

No.: CE/2019/41089

Date: 2019/04/16

Page: 1 of 4

MITSUBISHI GAS CHEMICAL CO., INC. ELECTRONICS MATERIAL DIVISION 5-2, MARUNOUCHI 2-CHOME, CHIYODA-KU, TOKYO 100-8324, JAPAN

The following sample(s) was/were submitted and identified by/on behalf of the applicant as:

Sample Submitted By

: MITSUBISHI GAS CHEMICAL CO., INC. ELECTRONICS MATERIAL DIVISION

Sample Description

: COPPER CLAD LAMINATES & PREPREGS

Style/Item No.

: CCL-HL830(WITHOUT COPPER FOIL), CCL-HL832(WITHOUT COPPER FOIL),

GHPL-830, GHPL-832

Buyer/Order No.

: MGC 2019-029

Sample Receiving Date

: 2019/04/08

**Testing Period** 

: 2019/04/08 to 2019/04/16

**Test Requested** 

: As specified by client, to test Halogen-Fluorine, Chlorine, Bromine, Iodine in the

submitted sample(s).

**Test Method** 

: Please refer to following pages.

Test Result(s)

: Please refer to following pages.

Troy Chang / Manager - Tec Signed for and behalf of SGS TAIWAN LTD. Chemical Laboratory - Taipei



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## Test Result(s)

PART NAME No.1 : BLACK SHEET

Test Item(s)	Unit	Method	MDL	Result No.1
Halogen				
Halogen-Fluorine (F) (CAS No.: 14762-94-8)	mg/kg	With reference to BS EN 14582 (2016). Analysis was performed by IC.	50	1990
Halogen-Chlorine (CI) (CAS No.: 22537-15-1)	mg/kg		50	351
Halogen-Bromine (Br) (CAS No.: 10097-32-2)	mg/kg		50	56300
Halogen-lodine (I) (CAS No.: 14362-44-8)	mg/kg		50	n.d.

## Note:

1. mg/kg = ppm; 0.1wt% = 1000ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

Page: 2 of 4



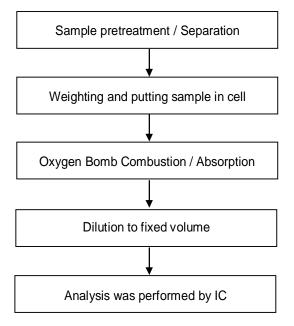
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## Analytical flow chart - Halogen

Technician: Rita Chen Supervisor: Troy Chang



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Page: 3 of 4



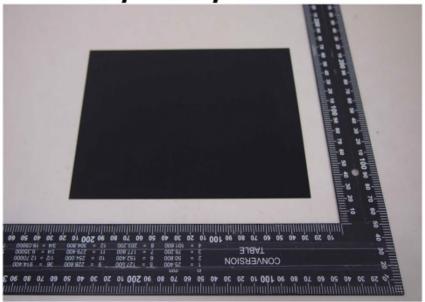
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\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

CE/2019/41089



\*\* End of Report \*\*

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Page: 4 of 4