

Certificate of non-use of The Controlled Substances

Company name	Littelfuse, LP (Subsidiary of Littelfuse, Inc.)
Product Covered	Thyristor TO-251 Package (V-PAK) Thyristor TO-252 Package (D-PAK)
Issue Date	August 12, 2010

It is hereby certified by Littelfuse, LP, that there is neither RoHS (EU Directive 2002/95/EC)-restricted substance nor such use, for materials to be used for unit parts, for packing/packaging materials, and for additives and the like in the manufacturing processes. In addition, it is hereby reported to you that the parts and sub-materials, the materials to be used for unit parts, the packing/packaging materials, and the additives and the like in the manufacturing processes, are all composed of the following components.

Issued by

Koichiro Yoshimoto, Senior Product Engineer, Littelfuse, L.P.

(1) Parts, sub-materials and unit parts

This document covers Thyristor TO-251 Package (V-PAK) and TO-252 Package (D-PAK) supplied by Littelfuse, LP. Actual values in this report are taken from Q8004D4 and the result is generally applicable to all Thyristor TO-251 Package (V-PAK) and TO-252 Package (D-PAK) supplied by Littelfuse, LP.

Please see page 2 & 3 for the complete list of part number covered by this report.

<Homogeneous Materials used>

Please see figure and table 1 on page 4 and table 2 on page 4 of this document.

(2) The analytical data on all measurable substances
 Please see annex 1 through 6, attached to this document

Remarks :

1. Pb (lead) contained in die bonding solder (item 8 on page 4) and passivation glass (item 7) to be categorized as exempt in RoHS Annex 5 and 7.

Please refer to Annex 7 of this report for the extract of the applicable exemptions of RoHS (EU Directive 2002/95/EC)



Littelfuse Part Number covered by this report (1/2)

TO-261 V Package

		Standard (Ca	atalog) Part Nu	mber		
L2004V3	LTV04-800T	S2004VS1	SK006V	SUFFIX FOR PACKING STYLE		
L2004V5	LTV08-600BH	S2004VS2	SK008V			
L2004V6	LTV08-600B	S2006VS2	SK010V	Any Part Number listed in this table is followed by RP or TP for packing style.		
L2004V8	LTV08-600CH	S2006VS3	SK012V			
L2006V5	LTV08-600C	S2006V				
L2006V6	LTV08-600SH	S2008VS2				
L2006V8	LTV08-600S	S2008VS3		SPECIAL DEVICE P/N		
L2008V6	LTV08-600TH	S2008V		Any Special P/N that has base standard P/N listed in this table.		
L2008V8	LTV08-600T	S2010VS2				
L4004V3	LTV08-800BH	S2010VS3		standard P/N listed in this table.		
L4004V5	LTV08-800B	S2010V				
L4004V6	LTV08-800CH	S2012V				
L4004V8	LTV08-800C	S4004VS1				
L4006V5	LTV08-800SH	S4004VS2				
L4006V6	LTV08-800S	S4006VS2				
L4006V8	LTV08-800TH	S4006VS3				
L4008V6	LTV08-800T	S4006V				
L4008V8		S4008VS2				
L6004V3		S4008VS3				
L6004V5	Q2004V3	S4008V				
L6004V6	Q2004V4	S4010VS2				
L6004V8	Q4004V3	S4010VS3				
L6006V5	Q4004V4	S4010V				
L6006V6	Q4006VH3	S4012V				
L6006V8	Q4006VH4	S6004VS1				
L6008V6	Q4008VH3	S6004VS2				
L6008V8	Q4008VH4	S6006VS2				
	Q6004V3	S6006VS3				
	Q6004V4	S6006V				
LTV04-600CH	Q6006VH3	S6008VS2				
LTV04-600C	Q6006VH4	S6008VS3				
LTV04-600SH	Q6008VH3	S6008V				
LTV04-600S	Q6008VH4	S6010VS2				
LTV04-600TH	Q8004V4	S6010VS3				
LTV04-600T	Q8006VH4	S6010V				
LTV04-800CH	Q8008VH4	S6012V				
LTV04-800C	QK004V4	S8006V				
LTV04-800SH	QK006VH4	S8008V				
LTV04-800S	QK008VH4	S8010V				
LTV04-800TH		S8012V				

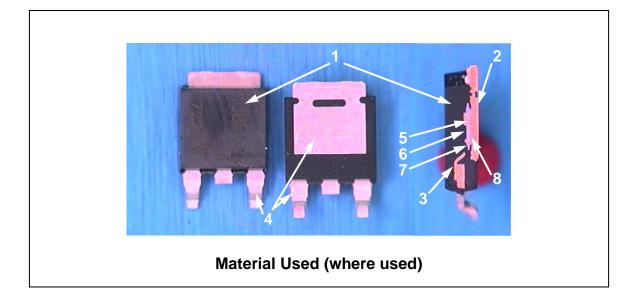


Littelfuse Part Number covered by this report (2/2)

TO-262 D Package

			italog) Part Nu	mber		
L2004D3	LTD04-800TH			SUFFIX FOR PACKING STYLE		
L2004D5	LTD08-600B	S2004DS2	SK008D			
L2004D6	LTD08-600BH	S2006D	SK010D	Any Part Number listed in this		
L2004D8	LTD08-600C	S2006DS2	SK012D	table is followed by RP or TP		
L2004D0	LTD08-600CH	S2006DS2	51(0120			
L2006D6	LTD08-600S	S2000D33		for packing style.		
L2006D8	LTD08-600SH	S2008DS2		SPECIAL DEVICE P/N		
L2008D8	LTD08-600T	S2008DS2		Any Special P/N that has base		
L2008D8	LTD08-600TH	S2000D33				
L2008D8	LTD08-800B	S2010D S2010DS2		standard P/N listed in this table.		
L4004D5	LTD08-800BH	S2010DS3				
L4004D6	LTD08-800C	S2012D				
L4004D8	LTD08-800CH	S4004DS1				
L4006D5	LTD08-800S	S4004DS2				
L4006D6	LTD08-800SH	S4006D				
L4006D8	LTD08-800T	S4006DS2				
L4008D6	LTD08-800TH	S4006DS3				
L4008D8		S4008D				
L6004D3		S4008DS2				
L6004D5	Q2004D3	S4008DS3				
L6004D6	Q2004D4	S4010D				
L6004D8	Q4004D3	S4010DS2				
L6006D5	Q4004D4	S4010DS3				
L6006D6	Q4006DH3	S4012D				
L6006D8	Q4006DH4	S6004DS1				
L6008D6	Q4008DH3	S6004DS2				
L6008D8	Q4008DH4	S6006D				
	Q6004D3	S6006DS2				
	Q6004D4	S6006DS3				
LTD04-600C	Q6006DH3	S6008D				
LTD04-600CH	Q6006DH4	S6008DS2				
LTD04-600S	Q6008DH3	S6008DS3				
LTD04-600SH	Q6008DH4	S6010D				
LTD04-600T	Q8004D4	S6010DS2				
LTD04-600TH	Q8006DH4	S6010DS3				
LTD04-800C	Q8008DH4	S6012D				
LTD04-800CH	QK004D4	S8006D				
LTD04-800S	QK006DH4	S8008D				
LTD04-800SH	QK008DH4	S8010D				
LTD04-800T		S8012D				





#	Description	Name of Material	Туре	Analysis data
1	Molding compound	epoxy resin	plastic	annex 1
2	Lead frame	ooppor allow	metal	annex 2
3	Preform (clip)	copper alloy	metai	
4	Matte-Tin plating	Tin	metal	annex 3
5	Silicon die	silicon	metal	annov 4 tostad as Niekal platad wafar
6	Nickel electrode	nickel	metal	annex 4, tested as Nickel-plated wafer.
7	Passivation glass	glass	glass	annex 5. Pb in this glass is exempted by RoHS Annex 7.
8	Die bonding solder	solder	metal	annex 6. Pb in this solder is exempted by RoHS Annex 5.

Table 1: Homogeneous Material Used



Expertise Applied | Answers Delivered

Components	Analysis Result					
	Cd Cadmium	Cr Chromium	Hg Mercury	Pb Lead	PBB	PBDE
As Component Total (Values of Q8004D4 * ¹ , as representative of Thyristor TO-251 & TO-252 Package)	< 2ppm	< 2ppm	< 2ppm	<10 ppm* ² (1.5% ^{*3})	< 5 ppm	< 5 ppm
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	< 2ppm	< 2ppm	< 2ppm	< 2ppm	< 5ppm	<5 ppm
Lead frame / Preform (Copper Alloy, KFC) See Annex 2 for the detail.	< 2ppm	< 2ppm	< 2ppm	< 2ppm	< 5ppm	<5 ppm
Outside lead finish (Matte-Tin plated, Sn 100%) See Annex 3 for the detail.	< 2ppm	< 2ppm	< 2ppm	<2ppm	< 5ppm	<5 ppm
Silicon Die (Silicon + Ni electrode) See Annex 4 for the detail.	< 2ppm	< 2ppm	< 2ppm	<2ppm	< 5ppm	<5 ppm
Passivation Glass See Annex 5 for the detail.	< 2ppm	< 2ppm	< 2ppm	40% *4	< 5ppm	<5 ppm
Die Bonding Solder (Pb=92.5%) See Annex 6 for the detail.	< 2ppm	< 2ppm	< 2ppm	92.5% ^{*5}	< 5ppm	<5 ppm

- *1 Other products may contain equal or less amount of Pb as Q8004D4 value shown here, but not more than the value shown here.
- *2 Less than 10ppm Pb content overall, excluding Pb from the die bonding solder and the passivation glass on the silicon die.
- *3 1.5wt% or 5mg of Pb (lead) content overall, including the RoHS-exempted use of Pb
- *4 Pb (lead) contained in passivation glass is exempted from restriction by RoHS Annex 5.
- *5 Pb (lead) contained in die bonding solder is exempted from restriction by RoHS Annex 7, first item.

