



TEST REPORT

NUMBER: AU12064035-5R3

Report from Intertek Testing Services Ltd., Shanghai Jinqiao Branch

APPLICANT: NewTechWood Ltd.
19111 Walden Forest Dr.Suite B Humble,Tx
77346,USA

DATE: JULY 22, 2013

SAMPLE DESCRIPTION: UltraShield Composite Decking

THE SUBMITTED SAMPLES

ITEM NO. : US07 & UH07
COUNTRY OF ORIGIN : CHINA.

PICTURES



TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

TO BE CONTINUED

AUTHORIZED BY:
FOR Intertek Testing Services
Ltd., Shanghai Jinqiao Branch

Jodie Zhou
Technical Supervisor



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CONCLUSION:

<u>TESTED SAMPLE</u>	<u>TEST ITEM</u>	<u>RESULT</u>
US 07	Weathering resistance	After 2000 hours exposure, Grey Scale 3-4
	Mould Resistance	After 28 days, rating 0
	Restricted Substances	Meet RoHS requirements
	VOCs content	See TEST CONDUCTED 4
UH 07	RoHS	Pass
	Formaldehyde content	Not Detected
THE FORMULATION OF PRODUCT	Recycled content of material	See TEST CONDUCTED 5

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TESTS CONDUCTED

1 WEATHERING RESISTANCE TEST

With reference to ISO 4982-2: 2006 cycle 1.

Result:

After 2000 hours exposure, there was some color change on the surface. Average ΔE^* =2.50, Grey scale 3-4.

DATE SAMPLE RECEIVED: June 28, 2012
TESTING PERIOD: June 28, 2012 to October 25, 2012

2 MOULD RESISTANCE TEST

With reference to ASTM G21-09
Temperature of incubation: 28°C
Mould culture used: Aspergillus niger (ATCC 9642), Penicillium pinophilum (ATCC 11797), Chaetomium globosum (ATCC 6205), Gliocladium virens (ATCC 9645) and Aureobasidium pullulans (ATCC 15233) with positive vitality.

Result:

After 28 days incubation, rating 0, no growth on specimen surface.

DATE SAMPLE RECEIVED: March 25, 2012
TESTING PERIOD: April 9, 2012 to May 21, 2012



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3 RESTRICTED SUBSTANCE

With reference to RoHS directive 2002/95/EC and Amendment 2005/618/EC for homogeneous material.

(A) TEST RESULT SUMMARY:

TESTING ITEM	RESULT
CADMIUM (Cd) CONTENT (mg/kg)	ND
LEAD (Pb) CONTENT (mg/kg)	17
MERCURY (Hg) CONTENT (mg/kg)	ND
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (mg/kg) (FOR NON-METAL)	ND

REMARK:
mg/kg = MILLIGRAM PER KILOGRAM = ppm
ND = NOT DETECTED

(B)RoHS REQUIREMENT:

RESTRICTED SUBSTANCES	LIMITS
CADMIUM (Cd)	0.01% (100 mg/kg)
LEAD (Pb)	0.1% (1000 mg/kg)
MERCURY (Hg)	0.1% (1000 mg/kg)
CHROMIUM (VI) (Cr ⁶⁺)	0.1% (1000 mg/kg)
POLYBROMINATED BIPHENYLS (PBBs)	0.1% (1000 mg/kg)
POLYBROMINATED DIPHENYL ETHERS (PBDEs)	0.1% (1000 mg/kg)

THE ABOVE LIMITS WERE QUOTED FROM ROHS DIRECTIVE 2002/95/EC AND AMENDMENT 2005/618/EC FOR HOMOGENEOUS MATERIAL.

