

Penfibre Sdn.Bhd-Film Division  
Lot 128-130, Prai Free Industrial Zone 1, 13600, Prai Penang, Malaysia

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

Sample Description : Lumirror PET Film - W10

Sample Receiving Date : 23-Dec-2008  
Testing Period : 26-Dec-2008 to 31-Dec-2008

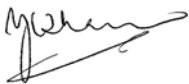
Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

---

Test Result(s) : Please refer to next page(s).

Conclusion : Based on the performed tests on submitted sample(s), the results **comply with** the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of  
SGS Testing & Control Services Singapore Pte Ltd



---

Y.C. Tham  
Laboratory Manager

Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). 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. 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. 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. This document cannot be reproduced except in full, without prior approval of the Company.

**Test Result(s):**

Sample Description : Lumirror PET Film - W10

Test Item(s):	Unit	Method	Results	MDL	RoHS Limit
Cadmium(Cd)	mg/kg	With reference to IEC62321:2008. Analysis was performed by ICP/AES	n.d.	2	100
Lead (Pb)	mg/kg	With reference to IEC62321:2008. Analysis was performed by ICP/AES	n.d.	2	1000
Mercury (Hg)	mg/kg	With reference to IEC62321:2008. Analysis was performed by ICP/AES	n.d.	2	1000
Hexavalent Chromium (CrVI)	mg/kg	With reference to IEC62321:2008. Analysis was performed by UV/Vis Spectrometry	n.d.	2	1000
<b>Sum of PBBs</b>	mg/kg	With reference to IEC 62321:2008. Analysis was performed by GC/MS	<b>n.d.</b>	-	1000
Monobromobiphenyl	mg/kg		n.d.	5	-
Dibromobiphenyl	mg/kg		n.d.	5	-
Tribromobiphenyl	mg/kg		n.d.	5	-
Tetrabromobiphenyl	mg/kg		n.d.	5	-
Hexabromobiphenyl	mg/kg		n.d.	5	-
Pentabromobiphenyl	mg/kg		n.d.	5	-
Heptabromobiphenyl	mg/kg		n.d.	5	-
Octabromobiphenyl	mg/kg		n.d.	5	-
Nonabromobiphenyl	mg/kg		n.d.	5	-
Decabromobiphenyl	mg/kg		n.d.	5	-
<b>Sum of PBDEs</b>	mg/kg		<b>n.d.</b>	-	1000
Monobromodiphenyl ether	mg/kg		n.d.	5	-
Dibromodiphenyl ether	mg/kg		n.d.	5	-
Tribromodiphenyl ether	mg/kg		n.d.	5	-
Tetrabromodiphenyl ether	mg/kg		n.d.	5	-
Pentabromodiphenyl ether	mg/kg		n.d.	5	-
Hexabromodiphenyl ether	mg/kg		n.d.	5	-
Heptabromodiphenyl ether	mg/kg		n.d.	5	-
Octabromodiphenyl ether	mg/kg		n.d.	5	-
Nonabromodiphenyl ether	mg/kg	n.d.	5	-	
Decabromodiphenyl ether ##	mg/kg	n.d.	5	-	

Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). 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. 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. 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. This document cannot be reproduced except in full, without prior approval of the Company.

- Note:
- (1) mg/kg = ppm ; 0.1wt% = 1000ppm
  - (2) n.d.= Not Detected
  - (3) MDL = Method Detection Limit
  - (4) ## = The exemption of DecaBDE in polymeric application according 2005/717/EC was overruled by the European Court of Justice by its decision of 01.04.2008. Subsequently DecaBDE will be included in the sum of PBDE after 01.07.2008.
  - (5) "-" = Not regulated
  - (6) \* : Exceeds limit

Remarks: Sample received was totally dissolved by preconditioning method.  
 Lab Analyst(s): Ray and Jay