Please refer to Annex 7 of this report for the applicable exemptions of RoHS (EU Directive 2002/95/EC)

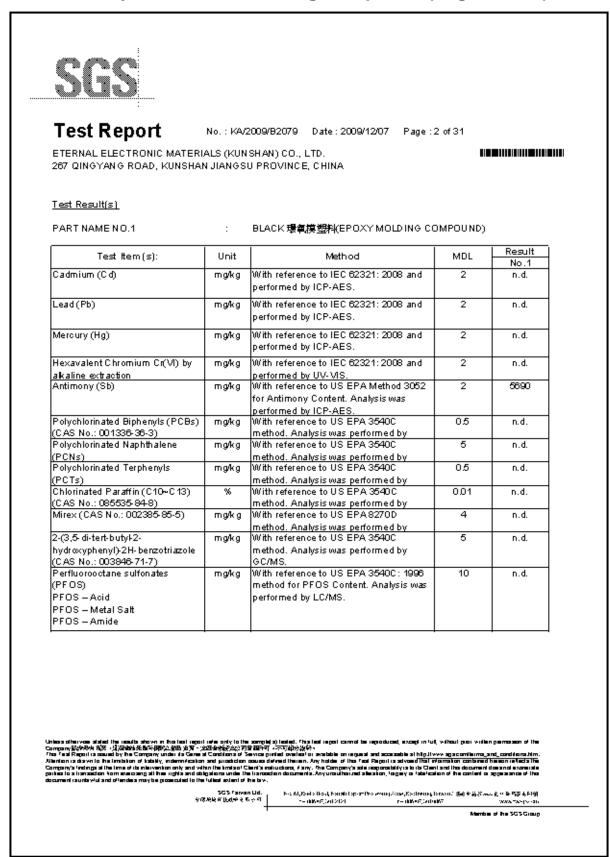


Annex 1: Analysis Result of Molding Compound (Page 1 of 31)

SAS		
Test Report	No. : KA/20	009/B2079 Date:2009/12/07 Page:1 of 31
ETERNAL ELECTRONIC MAT 267 QINGYANG ROAD, KUNS		•
The following sample(s) was	:/were submitte	d and identified by/on behalf of the client as :
Sample Description Style/Item No. Sample Receiving Date	: 6	環氧模塑料(EPOXY MOLDING COMPOUND) ETERKON EK-1800 2009/11/30
Sample Receiving Date Testing Period	•	2009/11/30 2009/11/30 T.O. 2009/12/07
Test Result(s)	:	Please refer to next page(s).
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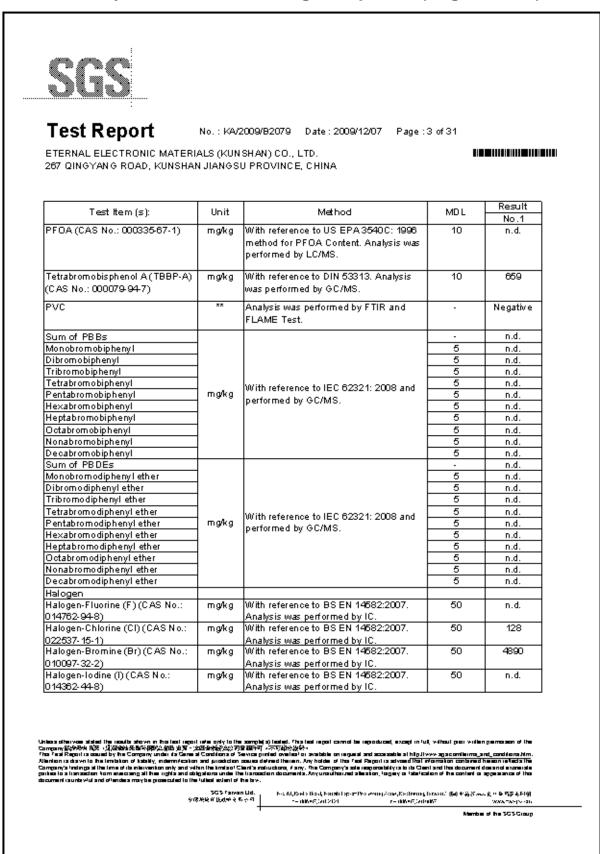


Annex 1: Analysis Result of Molding Compound (Page 2 of 31)





Annex 1: Analysis Result of Molding Compound (Page 3 of 31)





Annex 1: Analysis Result of Molding Compound (Page 4 of 31)



Test Report

No. : KA/2009/B2079 Date : 2009/12/07 Page : 4 of 31

ETERNAL ELECTRONIC MATERIALS (KUNSHAN) CO., LTD. 267 QINGYANG ROAD, KUNSHAN JIANGSU PROVINCE, CHINA

	Unit	Method	MDL	Result
Test Item(s):	01111	manoa		No.1
Phthalates				
BBP (Benzyl butyl phthalate)	%	With reference to EN 14372. Analysis	0.003	n.d.
(CAS No.: 000085-68-7)		was performed by GC/MS.		
DEHP (D+ (2-ethylhexyl)	%	With reference to EN 14372. Analysis	0.003	n.d.
phthalate) (CAS No.: 000117-81-		was performed by GC/MS.		
DIDP (Di-isodecyl phthalate) (CAS	%	With reference to EN 14372. Analysis	0.01	n.d.
No.: 026761-40-0)		was performed by GC/MS.		
DINP (Di-isononyl phthalate) (CAS	%	With reference to EN 14372. Analysis	0.01	n.d.
No.: 028553-12-0)		was performed by GC/MS.		
DNOP (Di-n-octyl phthalate) (CAS	%	With reference to EN 14372. Analysis	0.003	n.d.
No.: 000117-84-0)		was performed by GC/MS.		
DBP (Dibutyl phthalate) (CAS No.:	%	With reference to EN 14372. Analysis	0.003	n.d.
000084742)		was performed by GC/MS.		
DNHP (Di-n-hexyl phthalate) (CAS	%	With reference to EN 14372. Analysis	0.003	n.d.
No.: 00008475-3)		was performed by GC/MS.		
CFC's (Chlorofluorocarbons)				
Group I				n.d.
Chlorofluorocarbon-11 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
000075-69-4)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-12 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
000075-71-8)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-113 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
000076-13-1)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-114(CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
000076-14-2)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-115 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
000076-15-3)		Analysis was performed by GC/MS.		
Group III				n.d.
Chlorofluorocarbon-13 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
000075-72-9)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-111 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
000354-56-3)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-112 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
000076-12-0)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-211 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.	•	1
000422-78-6)				

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Annex 1: Analysis Result of Molding Compound (Page 5 of 31)



Test Report

No.: KA/2009/B2079 Date: 2009/12/07 Page: 5 of 31

ETERNAL ELECTRONIC MATERIALS (KUNSHAN) CO., LTD. 267 QINGYANG ROAD, KUNSHAN JIANGSU PROVINCE, CHINA

Test Item (s):	Unit	Method	MDL	Result
reschen (s).	OTHE	Method	MDL	No.1
Chlorofluorocarbon-212 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
003182-26-1)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-213 (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
002354-06-5)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-214(CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
029255-31-0)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-215 (CAS No.:	mgkg	With reference to US EPA 5021 method.	1	n.d.
004259-43-2)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-216 (CAS No.:	mgkg	With reference to US EPA 5021 method.	1	n.d.
000661-97-2)		Analysis was performed by GC/MS.		
Chlorofluorocarbon-217 (CAS No.:	mgkg	With reference to US EPA 5021 method.	1	n.d.
000422-88-6)		Analysis was performed by GC/MS.		
Halons				
Halon-1211	mg/kg	With reference to US EPA 5021 method.	1	n.d.
(CAS No.: 000353-59-3)	•••	Analysis was performed by GC/MS.		
Halon-1301	mgkg	With reference to US EPA 5021 method.	1	n.d.
(CAS No.: 000075-63-8)		Analysis was performed by GC/MS.		
Halon-2402	mg/kg	With reference to US EPA 5021 method.	1	n.d.
(CAS No.: 000124-73-2)		Analysis was performed by GC/MS.		
HCFCs				
HCFC-21 (CAS No.:000075-43-4)	mgkg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HCFC-22 (CAS No.:000075-45-6)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HCFC-31 (CAS No.:000593-70-4)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
-		Analysis was performed by GC/MS.		
HC FC-121 (CAS No.: 000354-14	mg/kg	With reference to US EPA 5021 method.	1	n.d.
3) .		Analysis was performed by GC/MS.		
HC FC-122 (CAS No.: 000354-21-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
2) .		Analysis was performed by GC/MS.		
HC FC-123 (CAS No.: 000306-83-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
2)		Analysis was performed by GC/MS.		

