TEST REPORT

CLIENT: **VENTEC ELECTRONIC (Suzhou) Co., Ltd**

REFERENCE: ASTM E 595

TEST ITEM: Outgassing

SAMPLE: VT-462S

REPORT No.: 24783E

TEST RESULTS:

The samples were tested by the indicated test methods within this report. Actual detailed test results are enclosed.

MICROTEK (CHANGZHOU) PRODUCT SERVICES CO., LTD. 麦可罗泰克（常州）产品服务有限公司 检测专用章

"INTEGRITY, HONESTY AND KNOWLEDGE"

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Report Number: 24783E

SUBMISSION IDENTIFICATION

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

Test Samples Submitted: 2020-02-12

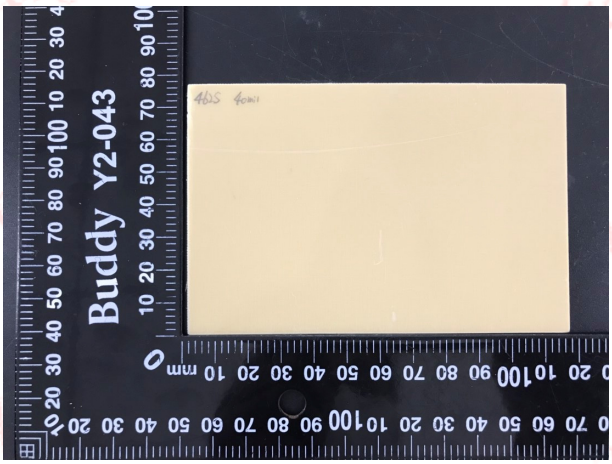
Sample Designation	Sample Identification	D/C	Sample Quantity
VT-462S	/	/	1 piece

Client: VENTEC ELECTRONIC (Suzhou) Co., Ltd

Address: 308 Tai Shan Rd, Suzhou New District Jiangsu P. R. China

Attention: Wang Juan **Phone:** (86) 512-68091810-2533, 15962100670

Samples as received:



Picture 1 VT-462S

Report Number: 24783E

Outgassing

TEST SPECIMEN

VT-462S 1 piece

REFERENCE

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

METHOD/ REQUIREMENT

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 24h. 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 1h. 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 24h. 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 2h. 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 attached test data sheet for actual test result.

Table 1 Outgassing

Sample Designation	VT-462S	Sample Identification	/
Test Date	2020-02-17~2020-02-22	Ambient	23℃, 49% RH
Sample No.		24783-1	
Total Mass Loss, TML(%)		0.14	
Regained Mass Loss, RML (%)		0.12	
Water Vapor Regained (%)		0.01	
Collected Volatile Condensable Materials (%)		0.02	

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CERTIFICATE OF CONFORMANCE

Microtek (Changzhou) Laboratories certifies 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 report is invalid without signature of approver and "Special seal for test report", and the test results of this report are only responsible for 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:
Clark Jia	Jocelyn Zhang	Gestar
Project Engineer	Project Engineer	Assistant Lab Manager
Date: 2020-02-24	Date: 2020-02-24	Date: 2020-02-24