



# Test Report

No.: ETR21304581

Date: 22-Mar-2021

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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 Name : COPPER CLAD LAMINATES & PREPREGS  
 Style/Item No. : CCL-HL972LF(WITHOUT COPPER FOIL),  
 CCL-HL972LF(TYPELD)(WITHOUT COPPER FOIL),  
 GHPL-970LF, GHPL-970LF(TYPELD)  
 Lot No. : MGC 2021-030

=====  
 Sample Receiving Date : 16-Mar-2021  
 Testing Period : 16-Mar-2021 to 22-Mar-2021

**Test Requested** : As specified by client, to test Halogen-Fluorine, Chlorine, Bromine, Iodine in the submitted sample.

**Test Results** : Please refer to following pages.

*Troy Chang*  
 Troy Chang, Manager  
 Signed for and on behalf of  
 SGS TAIWAN LTD.  
 Chemical Laboratory - Taipei




PIN CODE: 754D90E8

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## Test Part Description

No.1 : BLACK SHEET

## Test Result(s)

Test Item(s)	Method	Unit	MDL	Result
				No.1
Fluorine (F) (CAS No.: 14762-94-8)	With reference to BS EN 14582: 2016, analysis was performed by IC.	mg/kg	50	808
Chlorine (Cl) (CAS No.: 22537-15-1)	With reference to BS EN 14582: 2016, analysis was performed by IC.	mg/kg	50	72.7
Bromine (Br) (CAS No.: 10097-32-2)	With reference to BS EN 14582: 2016, analysis was performed by IC.	mg/kg	50	n.d.
Iodine (I) (CAS No.: 14362-44-8)	With reference to BS EN 14582: 2016, analysis was performed by IC.	mg/kg	50	n.d.

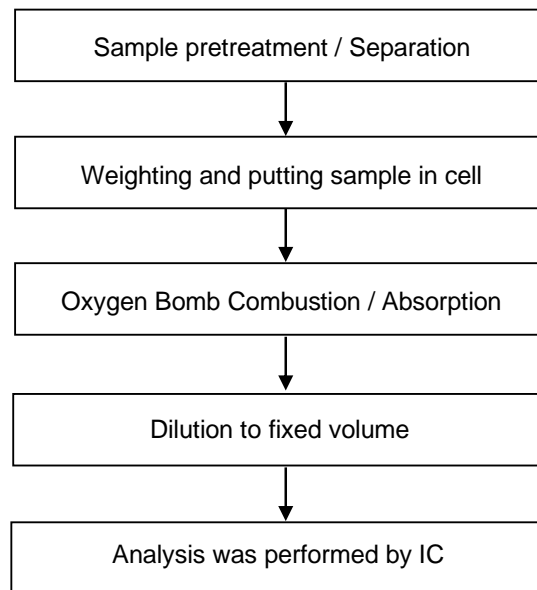
## Note :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. MDL = Method Detection Limit
3. n.d. = Not Detected ( Less than MDL)

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### Analytical flow chart - Halogen



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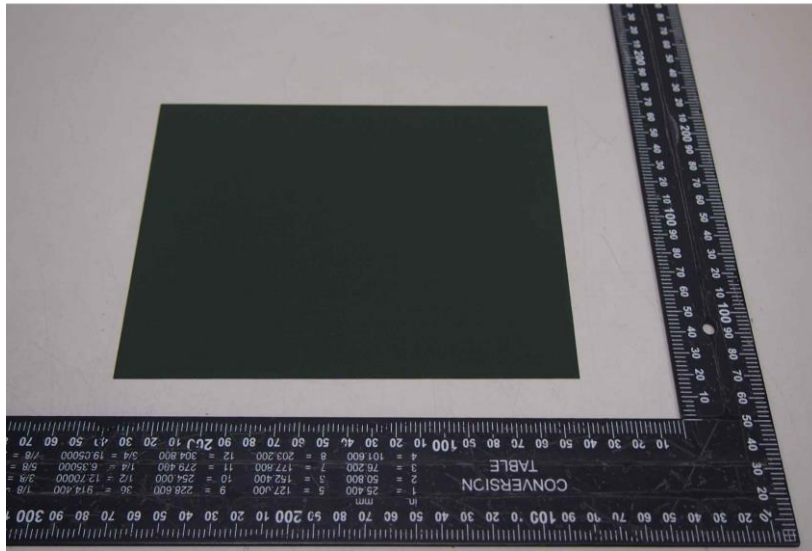
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\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

### ETR21304581



\*\* End of Report \*\*

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