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Annex 1: Analysis Result of Molding Compound (Page 6 of 31)



Test Report

No.: KA/2009/B2079 Date: 2009/12/07 Page: 6 of 31

51

ETERNAL ELECTRONIC MATERIALS (KUNSHAN) CO., LTD. 267 QINGYANG ROAD, KUNSHAN JIANGSU PROVINCE, CHINA

Toot Hope (a)	Unit	Method	MDL	Result
Test Item (s):		Method	MDL	No.1
HCFC-124 (CAS No.: 002837-89-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
)		Analysis was performed by GC/MS.		
HCFC-131 (CAS No.: 000359-28-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
4)		Analysis was performed by GC/MS.		
HCFC-132b (CAS No.: 001649-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
08-7)		Analysis was performed by GC/MS.		
HCFC-133a (CAS No.: 000075-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
38-7)		Analysis was performed by GC/MS.		
HC FC- 1415 (CAS No.: 001717-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
00-6)		Analysis was performed by GC/MS.		
HCFC-142b (CAS No.: 000075-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
38-3) `		Analysis was performed by GC/MS.		
HCFC-221 (CAS No.: 000422-26-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
4)		Analysis was performed by GC/MS.		
HCFC-222 (CASNo.: 000422-49-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
1)		Analysis was performed by GC/MS.		
HCFC-223 (CAS No.: 000422-52-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
3)		Analysis was performed by GC/MS.		
HCFC-224 (CAS No.: 000422-54	mg/kg	With reference to US EPA 5021 method.	1	n.d.
3)		Analysis was performed by GC/MS.		
HCFC-225ca (CAS No.: 000422-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
56-0)		Analysis was performed by GC/MS.		
HCFC-225cb (CAS No.: 000507-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
55-1)		Analysis was performed by GC/MS.		
HCFC-226 (CAS No.: 000431-87-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
3)		Analysis was performed by GC/MS.		
HCFC-231 (CAS No.: 000421-94	mg/kg	With reference to US EPA 5021 method.	1	n.d.
3)		Analysis was performed by GC/MS.		
HCFC-232 (CAS No.: 000460-89-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
9)		Analysis was performed by GC/MS.	•	1
HCFC-233 (CAS No.: 007 125-84-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
))		Analysis was performed by GC/MS.	•	

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Annex 1: Analysis Result of Molding Compound (Page 7 of 31)



Test Report

No.: KA/2009/B2079 Date: 2009/12/07 Page: 7 of 31

ETERNAL ELECTRONIC MATERIALS (KUNSHAN) CO., LTD. 267 QINGYANG ROAD, KUNSHAN JIANGSU PROVINCE, CHINA

Test Item (s):	Unit	Method	MDL	Result
rest item (s):	Unit	Merroo	MDL	No.1
HCFC-234 (CASNo.: 000425-94-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
5)		Analysis was performed by GC/MS.		
HCFC-235 (CAS No.: 000460-92-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
4)		Analysis was performed by GC/MS.		
HCFC-241(CASNo.: 000666-27-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
3)		Analysis was performed by GC/MS.		
HCFC-242 (CAS No.: 000460-69-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
3)		Analysis was performed by GC/MS.		
HCFC-243 (CAS No.: 000460-69-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
5)		Analysis was performed by GC/MS.		
HCFC-244	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HCFC-251 (CAS No.: 000421-41-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
0)		Analysis was performed by GC/MS.		
HCFC-252 (CAS No.: 000819-00-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
1)		Analysis was performed by GC/MS.		
HCFC-253 (CAS No.: 000460-35-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
3)		Analysis was performed by GC/MS.		
HCFC-261 (CAS No.: 000420-97-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
3)		Analysis was performed by GC/MS.		
HCFC-262 (CAS No.: 000420-99-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
5)		Analysis was performed by GC/MS.		
HCFC-271 (CAS No.: 000430-55-	mg/kg	With reference to US EPA 5021 method.	1	n.d.
7)		Analysis was performed by GC/MS.		
HBFCs				
HBFC-21B2 (CHF Br2) (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
001868-53-7)		Analysis was performed by GC/MS.		
HBFC-22B1 (CHF2Br) (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
001511-62-2)		Analysis was performed by GC/MS.		

Unices charves stated the results shown in the lead report reference of the lead report cannot be reported at a spectral provided provided and the second statement of the company Style Alex (其) State Alex (我们 2014) (Alex 2014) (Alex



Annex 1: Analysis Result of Molding Compound (Page 8 of 31)



Test Report

No.: KA/2009/B2079 Date: 2009/12/07 Page: 8 of 31

ETERNAL ELECTRONIC MATERIALS (KUNSHAN) CO., LTD. 267 QINGYANG ROAD, KUNSHAN JIANGSU PROVINCE, CHINA

Test Item (s):	Unit	Method	MDL	Result
reschenn(s).	Onit	METIOO	MDL	No.1
HBFC-31B1 (CH2FBr) (CAS No.:	mg/kg	With reference to US EPA 5021 method.	1	n.d.
000373-52-4)		Analysis was performed by GC/MS.		
HBFC-121B4(C2HFBr4)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-122B3 (C2HF2Br3)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-123B2 (C2HF3Br2)	mg/kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-124B1 (C2HF4Br)	mg∕kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-131B3 (C2H2FBr3)	mg∕kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-132B2 (C2H2F2Br2)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
· · ·		Analysis was performed by GC/MS.		
HBFC-133B1 (C2H2F3Br)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
· · ·		Analysis was performed by GC/MS.		
HBFC-14182 (C2H3FBr2)	mg/kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-142B1 (C2H3F2Br)	mg/kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-151B1 (C2H4FBr)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
· · · ·		Analysis was performed by GC/MS.		
HBFC-22186 (C3HFBr6)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
. ,		Analysis was performed by GC/MS.		
HBFC-22285 (C3HF2Br5)	mg/kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-223B4 (C3HF3Br4)	mg/kg	With reference to US EPA5021 method.	1	n.d.
,	2.0	Analysis was performed by GC/MS.		
HBFC-224B3 (C3HF4Br3)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
,,	2.0	Analysis was performed by GC/MS.		
HBFC-225B2 (C3HF5Br2)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
· · ·	v °	Analysis was performed by GC/MS.		

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Annex 1: Analysis Result of Molding Compound (Page 9 of 31)



Test Report

No.: KA/2009/B2079 Date: 2009/12/07 Page: 9 of 31

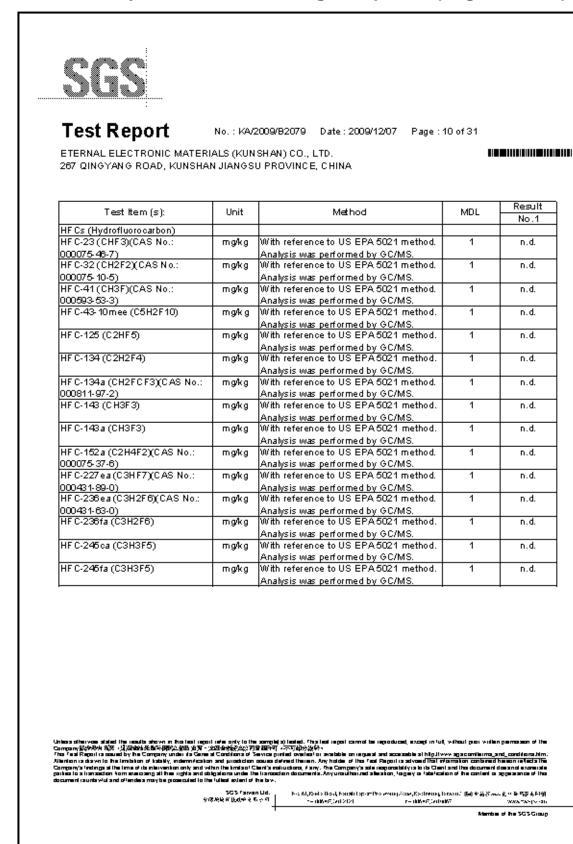
ETERNAL ELECTRONIC MATERIALS (KUNSHAN) CO., LTD. 267 QINGYANG ROAD, KUNSHAN JIANGSU PROVINCE, CHINA

