

Test Report No. 3823480

Date : 13-Mar-2018

Page 1 of 4

**Client : Thai Laminate Manufacturer Co., Ltd.
70 Soi Chalongkrung 31, Kwang Lamplatew,
Latkrabang Bangkok 10520 Thailand**

The following sample(s) was/were submitted and identified by client as:

Sample Name : TLM-LAMINATE FR4 TLM-150(mt)
Sample Description : LAMINATE
Sample No. : 3928031
Sample Condition : Sample is contained in a plastic bag.
Quantity Submitted : 4 pcs
Part No. : 3L063-02811-40504800-C1
Batch/Lot No. : L180200756
Manufacturer/Vendor : TLM
Country of Origin : THAILAND
Sample Receiving Date : 21-Feb-2018
Testing Period : 21-Feb-2018 to 13-Mar-2018

Test Method & Results : Please refer to next page(s).

Test Requested & Result Summary

Test Requested : Please refer to the result summary (Test parameter(s) was/were selected by client).

Result Summary:

Test Requested	Conclusion
- Tetrabromobisphenol A (TBBP-A)	See result

Remark: Test results in this report are applicable for the item tested and reflects the tested sample as received.

**Signed for and on behalf of
SGS (Thailand) Limited**

**Rutchuporn Moungsom
Laboratory manager - Toy and Hardgood**

3525193

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.
Publish or advertisement of the result or this document is prohibited, unless prior written approval of the Company.
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only."
WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted.

TEST RESULTS

Tetrabromobisphenol A

Method: With reference to Global SOP RSTS-E&E-121(2012). Analysis was performed by LC/MS.

Test Item(s)	Unit	MDL	Result (1)
Tetrabromobisphenol A (TBBP-A) (CAS No.: 79-94-7)	mg/kg	10	n.d.

Sample Description :

1. Brown sheet

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

2. n.d. = Not Detected = less than MDL

3. MDL = Method Detection Limit

4. The test item was performed by SGS Taiwan Ltd.

3525193

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

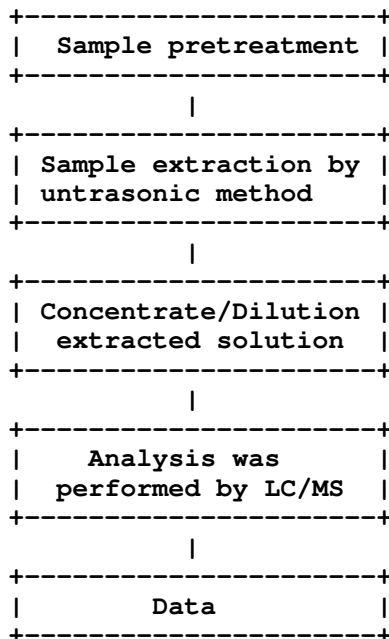
Publish or advertisement of the result or this document is prohibited, unless prior written approval of the Company.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted.

TBBP-A Analytical Flow chart

- 1) Technician: Yaling Tu
- 2) Supervisor: Troy Chang



3525193

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request.
 Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.
 Publish or advertisement of the result or this document is prohibited, unless prior written approval of the Company.
 Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
 WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted.

SAMPLE/ATTACHMENT PICTURE



***** End of Report *****

3525193

*This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law."
Publish or advertisement of the result or this document is prohibited, unless prior written approval of the Company.
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only."
WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted.*