

Test Report

No.: T32120332135SC

Date: Jan 21, 2022

Page 1 of 4

VINA ECO BOARD CO., LTD

D2-D7 PHU AN THANH IP, BEN LUC DISTRICT, LONG AN PROVINCE, VIET NAM

The following samples were submitted and identified by/on behalf of the client as:

15MM, LINE C, PRODUCTION SHIFT 1

SGS Case No. : CA321203342099
 Product Type : Particleboard (without surface finishes or seals)
 Thickness : 15 MM
 Lot No. : A21L10574065
 Manufacturing Date : 2021 (YEAR) 12 (MONTH) 06 (DAY)
 Sample Wrapping Method : Wrapped Collectively in Vapor Retarder
 Sample Receiving Date : DEC 30, 2021
 Test Performing Period : DEC 30, 2021 - Jan 21, 2022

Test Requested : Please refer to the result summary.

Test Method & Results : Please refer to next page(s).

Result Summary :

Test Requested	Conclusion
1. US EPA 40 CFR 770.10, Toxic Substances Control Act (TSCA) Title VI – Formaldehyde Emission	---
a) Determination of formaldehyde emission content	PASS

Signed for and on behalf of
SGS Hong Kong Ltd.

Cheung Cheuk Fung, Henry
Operations Manager

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H33977244

Test Report

No.: T32120332135SC

Date: Jan 21, 2022

Page 2 of 4

Test Results:

1. US EPA 40 CFR 770.10, Toxic Substances Control Act (TSCA) Title VI – Formaldehyde Emission

a) Determination of formaldehyde concentrations in air from wood products

Method: With reference to ASTM D6007–2014 and Standard Face and Back Configuration testing therein. Analysis was conducted by 3-Methyl-2-Benzothiazolinone Hydrazone Hydrochloride Monohydrate (MBTH) method with UV-Visible Spectroscopy measurement instead of the NIOSH 3500 Chromotropic Acid method presented in the ASTM standard.

Test Conditions and Sample Details

Sample Conditioning / Parameters			
Average Temperature (°C)	23.8	Average Relative Humidity (%)	49.7
Range of Temperature (°C)	23.3 – 24.3	Range of Relative Humidity (%)	49.1 – 50.3
Sampling Time (hour)	168	Formaldehyde background (ppm)	< 0.10
Sample Details and Apparatus			
Chamber Dimensions (m)	0.8 x 0.8 x 1.6 (Nominal)		
Chamber Volume (m ³)	1.0	Chamber Load Ratio (m ² /m ³)	0.43
Chamber Q/A Ratio (±2%)	1.172		
Sample Size (as received)	26.5 cm x 27 cm		
Number of Samples	3	Number of Exposed Surfaces	6
Sampling Parameters of Emission Test			
Average Temperature (°C)	25.0	Average Relative Humidity (%)	50.1
Range of Temperature (°C)	24.6 - 25.6	Range of Relative Humidity (%)	49.9 - 52.1
Air-sampling Time (min)	30	Time of samples in chamber before air sample collection (min)	240
Air-sampling Rate (L/min)	1.0	Formaldehyde background (ppm)	< 0.01

Test Item	Result (ppm)				Reporting Limit (ppm)	Permissible Limit (ppm)
	Trial 1	Trial 2	Trial 3	Average		
Formaldehyde Emission (Unadjusted)	0.03	0.03	0.03	---	0.01	--
Formaldehyde Emission (Corrected)	0.03	0.03	0.03	0.03	0.01	See note 5
Comment	--	--	--	PASS	--	--

Sample Description:

- Brown Particleboard (15 mm)

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H33977313

Test Report

No.: T32120332135SC

Date: Jan 21, 2022

Page 3 of 4

- Note :
1. ppm = parts of formaldehyde per million parts air
 2. ND = Not Detected
 3. °C = Degree Celsius
 4. Formaldehyde Emission (Corrected) is Formaldehyde concentration corrected to 25°C and 50% Relative Humidity
 5. Maximum Permissible Limit according to US EPA 40 CFR 770.10

Formaldehyde Emission Standards for Hardwood Plywood (HWPW), Particleboard (PB), and Medium Density Fiberboard (MDF)				
HWPW-VC	HWPW-CC	PB	MDF	Thin MDF
0.05 ppm	0.05 ppm	0.09 ppm	0.11 ppm	0.13 ppm
VC = Veneer Core; CC = Composite Core				

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H33977308

Remark:

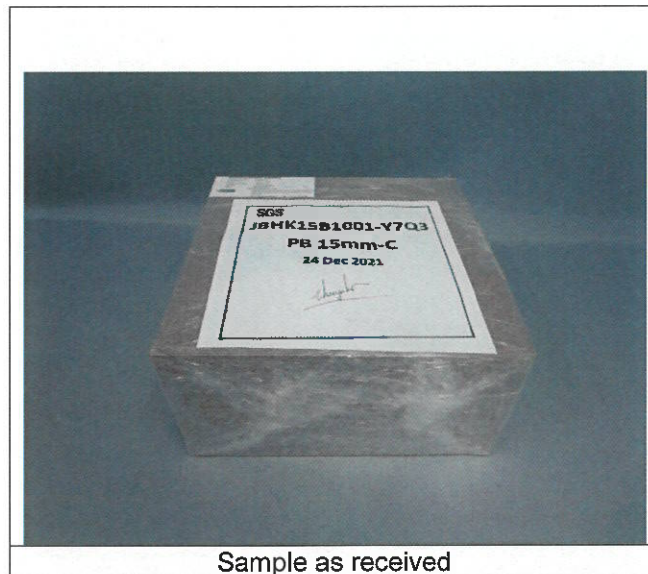
- When statement of conformity is made, unless the decision rule was mentioned in above specified test items, the decision rule would be based on the non-binary statement with guard band (is equal to the expanded measurement uncertainty with a 95% coverage probability, $w = U_{95}$) in ILAC-G8:09/2019 Clause 4.2.3.

"Pass - the measured value is within (or below / above) the acceptance limit, where the acceptance limit is below / above to the guard band." or "Pass - The measured values were observed in tolerance at the points tested. The specific false accept risk is up to 2.5%."

"Fail - the measured value is out of (or below / above) the tolerance limit added / subtracted to the guard band." or "Fail - One or more measured values were observed out of tolerance at the points tested". The specific false reject risk is up to 2.5%.

"Inconclusive – It is not possible to state the conformity. Either one or more measured values were observed in the portion of the expanded measurement uncertainty intervals at the points tested where the specific risk is up to 50%."

Photo Appendix



Sample as received

*** End of Report ***

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H33977307