



Test Report

No.: SZTYR040407622/LP

Date: APR 16, 2004

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EPAK MULTI PRODUCTS FACTORY
JIAN LONG TONG FU YU INDUSTRIAL ESTATE,
HENG GANG, SHENZHEN CITY, CHINA

Report on the submitted packaging samples said to be MPPO TRAY

Sample Receiving Date APR 13, 2004
Testing Period APR 13, 2004 TO APR 16, 2004

Test Requested To determine Total Lead, Cadmium, Mercury and Hexavalent Chromium content in the submitted packaging samples.

Test Method Analysis was performed by Inductively Coupled Plasma Atomic Emission Spectrometer.

Results Please refer to next page.

Conclusion The Total Lead, Cadmium, Mercury and Hexavalent Chromium content in the submitted packaging samples comply with the requirement of European Council Directive 94/62/EC – Article 11 that effective from June 2001.

Signed for and on behalf of
SGS-CSTC Ltd.



Zhang Yanzheng, Helen
Section Manager

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Results:

	Dk. grey plastics (Tray)
Lead [Pb]	2
Cadmium [Cd]	< 2
Mercury [Hg]	< 2
Chromium [Cr]	6
Total [Pb + Cd + Cr (VI) + Hg]	< 13
Total Limit	100

Note: - < = Less than

- The unit of results is mg per kg
- Results shown are of total weight of dry samples

*** End of Report ***

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e.PAK TRAY MATERIAL TECHNICAL DATA SHEET

Material Code : eP13

Description : eP13 is specifically made for packaging products used to protect semiconductor components. eP13 is compounded using a polyphenylene base material impregnated with carbon fiber in order to provide permanent ESD protection for highly sensitive electronic devices. eP13 is capable of resisting temperatures up to 140°C.

Based Resin : Modified polyphenylene oxide (MPPO)

<u>MECHANICAL</u>	<u>ASTM</u>	<u>AVERAGE VALUE</u>
Specific Gravity	D-792	1.34
Molding Shrinkage	D-955	0.3% to 0.4%
Water Absorption	D-570	0.09%
Tensile Elongation	D-638	2% to 3.0%
Tensile Strength	D-638	880 kgf/cm ²
Tensile Modulus	D-638	84090 kgf/cm ²
Flexural Strength	D-790	900 kgf/cm ²
Flexural Modulus	D-790	6450 kgf/cm ²
IZOD Impact Strength Notched(1/8")	D-256	50J/m
IZOD Impact Strength Unnotched	D-256	168J/m
 <u>ELECTRICAL</u>		
Surface Resistivity	D-257	10 ⁵ to 10 ¹¹ ohms/sq.
Volume Resistivity	D-257	10 ³ to 10 ⁶ ohm-cm.
 <u>THERMAL</u>		
H.D.T. @ 264 PSI	D-648	155°C

● Values presented are typical laboratory data.