Test Item (s):	Unit	Method	MDL	Result
reschem (s).	Onit	Method	MDL	No.1
HBFC-226B1(C3HF6Br)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-23185 (C3H2FBr5)	mg/kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-232B4(C3H2F2Br4)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-233B3 (C3H2F3Br3)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-234B2 (C3H2F4Br2)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-235B1 (C3H2F5Br)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-241B4 (C3H3FBr4)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-242B3 (C3H3F2Br3)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-243B2 (C3H3F3Br2)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-244B1 (C3H3F4Br)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-251B3 (C3H4F Br3)	mg/kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-252B2 (C3H4F2Br2)	mg/kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-253B1 (C3H4F3Br)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-261B2 (C3H5F Br2)	mg/kg	With reference to US EPA5021 method.	1	n.d.
		Analysis was performed by GC/MS.		
HBFC-262B1 (C3H5F2Br)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
· · ·		Analysis was performed by GC/MS.		
HBFC-271B1(C3H6FBr)	mg/kg	With reference to US EPA 5021 method.	1	n.d.
		Analysis was performed by GC/MS.		1

Unices charves stated the results shown in the lead report reference of the lead report cannot be reported at a spectral provided provided and the second statement of the company Style Alex (其) State Alex (我们 2014) (Alex 2014) (Alex

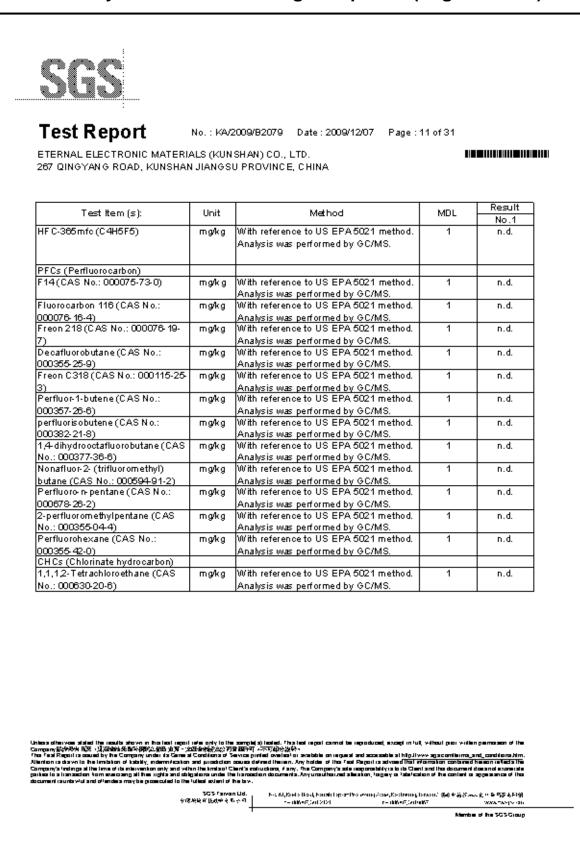


Annex 1: Analysis Result of Molding Compound (Page 10 of 31)



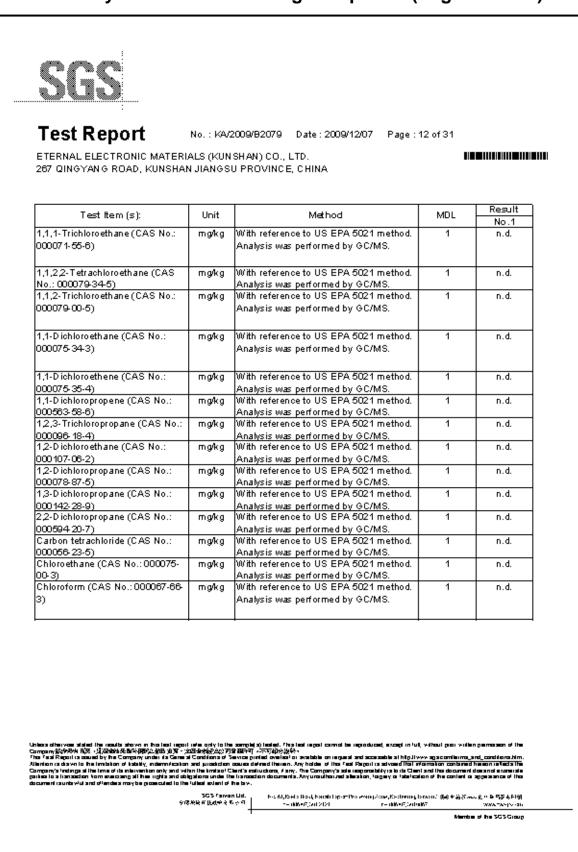


Annex 1: Analysis Result of Molding Compound (Page 11 of 31)



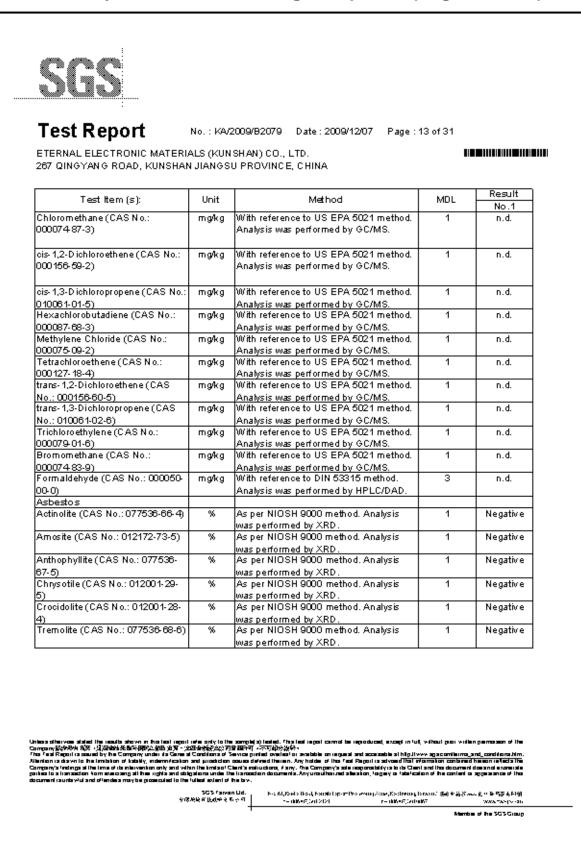


Annex 1: Analysis Result of Molding Compound (Page 12 of 31)





Annex 1: Analysis Result of Molding Compound (Page 13 of 31)





Annex 1: Analysis Result of Molding Compound (Page 14 of 31)



Test Report

No.: KA/2009/B2079 Date: 2009/12/07 Page: 14 of 31

: 14 of 31

ETERNAL ELECTRONIC MATERIALS (KUNSHAN) CO., LTD. 267 QINGYANG ROAD, KUNSHAN JIANGSU PROVINCE, CHINA

Test Item (s):	Unit	Method	MDL	Resul
				No.1
AZO				<u> </u>
1): 4 AMINOD IPHENYL (CAS	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
No.: 000092-67-1)		Analysis was performed by GC/MS.	<u> </u>	<u> </u>
2): BENZIDINE (CAS No.: 00092-	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
87-5)		Analysis was performed by GC/MS.		<u> </u>
3): 4 CHLORO- O- TOLUIDINE	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
(CAS No.: 000095-69-2)		Analysis was performed by GC/MS.		<u> </u>
4): 2-NAPHTHYLAMINE (CAS	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
No.: 000091-59-8)		Analysis was performed by GC/MS.		<u> </u>
5): O-AMINOAZOTOLUENE (CAS	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
No.: 000097-56-3)		Analysis was performed by GC/MS.		
6): 2-AMINO-4 NÍTROTOLUENE	mg/kg	With reference to LMBG \$2.02-2.	3	n.d.
(CAS No.: 000099-55-8)		Analysis was performed by GC/MS.		
7): P-CHLOROANILINE (CAS	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
No.: 000106-47-8)		Analysis was performed by GC/MS.		
8): 2,4-DIAMINOANISOLE (CAS	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
No.: 000615-05-4)		Analysis was performed by GC/MS.		
9): 4,4'-	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
DIAMINODIPHENYLMETHANE		Analysis was performed by GC/MS.		
(CAS No.: 000101-77-9)				
10): 3,3-DICHLOROBENZIDINE	maka	With reference to LMBG 82.02-2.	3	n.d.
(CAS No.: 000091-94-1)		Analysis was performed by GC/MS.		
11): 3,3-DIMETHOXYBENZIDINE	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
(CAS No.: 000119-90-4)	~ ~	Analysis was performed by GC/MS.		
12): 3.3-DIMETHYLBENZIDINE	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
(CAS No.: 000119-93-7)		Analysis was performed by GC/MS.	-	
- 13): 3,3-DIMETHYL-4,4-	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
DIAMINODIPHENYLMETHANE	mgweg	Analysis was performed by GC/MS.		n.u.
		Analysis was performed by GC/MS.		
(CAS No.: 000838-88-0) 14): P-CRESIDINE (2-METHOXY-	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
5-METHYLANILINE) (CAS No.:	тужд		3	^{n.a.}
		Analysis was performed by GC/MS.		
000120-71-8) 15): 4,4-METHYLENE-BIS- (2-	malka	With reference to LMBG 82.02-2.	3	n.d.
	mg/kg		3	^{n.a.}
CHLOROANILINE) (CAS No.:		Analysis was performed by GC/MS.		
000101-14-4)			<u> </u>	<u> </u>
16): 4,4-OXYDIANILINE (CAS	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
No.: 000101-80-4)		Analysis was performed by GC/MS.		<u> </u>
17): 4,4- THIODIANILINE (CAS	mg/kg	With reference to LMBG 82.02-2.	3	n.d.
No.: 000139-65-1)		Analysis was performed by GC/MS.		

