

Test Report

No.: SHAHL25004233201

Date: Mar 17, 2025

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Client Name: HANGZHOU ZEN BAMBOO & HARDWOOD PRODUCTS CO., LTD.

Client Address: HENGFAN INDUSTRIAL ZONE, TSINGSHANHU SUB-DISTRICT, LIN' AN DISTRICT, HANGZHOU CITY, ZHEJIANG PROVINCE, CHINA 311307

Sample Description: BAMBOO PLYWOOD

Item No.: SWT-19

Manufacturer: HANGZHOU ZEN BAMBOO & HARDWOOD PRODUCTS CO., LTD.

Origin of the Product(s): CHINA

Destination of the Product(s): USA

The above sample(s) and information were provided by the client.

SGS No.: SHHL2502009342FT

Sample Receiving Date: Mar 03, 2025

Testing Period: Mar 03, 2025 ~ Mar 17, 2025

Test Requested: Select test(s) as requested by the client.

Testing Performed: Follow selected test(s) as requested by client.

	Test Requirement	Conclusion
1	Final Regulation Order – Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Product (CARB ATCM), title 17, California Code of Regulation, section 93120.2 (a) and –US EPA 40 CFR Part 770.10, Toxic Substances Control Act (TSCA) Title VI–Formaldehyde Emission Test for Composite Wood Products	Pass

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Jessica Pan.

Jessica Pan
Approved Signatory

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Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SHA25-0042332-0001.C001	Natural color solid bamboo plywood

Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) “-” = Not Regulated

Final Regulation Order – Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Product (CARB ATCM), title 17, California Code of Regulation, section 93120.2 (a) and –US EPA 40 CFR Part 770.10, Toxic Substances Control Act (TSCA) Title VI–Formaldehyde Emission Test for Composite Wood Products

Test Method: With reference to ASTM D6007-22 and Standard Face and Back Configuration testing therein, analysis was performed by UV-Vis.

Test Item(s)	Limit	Unit(s)	MDL	A1
Sample Conditioning / Parameters				
Average Temperature	-	°C	-	23.0
Average Relative Humidity	-	%	-	50.0
Range of Temperature	-	°C	-	21-27
Range of Relative Humidity	-	%	-	45-55
Sampling Time	-	h	-	168
Formaldehyde Background	-	ppm	-	<0.10
Sample Details and Apparatus				
Chamber Dimensions(Nominal)	-	m	-	1.578x0.8x0.8
Chamber Volume	-	m ³	-	1.0
Chamber Load Ratio	-	m ² /m ³	-	1.4259
Chamber Q/A Ratio(±2%)	-	-	-	0.526
Sample Size	-	cm	-	35x68
Number of Samples	-	-	-	3
Number of Exposed Surfaces	-	-	-	6
Sampling Parameters of Emission Test				
Average Temperature	-	°C	-	25.0
Average Relative Humidity	-	%	-	50.0
Range of Temperature	-	°C	-	24-26
Range of Relative Humidity	-	%	-	46-54
Air-sampling Time	-	min	-	30
Sampling Time in Chamber	-	min	-	240
Air-sampling Rate	-	L/min	-	1.0
Formaldehyde Background	-	ppm	0.01	<0.01
Formaldehyde Emission Results				
Formaldehyde Emission	-	ppm	0.01	ND
Formaldehyde Emission (Corrected)	0.05	ppm	0.01	ND
Conclusion				Pass



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Notes:

- (1) ppm = parts of formaldehyde per million parts air.
- (2) Formaldehyde Emission (Corrected) is Formaldehyde concentration corrected to 25°C and 50% Relative Humidity.
- (3) The scope of CARB ATCM / TSCA Title VI is/are applicable for composite wood, but not for other wood products.
- (4) Formaldehyde emission test is one of the conformity criteria under CARB ATCM / TSCA Title VI. Full conformity of a composite wood product happens provided that this composite wood fulfill all the requirement as stated in CARB ATCM title 17 section 93120 to 93120.12 / US EPA 40 CFR Part 770.10.

Reference Limit:

Maximum Permissible Limit according to CARB ATCM, Title 17, California Code of Regulation, Section 93120.2 (a):

Formaldehyde Emission Standards for Hardwood Plywood(HWPW), Particleboard(PB), and Medium Density Fiberboard(MDF)	
Type	Limits
HWPW	0.05 ppm
PB	0.09 ppm
MDF	0.11 ppm
Thin MDF	0.13 ppm

Maximum Permissible Limit according to TSCA Title VI, US EPA 40 CFR Part 770.10, Code of Federal Regulations:

Formaldehyde Emission Standards for Hardwood Plywood(HWPW), Particleboard(PB), and Medium Density Fiberboard(MDF),and Laminated Product	
Type	Limits
HWPW	0.05 ppm
PB	0.09 ppm
MDF	0.11 ppm
Thin MDF	0.13 ppm
Laminated Product	0.05ppm

For the maximum permissible limit of Laminated product, Effective date is March 22,2024

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



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Sample Photo:



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*** End of Report ***



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