

Test Report

No. : CE/2019/41119

Date : 2019/04/16

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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. : PLEASE REFER TO PAGE 3
Buyer/Order No. : MGC 2019-034
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 - Technical
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	986
Halogen-Chlorine (Cl) (CAS No.: 22537-15-1)	mg/kg		50	61.6
Halogen-Bromine (Br) (CAS No.: 10097-32-2)	mg/kg		50	n.d.
Halogen-Iodine (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



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Style/Item No.

:

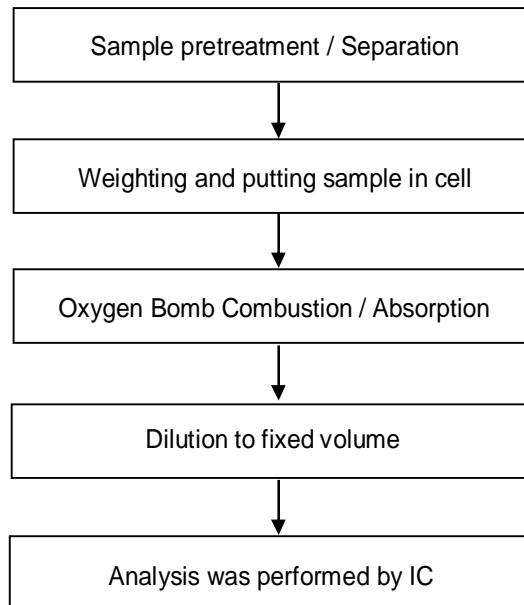
CCL-HL830NS(WITHOUT COPPER FOIL), CCL-HL830NS(TYPE-HX)(WITHOUT COPPER FOIL),
CCL-HL830NS(TYPE-EX)(WITHOUT COPPER FOIL), CCL-HL830NS(TYPE-LC)(WITHOUT COPPER FOIL),
CCL-HL830NS(TYPE-LD)(WITHOUT COPPER FOIL), CCL-HL830NS(TYPE-HD)(WITHOUT COPPER FOIL),
CCL-HL832NS(WITHOUT COPPER FOIL), CCL-HL832NS(TYPE-HX)(WITHOUT COPPER FOIL),
CCL-HL832NS(TYPE-EX)(WITHOUT COPPER FOIL), CCL-HL832NS(TYPE-LC)(WITHOUT COPPER FOIL),
CCL-HL832NS(TYPE-LD)(WITHOUT COPPER FOIL), CCL-HL832NS(TYPE-HD)(WITHOUT COPPER FOIL),
GHPL-830NS, GHPL-830NS(TYPE-LC), GHPL-830NS(TYPE-LD), GHPL-830NS(TYPE-HD), GHPL-832NS,
GHPL-832NS(TYPE-LC), GHPL-832NS(TYPE-LD), GHPL-832NS(TYPE-HD)

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Analytical flow chart - Halogen

- Technician: Rita Chen
- Supervisor: Troy Chang



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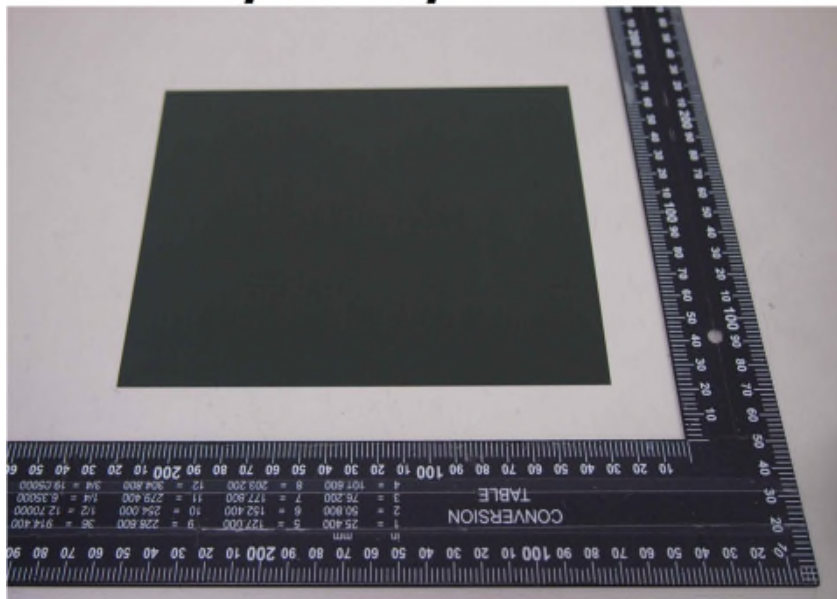
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* The tested sample / part is marked by an arrow if it's shown on the photo. *

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** End of Report **

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