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Annex 1: Analysis Result of Molding Compound (Page 15 of 31)



Test Report

No.: KA/2009/B2079 Date: 2009/12/07 Page: 15 of 31

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ETERNAL ELECTRONIC MATERIALS (KUNSHAN) CO., LTD. 267 QINGYANG ROAD, KUNSHAN JIANGSU PROVINCE, CHINA

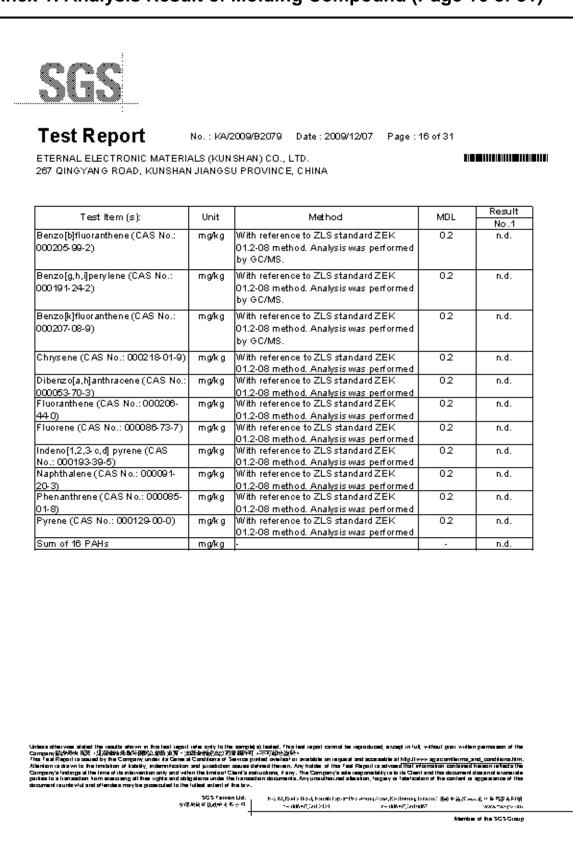
18): 0- TOLUIDINE (CAS No.: m; 000095-53-4) m; 19): 2,4 TOLUYLENEDIAMINE m; (CAS No.: 000095-80-7) 20): 2,4,5-TRIMETHYLANILINE m; (CAS No.: 000137-17-7) 21): 0-ANISIDINE (CAS No.: m; 000090-04-0) 22): P-AMINOAZOBENZENE m; 000090-04-0) 23): 2,4-XYLIDINE (CAS No.: m; 000095-68-1) 24): 2,6-XYLIDINE (CAS No.: m; 000087-62-7) 000087-62-7) 000088-73-3) Triphenyl Tin (TBT) (CAS No.: m; 000688-73-3) m; 000688-73-3) Triphenyl Tin Oxide (TBTO) ^{xxx} m; 000688-34-8) m; 000688-34-9)	nit gkg gkg gkg gkg gkg gkg gkg gkg gkg gk	Method With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Mith reference to LMBG 82.02-2. Mith reference to LMBG 82.02-2. With reference to LMBG 82.02-3. With reference to DIN 38407- 13. Analysis was performed by GC/FPD.	MDL 3 3 3 3 3 3 3 0.03	No.1 n.d. n.d.
000095-53-4) m; 19): 2,4 TOLUYLENEDIAMINE m; (CAS No.: 000095-80-7) 20): 2,4,5 TRIMETHYLANILINE m; (CAS No.: 000137-17-7) 22): 2,4,5 TRIMETHYLANILINE m; (CAS No.: 000137-17-7) 22): 2,4 X00009-04-0) m; 22): P-AMINOAZOBENZENE m; 000090-04-0) 22): 2,4 XYLIDINE (CAS No.: m; 000095-68-1) 24): 2,6 XYLIDINE (CAS No.: m; 000087-62-7) 000087-62-7) 7 Organio-tin compounds m; 000088-73-3) Tributyl Tin (TBT) (CAS No.: m; 000688-73-8) m; 000688-73-8) Tributyl Tin Oxide (TBTO)*** m; 00068-34-8) m; 00068-35-9)	gkg gkg gkg gkg gkg gkg gkg gkg	Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3 3 3 3 3 3 3 0.03	n.d. n.d. n.d. n.d. n.d. n.d. n.d.
19): 2,4 TOLUYLENEDIAMINE m; (CAS No.: 000095-80-7) 20): 2,4,5-TRIMETHYLANILINE m; 20): 2,4,5-TRIMETHYLANILINE m; 20): 2,4,5-TRIMETHYLANILINE m; 21): 0-ANISID INE (CAS No.: m; 000090-04-0) 0 22): P-AMINOAZOBENZENE m; 023): 2,4-XYLIDINE (CAS No.: m; 000095-68-1) 24): 2,6-XYLIDINE (CAS No.: m; 000095-68-7) 000087-62-7) 0 000087-62-7) 000088-73-3) m; 000688-73-3) Tributyl Tin (TBT) (CAS No.: m; 000688-73-8) m; 0 Tributyl Tin 0xide (TBTO)*** m; 0 000683-34-8) m; 0	9 kg 9 kg 9 kg 9 kg 9 kg 9 kg 9 kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 36407-13. Analysis was performed by GC/FPD. With reference to DIN 36407-13. Analysis	3 3 3 3 3 3 0.03	n.d. n.d. n.d. n.d. n.d.
(CAS No.: 000095-80-7) 20): 2,4,5-TRIMETHYLANILINE (CAS No.: 000137-17-7) 21): 0-ANISIDINE (CAS No.: m: 000090-04-0) 22): P-AMINOAZOBENZENE (CAS No.: 000060-09-3) 23): 2,4-XYLIDINE (CAS No.: m: 000095-68-1) 24): 2,6-XYLIDINE (CAS No.: m: 000087-62-7) 0rganio-tin compounds Tributyl Tin (TBT) (CAS No.: m: 000688-73-3) Triphenyl Tin (TphT) (CAS No.: m: 00068-34-8) Tributyl Tin Oxide (TBTO) ⁵⁵⁵ (CAS No.: 000056-35-9)	9 kg 9 kg 9 kg 9 kg 9 kg 9 kg 9 kg	Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3 3 3 3 3 3 0.03	n.d. n.d. n.d. n.d. n.d.
20): 2,4,5-TRIMETHYLÁNILINE m; (CAS No.: 000137-17-7) 21): 0-ANISID INE (CAS No.: m; 21): 0-ANISID INE (CAS No.: m; 000090-04-0) 22): P-AMINOAZOBENZENE m; 22): P-AMINOAZOBENZENE m; 000096-68-1) 23): 2,4-XYLIDINE (CAS No.: m; 000095-68-1) 24): 2,6-XYLIDINE (CAS No.: m; 000087-62-7) 000087-62-7) m; 000088-73-3) Triphenyl Tin (TBT) (CAS No.: m; 000688-84-8) m; 000688-34-8) m; Tributyl Tin Oxide (TBTO)*** m; 00068-35-9) m;	gkg gkg gkg gkg gkg gkg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3 3 3 3 3 0.03	n.d. n.d. n.d. n.d. n.d.
(CAS No.: 000137-17-7) 21): O-ANISIDINE (CAS No.: ms 000090-04-0) 22): P-AMINOAZOBENZENE ms (CAS No.: 000060-09-3) 23): 2,4 XYLIDINE (CAS No.: ms 000095-68-1) 24): 2,6 XYLIDINE (CAS No.: ms 000087-62-7) 0rganio-tin compounds Tributyl Tin (TBT) (CAS No.: ms 000688-73-3) Triphenyl Tin (TphT) (CAS No.: ms 00068-34-8) Tributyl Tin Oxide (TBTO) ^{xxx} ms (CAS No.: 000056-35-9)	gkg gkg gkg gkg gkg gkg	Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3 3 3 3 3 0.03	n.d. n.d. n.d. n.d. n.d.
21): O-ANISIDINE (CAS No.: m; 200090-04-0) m; 22): P-AMINOAZOBENZENE m; 23): 2,4 XYLIDINE (CAS No.: m; 23): 2,4 XYLIDINE (CAS No.: m; 24): 2,6 XYLIDINE (CAS No.: m; 2000087-62-7) 000087-62-7) 000088-73-3) Tributyl Tin (TBT) (CAS No.: m; 000688-73-3) Triphenyl Tin (TphT) (CAS No.: m; 000688-34-8) Tributyl Tin Oxide (TBTO)*** m;	gkg gkg gkg gkg gkg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3 3 0.03	n.d. n.d. n.d.
000090-04-0) ms 22): P-AMINOAZOBENZENE ms (C AS No.: 000060-09-3) 23): 2,4 XYLIDINE (CAS No.: ms 000095-68-1) 24): 2,6 XYLIDINE (CAS No.: ms 000095-68-7) 000087-62-7) 000087-62-7) 000087-62-7) 0000887-63-3) ms 000088-73-3) Tributyl Tin (TBT) (CAS No.: ms 000688-73-3) ms 000688-73-8) Tributyl Tin (TphT) (CAS No.: ms 000688-73-8) ms 00068-34-8) Tributyl Tin Oxide (TBTO)*** ms	gkg gkg gkg gkg gkg	Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3 3 0.03	n.d. n.d. n.d.
22): P-AMINOAZOBENZENE m; (CAS No.: 000060-09-3) 23): 2,4-XYLIDINE (CAS No.: m; 000095-68-1) 24): 2,6-XYLIDINE (CAS No.: m; 000087-62-7) Organio-tin compounds TributyI Tin (TBT) (CAS No.: m; 000688-73-3) TriphenyI Tin (TphT) (CAS No.: m; 000688-73-8) TriphenyI Tin Oxide (TBTO)*** m; (CAS No.: 000056-35-9)	gkg gkg gkg gkg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3 3 0.03	n.d. n.d. n.d.
(CAS No.: 000060-09-3) 23): 2,4 XYLIDINE (CAS No.: 000095-68-1) 24): 2,6 XYLIDINE (CAS No.: 000087-62-7) Organio-tin compounds Tributyl Tin (TBT) (CAS No.: 000688-73-3) Triphenyl Tin (TphT) (CAS No.: 000688-34-8) Tributyl Tin Oxide (TBTO)*** 000688-34-9)	gkg gkg gkg gkg	Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3 3 0.03	n.d. n.d. n.d.
23): 2,4 XYLIDINE (CAS No.: m; 000095-68-1) 24): 2,6 XYLIDINE (CAS No.: m; 000087-62-7) Organietin compounds Tributyl Tin (TBT) (CAS No.: m; 000688-73-3) Triphenyl Tin (TphT) (CAS No.: m; 000668-34-8) Tributyl Tin Oxide (TBTO) ⁵⁵⁵ m; (CAS No.: 000056-35-9)	g/kg g/kg g/kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3	n.d.
000095-68-1) 24): 2,6 XYLIDINE (CAS No.: m: 000087-62-7) Organio-tin compounds Tributyl Tin (TBT) (CAS No.: m: 000688-73-3) Triphenyl Tin (TphT) (CAS No.: m: 000668-34-8) Tributyl Tin Oxide (TBTO) ⁵⁵⁵ m: (CAS No.: 000056-35-9)	g/kg g/kg g/kg	Analysis was performed by GC/MS. With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	3	n.d.
24): 2,6 XYLIDINE (CAS No.: m; 000087-62-7) Tributyl Tin (TBT) (CAS No.: m; 000688-73-3) Triphenyl Tin (TphT) (CAS No.: m; 000668-34-8) Tributyl Tin Oxide (TBTO)*** m; (CAS No.: 000056-35-9)	g/kg g/kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	0.03	n.d.
000087-62-7) Organio-tin compounds Tributyl Tin (TBT) (CAS No.: m; 000688-73-3) Triphenyl Tin (TphT) (CAS No.: m; 00068-34-8) Tributyl Tin Oxide (TBTO)*** m; (CAS No.: 000056-35-9)	g/kg g/kg	Analysis was performed by GC/MS. With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis	0.03	n.d.
Organic-tin compounds Tributyl Tin (TBT) (CAS No.: 000688-73-3) Triphenyl Tin (TphT) (CAS No.: 00068-34-8) Tributyl Tin Oxide (TBTO)*** m: (CAS No.:	g/kg	With reference to DIN 38407-13. Analysis was performed by GC/FPD. With reference to DIN 38407-13. Analysis		
TributyI Tin (TBT) (CAS No.: ms 000688-73-3) TriphenyI Tin (TphT) (CAS No.: ms 000688-34-8) TributyI Tin Oxide (TBTO)**** ms (CAS No.: 000056-35-9)	g/kg	was performed by GC/FPD. With reference to DIN 38407-13. Analysis		
000688-73-3) Triphenyl Tin (TphT) (CAS No.: me 000688-34-8) Tributyl Tin Oxide (TBTO)*** me (CAS No.: 000056-35-9)	g/kg	was performed by GC/FPD. With reference to DIN 38407-13. Analysis		
Triphenyl Tin (TphT) (CAS No.: m: 000668-34-8) Tributyl Tin Oxide (TBTO)*** m: (CAS No.: 000056-35-9)	· ·	With reference to DIN 38407-13. Analysis	0.03	n.d.
000668-34-8) Tributyl Tin Oxide (TBTO)*** m: (CAS No.: 000056-35-9)	· ·		0.03	n.d.
Tributyl Tin Óxide (TBTO)*** m: (CAS No.: 000056-35-9)	aka	was performed by GC/FPD.		
(CAS No.: 000056-35-9)	aka			
(CAS No.: 000056-35-9) Polynuclear Aromatic	aa	With reference to DIN 38407-13. Analysis	-	n.d.
Polypuoleon Aromatio		was performed by GC/FPD.		
Folyndelear Aromatic				Т
Hydrocarbons (PAHs)				
Acenaphthene (CAS No.: 000083- m)	g/kg	With reference to ZLS standard ZEK	02	n.d.
32-9)		01.2-08 method. Analysis was performed		
Acen aphthylene (CAS No.: m)	g/kg	With reference to ZLS standard ZEK	02	n.d.
000208-96-8)		01.2-08 method. Analysis was performed		
Anthracene (CAS No.: 000120-12- m	g/kg	With reference to ZLS standard ZEK	02	n.d.
7)		01.2-08 method. Analysis was performed		
Benzo[a]anthracene (CAS No.: mi	g/kg	With reference to ZLS standard ZEK	02	n.d.
000056-55-3)		01.2-08 method. Analysis was performed		
		by GC/MS.		
Benzo[a]pyrene (CAS No.: m;	g/kg	With reference to ZLS standard ZEK	02	n.d.
000050-32-8)		01.2-08 method. Analysis was performed		
		by GC/MS.		

