

TEST REPORT: 7191243097-CHM20-MA

Date: 17 SEP 2020

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Client's Ref:

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SUBJECT

Evaluation of "MICALITE DECORATIVE LAMINATE PANEL" Sample

CLIENT

Micalite Pte Ltd
67 Tampines Industrial Ave 5
T5 @ Tampines
528643
Singapore

Attn: Mr. Dave Chew

DESCRIPTION OF SAMPLE

Two pieces of board labelled as follow were received on 30 Jul 2020:

Sample Description	MICALITE DECORATIVE LAMINATE PANEL
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DATE OF ANALYSIS

08 Sep 2020 – 16 Sep 2020



TÜV SÜD PSB

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METHOD OF TEST

1. Emission Test

The following emission tests were conducted according to ASTM D5116-17 – *Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials / Products*, as reference.

- 1) Total Volatile Organic Compounds (TVOC) Emission Rate
- 2) Formaldehyde Emission Rate

Emission Test Condition

- 1) Chamber Volume: about 1m³
- 2) Temperature: 23°C
- 3) Relative Humidity: 50%
- 4) Air Exchange Rate: n=1 (air change rate per hour in the chamber)
- 5) Chamber Loading Ratio: 0.4-1.0 m²/m³ (total exposed surface area of the test specimen divided by the net air volume of the emission test chamber)
- 6) Air Velocity: 0.1 m/s to 0.3 m/s (over the surface of the test specimen)

REMARKS

Product Loading Ratio for the "MICALITE DECORATIVE LAMINATE PANEL" sample was 0.4.

RESULTS

Table 1. Total Volatile Organic Compounds (TVOC) Emission Rate Test Result

Sample	Test Result (After 72 hours)	Criteria for Singapore Green Label Category 41	Inferred Result
MICALITE DECORATIVE LAMINATE PANEL	< 0.1 mg per m ² per hour	< 0.5 mg per m ² per hour	Pass

^a TVOC is the sum of volatile organic compounds sampled on the sorbent tube between n-hexane (C6) and n-hexadecane (C16), and quantified by converting the total area of the chromatogram in that region to Toluene concentration equivalent.

Table 2. Formaldehyde Emission Rate Test Result

Sample	Test Result (After 72 hours)	Criteria for Singapore Green Label Category 41	Inferred Result
MICALITE DECORATIVE LAMINATE PANEL	0.097 mg per m ² per hour	< 0.1 mg per m ² per hour	Pass ¹

¹ The result is a borderline pass. The expanded uncertainty of measurement is 25% (k=2 at 95% confidence level).





MS MARIANA AHMAD
CHEMIST



DR XIAO ZHOU
PRODUCT MANAGER
MICROCONTAMINATION DIAGNOSIS
CHEMICAL & MATERIALS

APPENDIX

Sample	Sample Photo
MICALITE DECORATIVE LAMINATE PANEL (top view)	
MICALITE DECORATIVE LAMINATE PANEL (side view)	



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Effective 01 September 2020

