TEST REPORT

CLIENT: **Ventec International Group**

REFERENCE: ASTM method E 595-15(2021)

TEST ITEM: Outgassing

SAMPLE: CCL

REPORT No.: 47556E

TEST RESULTS:

The samples were tested by the indicated test methods within this report, and the detailed test results are enclosed in the data sheets.

"INTEGRITY, HONESTY AND KNOWLEDGE"

MICROTEK（CHANGZHOU）PRODUCT SERVICES CO., LTD

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Report Number: 47556E

SUBMISSION IDENTIFICATION

The following sample(s) were submitted and confirmed by the customer:

Test Samples Submitted: 2025-07-24

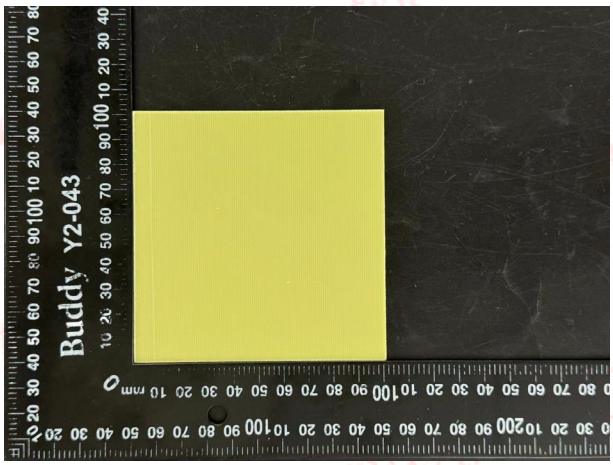
Sample Designation	Sample Identification	D/C	Sample Quantity
CCL	VT-47	/	1 Piece

Client: Ventec International Group

Address: 10 INDUSTRIAL 5TH RD PINGCHENG IND ZONE PINGCHENG TAOYUAN HSIEN, 324 TAIWAN

Attention: Wang Juan **Phone:** 886 3-4195901

Samples as received:



Picture 1 VT-47

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Outgassing

TEST SPECIMEN

1 Piece of sample

REFERENCE

ASTM method E 595-15(2021) Total Mass Loss and Collected Volatile Condensable Materials from Outgassing in Vacuum Environment

METHOD/ REQUIREMENT (Completed by a qualified subcontractor)

Weigh a prepared aluminum foil boat and return it to the glass storage desiccators. Weigh a prepared collector plate and mount it into its cooling plate receptacle. Add the test specimen to the boat and condition the specimen at 23 ℃, 50% RH for a minimum of 24 h. Weigh the conditioned specimen and boat. Place the test specimen and boat into the specimen compartment in the temperature-vacuum system. Mount the respective cover plates of each specimen compartment and at least 3 control compartments. Close and activate the vacuum system and allow the system to evacuate to 7.0×10^{-3} Pa or less within 1 h. During this period, control of the collector plate temperature at 25 ℃±1 ℃ shall be achieved. When the required vacuum has been achieved, turn on the heater and adjust the controller to heat the bar to 125 ℃±1 ℃ within 60 min. Maintain the collector plate temperature at 25 ℃±1 ℃ and the heater bar temperature at 125 ℃±1 ℃ for 24 h. After this period close the vacuum valve to pumping system and turn off the current to the heater bars. Open the went valve and backfill with clean, dry nitrogen at a gage pressure of (10~30) kPa above atmosphere to rapidly cool the bars to 50 ℃ within 2 h. Turn off the collector-plate heat exchangers, return the vacuum chamber to room pressure. Remove the aluminum specimen boats and their respective collector plates and the control collector plates and immediately store in the desiccators. After allowing the specimens to cool to room temperature, weigh the specimens and boats and the collector plates within 2 min of removal from the desiccators.

Calculation of Total Mass Loss (TML) as follows:

Mass Loss (L)=S_I-S_F

Total Mass Loss (TML) (%) =(L/S_I) ×100

Where: S_I = Initial specimen mass

SF = Final specimen mass

L= Mass Loss.

Calculate the Collected Condensable Volatile Material (CVCM) as follows:

Mass of condensable material (C_O) =C_F-C_I

CVCM (%) =(C_O/S_I) ×100

Where: C_F = Final Mass of collector plate

C_I = Initial mass of collector plate

C_O = Mass of condensable material

S_I = Initial specimen mass

RESULTS

The sample was tested by the methods given above. See the attached test data sheet for detailed result.

Table 1 Outgassing

Sample Designation	CCL	Sample Identification	VT-47
Test Date	2025-07-31~2025-08-04	Ambient	23 °C, 50% RH
Sample No.		47556-1	
Total Mass Loss, TML(%)		0.48	
Regained Mass Loss, RML (%)		0.19	
Water Vapor Regained (%)		0.29	
Collected Volatile Condensable Materials, CVCM (%)		0.00	

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CERTIFICATE OF CONFORMANCE

Microtek (Changzhou) Laboratories certify that the test equipment used complies with the calibration requirements of correlation criterion and that the data contained in this report is accurate within the tolerance limitation of this equipment.

The test report is invalid without the signature of the approver and the stamp of "Special Seal for Test Report". This report has been CA certified, and will be invalid if altered or tampered with. The partial replication of it is invalid, too.

The authenticity of report should be subject to its authorized electronic report that has been CA certified. The test results in this report are only responsible for the tested samples.

The report shall not be reproduced, except in full, without the written approval of Microtek (Changzhou) Laboratories.

Thank you for selecting Microtek (Changzhou) Laboratories for your testing requirements.

Edited by:	Reviewed by:	Approved by:
Jocelyn Zhang	Tansy Liu	Mary Yang
Date:2025-08-18	Date:2025-08-18	Date:2025-08-18