Unices of hervices stated the results shown in the lead regist rate only to the somplet synthesis. This had regist cannot be reproduced, except in full, without protive interpretation of the Company SyNPAN (我 《) (如何的话,我们不知道,我们不知道,我们不知道,我们不知道,我们不知道,我们不知道,我们不知道,我们就会认为我们的问题。 The fead Regist is counted by the Company under its Conditions of Service pretation without a work the rest regist and accessable at http://www.ags.com/inime_and_conditions.htm. The fead Regist is counted by the Company under its Conditions of Service pretations would be on registed and accessable at http://www.ags.com/inime_and_conditions.htm. The fead Regist is counted by the Company of America Conditions of Service Servi

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Annex 1: Analysis Result of Molding Compound (Page 16 of 31)



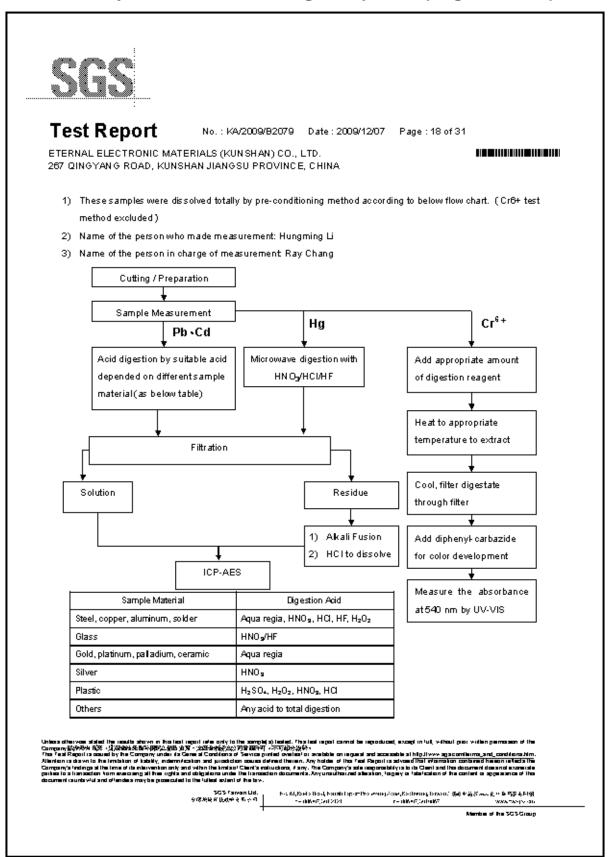


Annex 1: Analysis Result of Molding Compound (Page 17 of 31)

