friction: X Direction: 0.67 Y Direction: 0.61 Technical class DS
4	Thermal conductivity	EN 14041:2018 Clause 4.7& EN12667:2001	0.098W/(m K)
5	SVHCs in Articles and Packaging	SVHCs EN660-2:1999+A1:2003&EN649:2011	ND

Note:

1. All test specimens were cut from the samples, see the photographs.
2. ND = Not Detected (<MDL)
3. Reaction to fire was carried out by xinmiao Jiayi(hangzhou)Testing&Certification Centre Branch.
4. Formaldehyde emission was carried out by xinmiao Jiayi(hangzhou)Testing&Certification Centre
5. Thermal conductivity was carried out by xinmiao Jiayi(hangzhou)Testing&Certification Centre
6. Slip resistance and SVHCS was carried out by xinmiao Jiayi(hangzhou)Testing&Certification Centre



1. Reaction to fire

Test Method:

EN 14041:2018 EN 13501-1:2018

Test Conducted:

This test is conducted as per EN 13501-1:2018 Fire classification of construction products and building elements-Part 1: Classification using data from reaction to fire tests. And the test methods as following:

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

1.2 EN ISO 11925-2:2010+AC:2011 Reaction to fire tests-Ignitability of building products subjected to direct impingement of flame-Part 2: Single-flame source test.

Mounting and fixing (For EN ISO 9239-1:2010):

Fibre cement board, with its density about 1800kg/m³, thickness about 8mm, is as the substrate. The specimens were fixed mechanically to the substrate.

**Test Results:**

Test method	Parameter	Number of tests	Results
EN ISO 9239-1:2010	The mean value for the critical heat flux (CHF and/or HF-30) from the same orientation	3	$\geq 11 \text{ kW/m}^2$
	Smoking measurement Integrated smoke value		79.1 % $\times$ min
	Comments and Observation		Charring
EN ISO 11925-2:2010+AC:2011 Exposure = 15 s	$F_s \leq 150 \text{ mm}$ within 20 s	12	Yes

Remark:

- 1). Specimens that do not ignite or which spread flame less than 110 mm have a critical heat flux $\geq 11 \text{ kW/m}^2$
- 2). Above value is the mean value for the critical flux (CHF and/or HF-30) from the three same orientation specimens.

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



This classification has been carried out in accordance with **EN 13501-1:2018**.

Fire behaviour		Smoke production	
Bfl	—	s	1

Remark:

The classes with their corresponding fire performance are given in Table 2.

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.

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

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

**Table 2-Classes of reaction to fire performance for floorings**

Class	Test method(s)	Classification criteria	Additional classification
A1fl	EN ISO 1182 a and	$\Delta T \leq 30\text{ }^{\circ}\text{C}$; and $\Delta m \leq 50\%$; and $t_f = 0$ (i.e. no sustained flaming)	-
	EN ISO 1716	$PCS \leq 2,0\text{ MJ/kg a}$ and $PCS \leq 2,0\text{ MJ/kg b}$ and $PCS \leq 1,4\text{ MJ/m}^2\text{ c}$ and $PCS \leq 2,0\text{ MJ/kg d}$	-
A2 fl	EN ISO 1182 a or	$\Delta T \leq 50\text{ }^{\circ}\text{C}$ and $\Delta m \leq 50\%$ and $t_f \leq 20\text{ s}$	-
	EN ISO 1716	$PCS \leq 3,0\text{ MJ/kg a}$ and $PCS \leq 4,0\text{ MJ/m}^2\text{ b}$ and $PCS \leq 4,0\text{ MJ/m}^2\text{ c}$ and $PCS \leq 3,0\text{ MJ/kg d}$	-
	EN ISO 9239-1 e	Critical flux $f \geq 8,0\text{ kW/m}^2$	Smoke production g
B fl	EN ISO 9239-1 e	Critical flux $f \geq 8,0\text{ kW/m}^2$	Smoke production g
	EN ISO 11925-2 h: Exposure = 15 s	$F_s \leq 150\text{ mm}$ within 20 s	-
C fl	EN ISO 9239-1 e and	Critical flux $f \geq 4,5\text{ kW/m}^2$	Smoke production g
	EN ISO 11925-2 h: Exposure = 15 s	$F_s \leq 150\text{ mm}$ within 20 s	
D fl	EN ISO 9239-1 e and	Critical flux $f \geq 3,0\text{ kW/m}^2$	Smoke production g
	EN ISO 11925-2 h: Exposure = 15 s	$F_s \leq 150\text{ mm}$ within 20 s	
E fl	EN ISO 11925-2 h: Exposure = 15 s	$F_s \leq 150\text{ mm}$ within 20 s	
F fl	No performance determined		