**Sample photo:**

Sample Description : Lumirror PET Film - W10

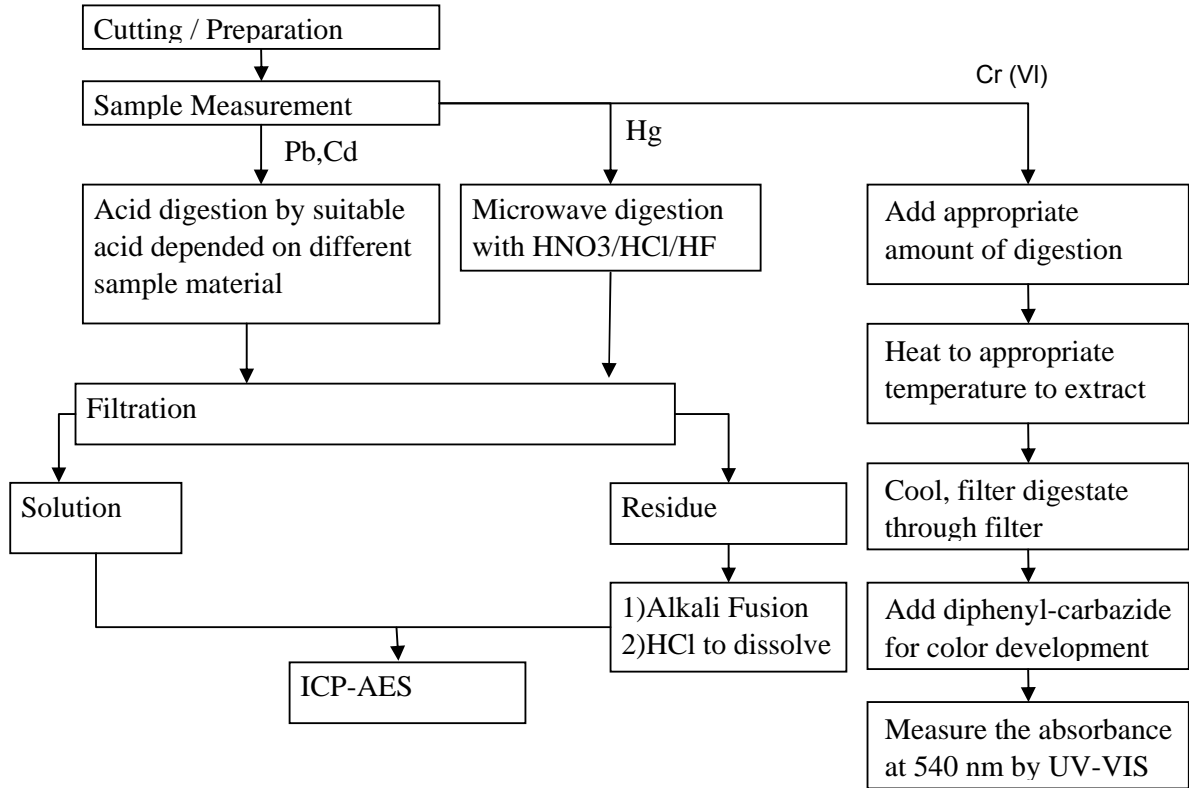
SGS authenticate the photo on original report only



Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). 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. 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. 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. This document cannot be reproduced except in full, without prior approval of the Company.

**Process Flow of IEC 62321 (Pb, Cd, Hg & Cr<sup>6+</sup>)**

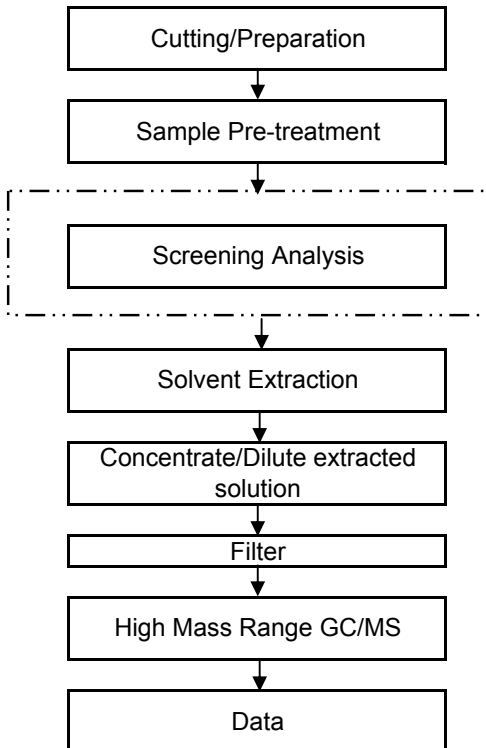


Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). 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. 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. 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. This document cannot be reproduced except in full, without prior approval of the Company.

**Process Flow of PBBs and PBDEs by GC/MS (IEC 62321)**

First Testing Process → Optional screen process ..... Confirmation process ...→



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

Test Location: 26 Ayer Rajah Crescent, #07-07, Singapore 139944

This document is issued by the Company under its General Conditions of Service accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). 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. 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. 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. This document cannot be reproduced except in full, without prior approval of the Company.