SGS				
Test Repo	nt No. : KA/2009/8	92079 Date: 2009/12/07	Page : 17 of 31	
	NIC MATERIALS (KUN SHAN D, KUNSHAN JIANGSU PR(· ·		
2. n.d. = Not D 3. MDL = Meth 4. " - " = Not R 5. ** = Qualitat 6. Negative = 1 7. Negative = ' 8. Amending for concentration 9. The Asbesto	nod D etection Limit egulated tive analysis (No Unit) Undetectable / Positive = D e '< 1.0 %", Positive = "> 1.0 or the 22nd C ouncil D irective on of three compounds DEHF on of three compounds DINP os test was subcontracted to est was subcontracted to othe	%" • 76/769/EEC notified under •, DBP and BBP shall not be •, DIDP and DNOP shall not l other SGS Laboratory.	greater than 0.1% and total	
Requirement of ZEK	01.2-08 : Restraining maxir	mum valuesfor products		
Parameter	Category 1	C ategory 2	Category 3	
	Materials in contactwith foodstuff or materials which are meant to put in the mouth as well as toys for children <36 months.	Materials with fores eeable skin contact >30 s (prolonged skin contact) and toys not covered by category 1.	Materials with fores eeable skin contact <30 s (short time skin contact) or without skin contact.	
Benzo[a]pyrene (mg/kg)	<mdl (<0.2)**<="" td=""><td>1</td><td>20</td><td></td></mdl>	1	20	
Sum of 16 EPA-PAH (mg/kg)*	<mdl (<0.2)**<="" td=""><td>10</td><td>200</td><td></td></mdl>	10	200	
** = In case categor or or al and §64 food law food la	AH substances >0.2 mg/k g at that the maximum values ex y 2, one may confirm the sui mucosa by additional specific 4 LFGB 80.30-1. The conclus woriteria. <u>mation : Directive 2006/12</u> on the market or used as a s if to or higher than 0.005 % b on the market in semi-finisher OS is equal to or higher tha y or microstructurally distinct the amount of PFOS is equ.	coeed the limits of category 1 tability of the tested material o migration tests of PAH com sion of the migration test rest <u>(2/EC</u> ubstance or constituent of pr y mass. ed products or articles, or pa n 0.1 % by mass calculated of parts that contain PFOS or,	I, but are within the limits of for contact with foodstuff ponents based on DIN EN 1 ults must be made based on reparations in a rts thereof, if the with reference to the for textiles or other	198 1 1
		a) insing, "Ing insi regal cannol be reproduce	d, axaqtın ful, vihasi pici vifan permasa Aka ildə Kumana araşıklara araşı	
coated materials, if impany (۲۹۹۹ ایک مالیک ۲۹۵۹ ایک ایتاری ایک ایک ایک ایک ایک ایک ایک impany ایک ایک ایک ایک ایک ایک ایک impany ایک ایک ایک ایک ایک ایک ایک ایک impany ایک ایک ایک ایک ایک ایک ایک ایک impany ایک	부명하고 ()원 (19 년 7 - (2011년)(李)(20) 가영 88가지 any under (18 Grand al Cardidana of Sevice pri dally, nderna/action and production course de uventon colvand when the transition Cardia col	nied overlaator or svatsbie on reguesiand acces Arned Herren. Any holder of the facel Regarius Inscharer Alarry, The Commany's sole responses	ade a might ever agatement og angatement i advæd find i from som en til de anni ett i kjus is is Cient and i ha document desand ex gev a label calon of he content a aggestand	da The

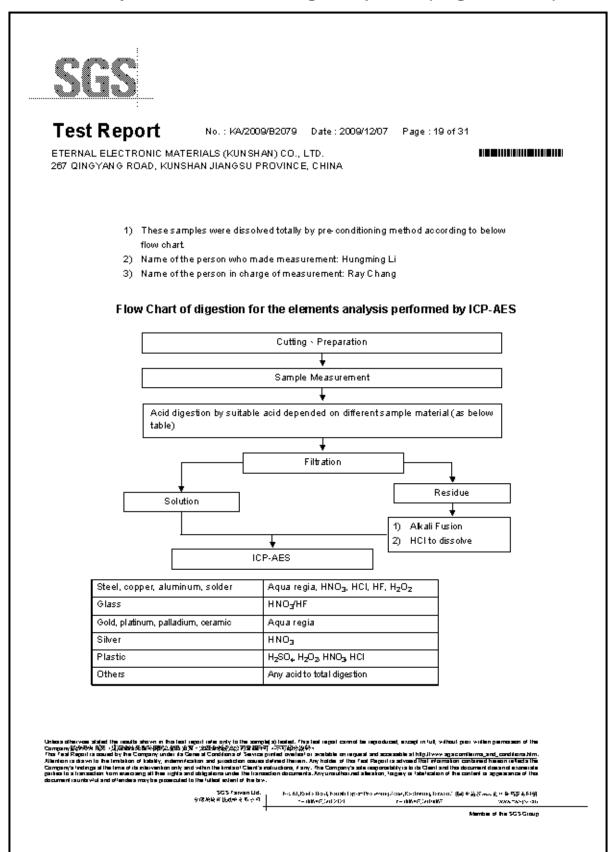


Annex 1: Analysis Result of Molding Compound (Page 18 of 31)



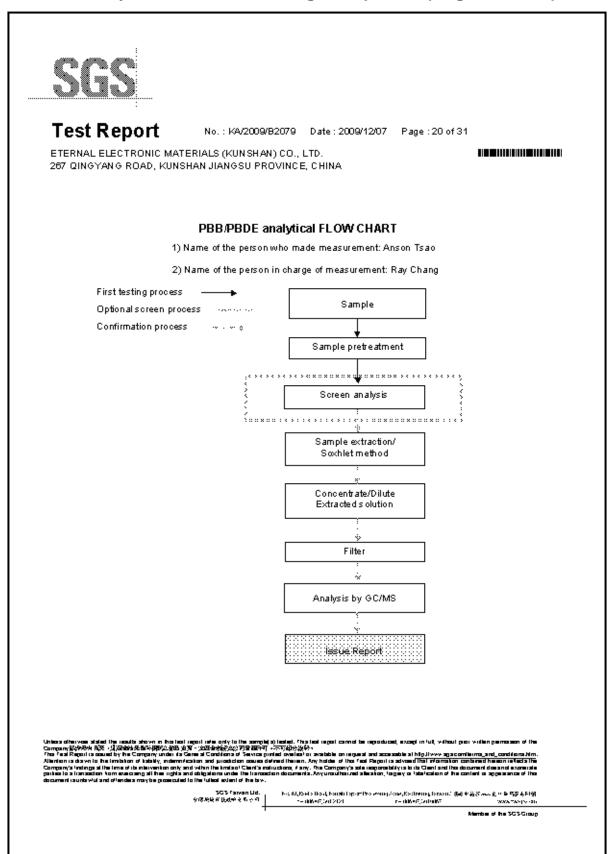


Annex 1: Analysis Result of Molding Compound (Page 19 of 31)





Annex 1: Analysis Result of Molding Compound (Page 20 of 31)



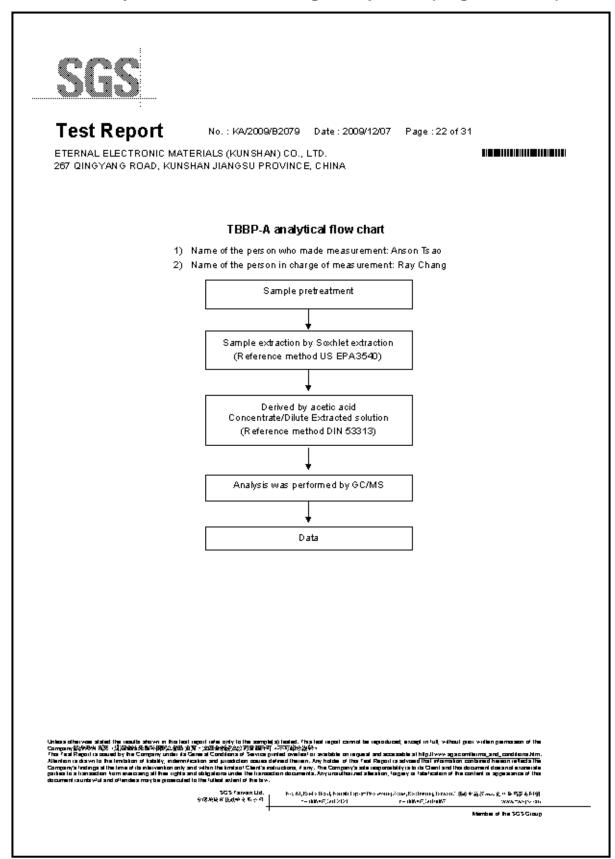


Annex 1: Analysis Result of Molding Compound (Page 21 of 31)