- ^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 $\leq$ 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

SAMPLE INFORMATION AND PICTURES

Thickness: About 4.2mm

Mass per unit area: About 8.35kg/m²

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



2. Formaldehyde emission

Test Method:

EN 14041:2018 Clause 4.3 and EN ISO 717-1:2020

Test condition:

Thickness: About 4.2mm Analysis

was performed by GGC_T

Test Result:

Test Item	Unit	MDL	Result
Formaldehyde Emission (In air)	mg/m ³	0.005	ND

Note:

- 1.ND=Not Detected (<MDL)
- 2.MDL=Method Detection Limit
- 3.mg/m³= milligram per cubic meter;
- 4.Reference Limit: EN 14041:2018 Formaldehyde class E1: ≤0.124 mg/m³ Formaldehyde class E2: >0.124 mg/m³

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



Slip resistance

Test Method:

EN 14041:2018 Clause 4.5 and EN 13893:2002

Test condition:

Specimen thickness: About 4.2mm

Testing speed: 0.20m/s

Test Result:

Requirement in EN 14041:2018	Result	Conclusion
The floor covering intended to be used in dry and non-contaminated conditions shall have a dynamic coefficient of friction of ≥ 0.30 when tested ex-factory under dry conditions in accordance with EN 13893 and shall be declared as technical class DS.	Dynamic coefficient of friction: X Direction: 0.67 Y Direction: 0.61	Technical class DS

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



3. Thermal conductivity

Test Method:

EN 14041:2018 Clause 4.7& EN12667:2001

Test condition:

Sample:950mm×150mm×4.2mm,

1pcs Density: About 2110kg/m³

average temperature: 30℃

Temperature difference: 5℃

Laboratory environmental conditions: 23±2℃, 50±5%RH

Test Result:

Requirement in EN 14041:2018& EN12667:2001	Result
When floor coverings are to be installed over an under-floor heating system the design thermal conductivity values given in EN 12524 shall be assumed for design calculation purposes. Alternatively, the thermal resistance measured in accordance with EN 12667 may be used	0.098W/(m·K)

the photo(s) on original report only

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



5.SVHCs EN660-2:1999+A1:2003&EN649:2011 in Articles and Packaging

Test Method:

EN SVHCs EN660-2:1999+A1:2003&EN649:2011 in Articles and Packaging

Test condition:

Specimen thickness:About 4.2mm

Test Requested

- 1)As specified by applicant, based on the list published by European chemicals agency (ECHA) on 2008 October 28 for public consultation regarding regulation (EC) No 1907/2006 concerning the REACH, to determine the fifteen (15) Substances of Very High Concern (SVHC) content in the submitted sample.
- 2) As specified by applicant, based on the list published by European chemicals agency (ECHA) on 2010 January 13 for public consultation regarding regulation (EC) No 1907/2006 concerning the REACH, to determine the fifteen (15) Substances of Very High Concern (SVHC) content in the submitted sample.
- 3) As specified by applicant, based on the list published by European chemicals agency (ECHA) on 2010 June 18 for public consultation regarding regulation (EC) No 1907/2006 concerning the REACH, to determine the eight (8) Substances of Very High Concern (SVHC) content in the submitted sample.
- 4) As specified by applicant, based on the list of the fourth published by European chemicals agency (ECHA) on December 2010 for public consultation regarding regulation (EC) No 1907/2006 concerning the REACH, to determine the eight (8) Substances of Very High Concern (SVHC) content in the submitted sample.