(C) TEST METHOD:

TESTING ITEM	TESTING METHOD	REPORTING LIMIT
CADMIUM (Cd) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0: 2008, BY ACID DIGESTION AND DETERMINED BY ICP-OES	2 mg/kg
LEAD (Pb) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0: 2008, BY ACID DIGESTION AND DETERMINED BY ICP-OES	2 mg/kg
MERCURY (Hg) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0: 2008, BY ACID DIGESTION AND DETERMINED BY ICP-OES	2 mg/kg
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (FOR NON-METAL)	WITH REFERENCE TO IEC 62321 EDITION 1.0: 2008, BY ALKALINE DIGESTION AND DETERMINED BY UV-VIS SPECTROPHOTOMETER	1 mg/kg

DATE SAMPLE RECEIVED: July 5, 2012
TESTING PERIOD: July 5, 2012 to July 7, 2012



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4 RESTRICTED SUBSTANCE

With reference to ASTM D5116.

Result:

1. Single VOC Compounds List:

<u>No.</u>	<u>Retention time,min</u>	<u>Compounds name</u>	<u>CAS NO.</u>	<u>Result: ug/m³</u>
1	11.123	Toluene	108-88-3	8.07
2	13.004	Ethyl benzene	100-41-4	3.24
3	13.123	m+p-Xylene	—	5.30
4	13.523	Styrene	100-4-25	3.19
5	13.571	O-Xylene	95-47-6	2.22

2. TVOC: 24.68ug/m³ (Toluene response factor)

Remark:Compounds Retention Time at 8.938min;12.736min;14.086min are internal standards.

5 ROHS DIRECTIVE

With reference to test method of IEC 62321 edition 1.0: 2008 and maximum concentration limits quoted from RoHS directive (2002/95/EC), RoHS directive (2011/65/EU), which will supersede 2002/95/EC with effect from 3 January 2013

Result: Pass



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<u>TESTING ITEM</u>	<u>RESULT</u>
CADMIUM (Cd) CONTENT (mg/kg)	ND
LEAD (Pb) CONTENT (mg/kg)	23
MERCURY (Hg) CONTENT (mg/kg)	ND
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (mg/kg) (FOR NON-METAL)	ND
POLYBROMINATED BIPHENYLS (PBBs) (mg/kg)	
MONOBROMO BIPHENYLS (MonoBB)	ND
DIBROMO BIPHENYLS (DiBB)	ND
TRIBROMO BIPHENYLS (TriBB)	ND
TETRABROMO BIPHENYLS (TetraBB)	ND
PENTABROMO BIPHENYLS (PentaBB)	ND
HEXABROMO BIPHENYLS (HexaBB)	ND
HEPTABROMO BIPHENYLS (HeptaBB)	ND
OCTABROMO BIPHENYLS (OctaBB)	ND
NONABROMO BIPHENYLS (NonaBB)	ND
DECABROMO BIPHENYL (DecaBB)	ND
POLYBROMINATED DIPHENYL ETHERS (PBDEs) (mg/kg)	
MONOBROMO DIPHENYL ETHERS (MonoBDE)	ND
DIBROMO DIPHENYL ETHERS (DiBDE)	ND
TRIBROMO DIPHENYL ETHERS (TriBDE)	ND
TETRABROMO DIPHENYL ETHERS (TetraBDE)	ND
PENTABROMO DIPHENYL ETHERS (PentaBDE)	ND
HEXABROMO DIPHENYL ETHERS (HexaBDE)	ND
HEPTABROMO DIPHENYL ETHERS (HeptaBDE)	ND
OCTABROMO DIPHENYL ETHERS (OctaBDE)	ND
NONABROMO DIPHENYL ETHERS (NonaBDE)	ND
DECABROMO DIPHENYL ETHER (DecaBDE)	ND

6 Formaldehyde content

With reference to EN 717-1: 2004.

Climatic conditions: 23°C, 45% R.H.

Air exchange rate: 1.0 H⁻¹

Loading factor: 1.0m²/m³

Test Duration: 240 hours

Result: ND (not detected)



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7 RECYCLED CONTENT OF MATERIAL

ACCORDIGN TO FORMUALTION PROVIDED BY CLIENT. THE CLIENT DECLARED THAT THE FORMULATION OF TYPE US07 AND UH07 WERE SAME.

The recycle material mass content: 60%+39%=99%;

Name of Raw Materials	% of total product by weight	Remark
Recycled Wood Fiber	60%	Recycled material
Recycled HDPE	39%	Recycled material
Adhesive	1%	
Total	100	

END OF REPORT