Test Method and Test Instrument

- 5) Test Method: With refer to US EPA3051A, US EPA3052, US EPA8270D, ISO 17353 2004- 9 Test Instrument: ICP/OES, GC/MS, IC.
- 6) EN14372, US EPA3550C, ZLS standard ZEK 01.2-08 and In-House method.Analyzed by ICP-AES and GC/MS.
- 7) Test Method: With refer to US EPA3051A, US EPA3052, US EPA8270D.Test Instrument: ICP/OES, GC/MS.
- 8) TestMethod: With refer to US EPA3051A, US EPA3052, US EPA8270D.Test Instrument: ICP/OES, GC/MS.



Conclusion

According to the specified scope and analytical technique, concentrations of all SVHC are <0.1% in the submitted sample(s)

Results

- The fifteen (15) Substances of Very High Concern (SVHC) content

• ***** To be continued*****



Substance Name	CAS No.	Unit	MQL	Result	Classification
				No.1△	
Anthracene	120-12-7	%	0.005	N.D.	PBT
4,4'-Diaminodiphenylmethane	101-77-9	%	0.005	N.D.	CMR
Dibutyl phthalate(DBP)	84-74-2	%	0.005	N.D.	CMR
Benzyl butyl phthalate (BBP)	85-68-7	%	0.005	N.D.	CMR
Cobalt dichloride*	7646-79-9	%	0.05	N.D.	CMR
Diarsenic pentaoxide*	1303-28-2	%	0.05	N.D.	CMR
Diarsenic trioxide*	1327-53-3	%	0.05	N.D.	CMR
Sodium dichromate, dehydrate#	7789-12-0, 10588-01-9	%	0.05	N.D.	CMR
5-tert-butyl-2,4,6-trinitro- m-xylene (musk)	81-15-2	%	0.005	N.D.	vPvB
Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	%	0.005	N.D.	CMR
Hexabromocyclododecane (HBCDD)	25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6 134237-52-8)	%	0.005	N.D.	PBT
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	%	0.005	N.D.	PBT
Bis(tributyltin)oxide	56-35-9	%	0.005	N.D.	PBT



Lead hydrogen arsenate*	7784-40-9	%	0.05	N.D.	CMR
Triethyl arsenate*	15606-95-8	%	0.05	N.D.	CMR



Test Part Description : Reference to Test Method and Test Instrument

Note : N.D. = not detected (less than MQL)

N.A. = not applicable

- 1mg/kg=1ppm=0.0001%
- MQL=Method Quantitation Limit
- *The Substances are tested in term of their respective elements (e.g. As,Pb,Co).
- #The Substances are tested in term of hexavalent chromium, Cr(VI).
- [△]As requested by client, the testing was conducted as whole/part sample, for the sample can't be disjointed.

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

**The fifteen (15) Substances of Very High Concern (SVHC) content:**

Substance Name	CAS No.	Unit	MQL	Result	Classification
				No.1 [△]	
Anthracene oil(**)	090640-80-5	%	0.05	N.D.	PBT
Anthracene oil, anthracene paste, distn. Lights(**)	091995-17-4	%	0.05	N.D.	PBT
Anthracene oil, anthracene paste, anthracene fraction(**)	091995-15-2	%	0.05	N.D.	PBT
Anthracene oil, anthracene-low(**)	090640-82-7	%	0.05	N.D.	PBT
Anthracene oil, anthracene paste(**)	090640-81-6	%	0.05	N.D.	PBT
Pitch, coal tar, high-temp.(**)	065996-93-2	%	0.05	N.D.	PBT
Aluminosilicate, Refractory Ceramic Fibres	--	%	0.05	N.D.	Carcinogen Category 2
Zirconia Aluminosilicate, Refractory Ceramic Fibres	--	%	0.05	N.D.	Carcinogen Category 2
DIBP (Di-isobutyl phthalate)	000084-69-5	%	0.005	N.D.	Toxic to Reproduction Category 2
2,4-Dinitrotoluene	000121-14-2	%	0.005	N.D.	Carcinogen Category 2
Tris(2-chloroethyl) phosphate (TCEP)	000115-96-8	%	0.005	N.D.	Toxic to Reproduction Category 2
Lead chromate	007758-	%	0.01	N.D.	Carcinogen Category 2; Toxic to Reproduction



	97-6				Category 1
Lead chromate molybdate sulphate red(C.I. Pigment Red 104)	012656-85-8	%	0.01	N.D.	Carcinogen Category 2; Toxic to Reproduction Category 1
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	001344-37-2	%	0.01	N.D.	Carcinogen Category 2; Toxic to Reproduction Category 1

Test Part Description :Reference to Test Method and Test Instrument**Note : ND = not detected (less than MQL)****NA = not applicable**

- 1mg/kg=1ppm=0.0001%
- MQL=Method Quantitation Limit
- (**): The concentrations of above-mentioned mixtures are evaluated per the gained composition rate between the selected marks and the mixtures.
- Classification of this report in accordance with 67/548/EEC and Regulation (EC) No 1907/2006.
- If a SVHC is found over the reporting limit, client is suggested to identify the component which contains the SVHC and the exact concentration of the SVHC by requesting further quantitative analysis from the laboratory.
- [△]As requested by client, the testing was conducted as whole/part sample, for the sample can't be disjointed.

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

**The eight (8) Substances of Very High Concern (SVHC) content**

Substance Name	CAS No.	Unit	MQL	Result	Classification
				No.1 [△]	
Trichloroethylene	79-01-6	%	0.05	N.D.	Carcinogenic category 2
Boric acid*	10043-35-3 11113-50-1	%	0.05	N.D.	Toxic for reproduction category 2
Disodium tetraborate, anhydrous*	1330-43-4 12179-04-3 1303-96-4	%	0.05	N.D.	Toxic for reproduction category 2
Tetraboron disodium heptaoxide, hydrate*	12267-73-1	%	0.05	N.D.	Toxic for reproduction category 2
Potassium chromate*	7789-00-6	%	0.05	N.D.	Carcinogenic category 2; mutagenic category 2
Ammonium dichromate*	7789-09-5	%	0.05	N.D.	Carcinogenic category 2; mutagenic category 2; toxic for reproduction category 2
Potassium dichromate*	7778-50-9	%	0.05	N.D.	Carcinogenic category 2; mutagenic category 2; toxic for reproduction category 2

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



Test Part Description :Reference to Test Method and Test Instrument

Note : ND = not detected (less than MQL)

NA = not applicable

- 2. 1mg/kg=1ppm=0.0001%
- MQL=Method Quantitation Limit
- *The Substances are tested in term of their respective elements (e.g. B, Cr).
- △As requested by client, the testing was conducted as whole/part sample, for the sample can't be disjointed.

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



• The eight (8) Substances of Very High Concern (SVHC) content

Substance Name	CAS No.	Unit	MQL	Result	Classification
				No.1 [△]	
Cobalt(II) sulphate*	10124-43-3	%	0.05	N.D.	CMR (carcinogen, cat. 2; toxic for reproduction, cat. 2)
Cobalt(II) dinitrate*	10141-05-6	%	0.05	N.D.	CMR (carcinogen, cat. 2; toxic for reproduction, cat. 2)
Cobalt(II) carbonate*	513-79-1	%	0.05	N.D.	CMR (carcinogen, cat. 2; toxic for reproduction, cat. 2)
Cobalt(II) diacetate*	71-48-7	%	0.05	N.D.	CMR (carcinogen, cat. 2; toxic for reproduction, cat. 2)
2-Methoxyethanol	109-86-4	%	0.05	N.D.	CMR (toxic for reproduction, cat. 2)



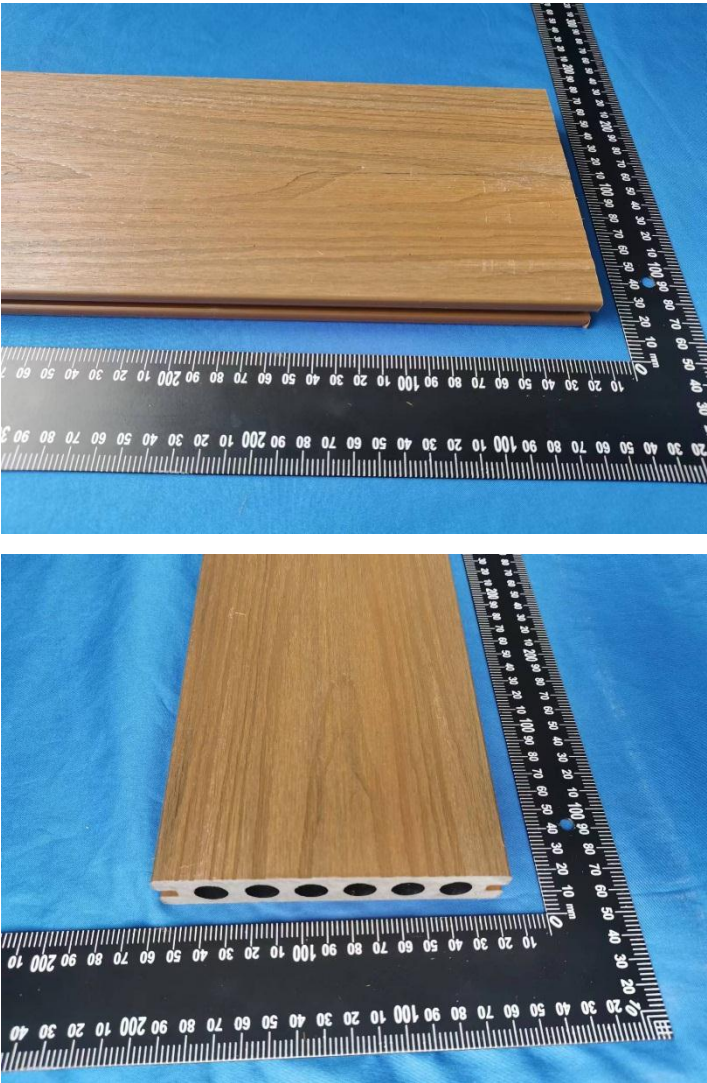
2-Ethoxyethanol	110-80-5	%	0.05	N.D.	CMR (toxic for reproduction, cat. 2)
Chromium trioxide*	1333-82-0	%	0.05	N.D.	CMR (carcinogen, cat .1; mutagen, cat. 2)
Acids generated from chromium trioxide and their oligomers: Chromic acid Dichromic acid Oligomers of chromic acid and dichromic acid*	7738-94-5 13530-68-2	%	0.05	N.D.	CMR (carcinogen, cat. 2)

Test Part Description :Reference to Test Method and Test Instrument**Note : ND = not detected (less than MQL)****NA = not applicable**

- 1mg/kg=1ppm=0.0001%
- MQL=Method Quantitation Limit
- *The Substances are tested in term of their respective elements (e.g.Co, Cr).
- [△]As requested by client, the testing was conducted as whole/part sample, for the sample can't be disjointed.



Sample Photo:



*****End of the report*****