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<section-header>287 QINGYANG ROAD, KUNSHAN JIANGSU PRÓVINCE, CHINA Analytical flow chart of phthalate content 1) Name of the person who made measurement: Anson Tsao 2) Name of the person in charge of measurement: Ray Charg Sample pretreatment/separation Sample extraction by sochlet method Concentrate/Dilute Extracted solution Analysis was performed by OC/MS Data</section-header>	Test Report	No.:KA/2009/B2079 Date:2009/12/07 Page:21 of 31
1) Name of the person who made measurement: Anson Taa (2) Name of the person in charge of measurement: Ray Chang Sample pretreatment's eparation Sample extraction by soxhiet method Concentrate/Dilute Extracted solution Anahysis was performed by GC/MS Data		
2) Name of the person in oharge of measurement: Ray Chang Sample pretreatment/separation ↓ Concentrate/Dilute Extracted solution ↓ Data		Analytical flow chart of phthalate content
Sample pretreatment/separation Sample extraction by soxhiet method Concentrate/Dilute Extracted solution Analysis was performed by GC/MS Data	1)	Name of the person who made measurement: Anson Ts ao
Sample extraction by soxhlet method Concentrate/Dilute Extracted solution Analysis was performed by GC/MS Data	2)	Name of the person in charge of measurement: Ray Chang
Analysis was performed by GC/MS Data		Sample pretreatment/separation
Analysis was performed by GC/MS Data		·
hes a fair too is faired the used to devon in the local ingest inter only (o line sample is) line(d). The line ingest index is ingesting a size of line sample is index if the line is the line is in the line is		Sample extraction by soxhlet method
hes a fair too is faired the used to devon in the local ingest inter only (o line sample is) line(d). The line ingest index is ingesting a size of line sample is index if the line is the line is in the line is		
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hisos dharwaa sistad iha uaada shown on hay kali yaa ay ya ka ay ya ka ay ya ka ay ya ay		Analysis was performed by GC/MS
hisos dharwaa sistad iha uaada shown on hay kali yaa ay ya ka ay ya ka ay ya ka ay ya ay		
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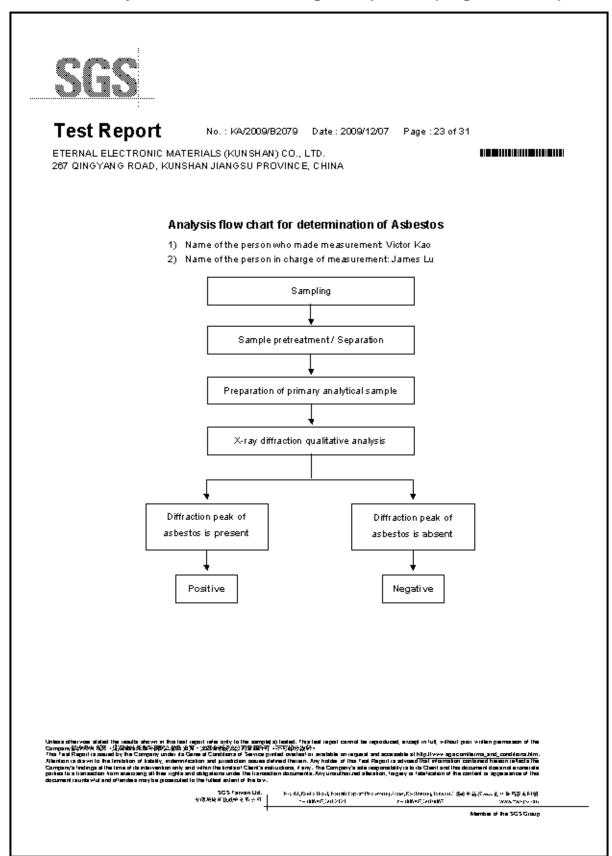


Annex 1: Analysis Result of Molding Compound (Page 22 of 31)



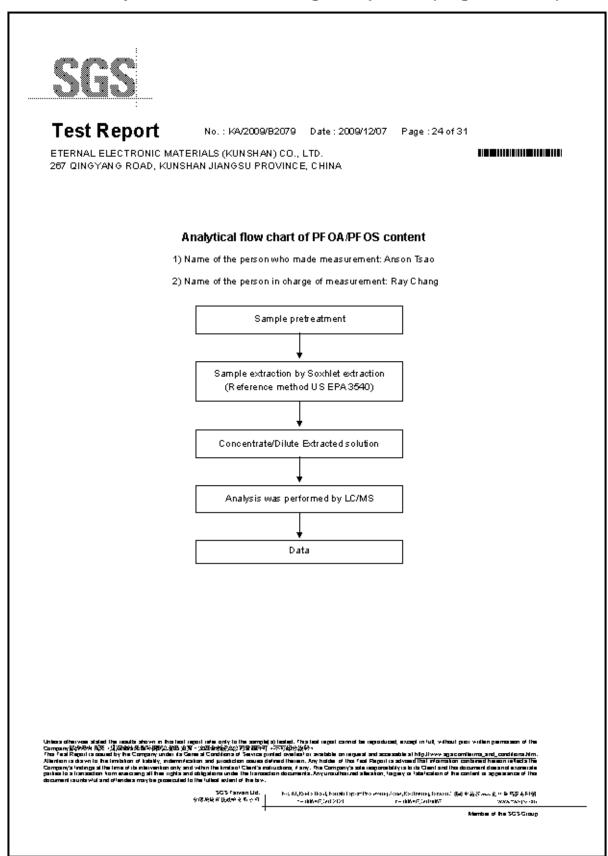


Annex 1: Analysis Result of Molding Compound (Page 23 of 31)



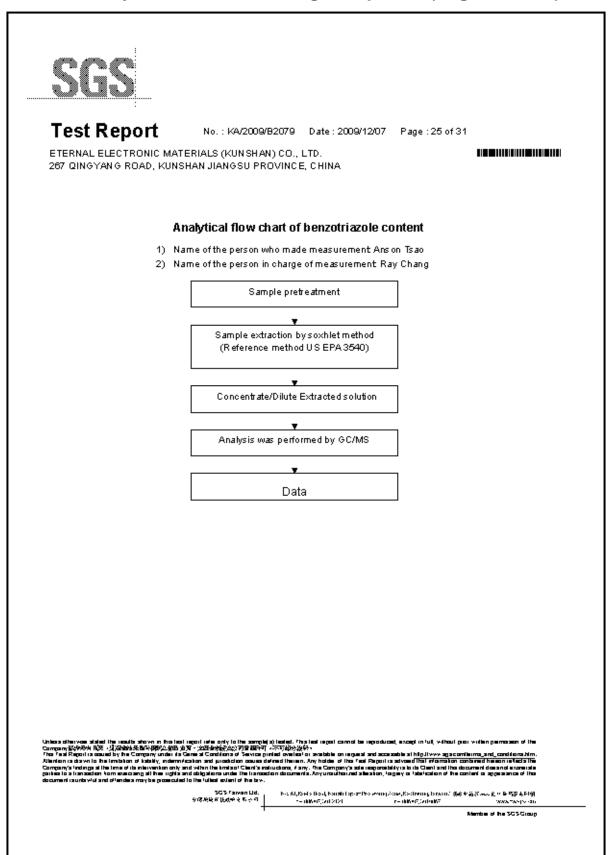


Annex 1: Analysis Result of Molding Compound (Page 24 of 31)



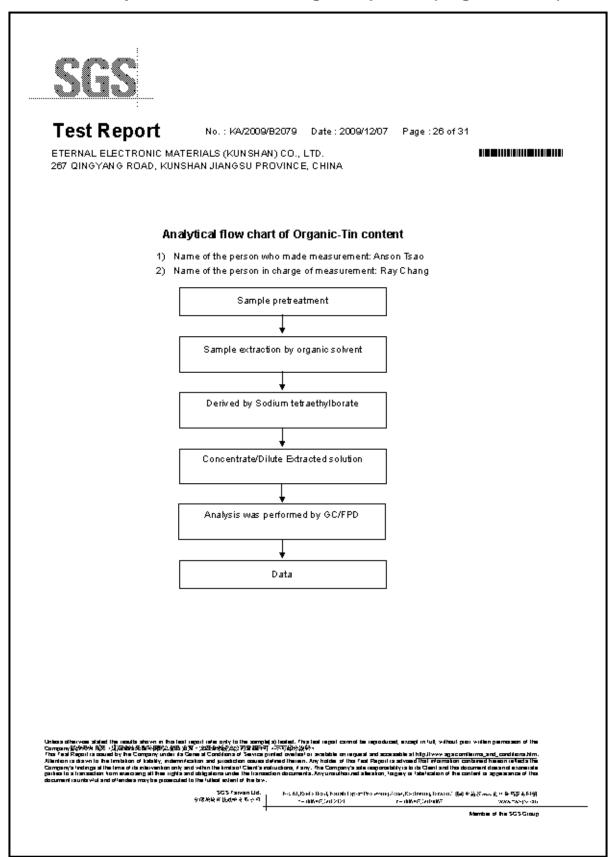


Annex 1: Analysis Result of Molding Compound (Page 25 of 31)



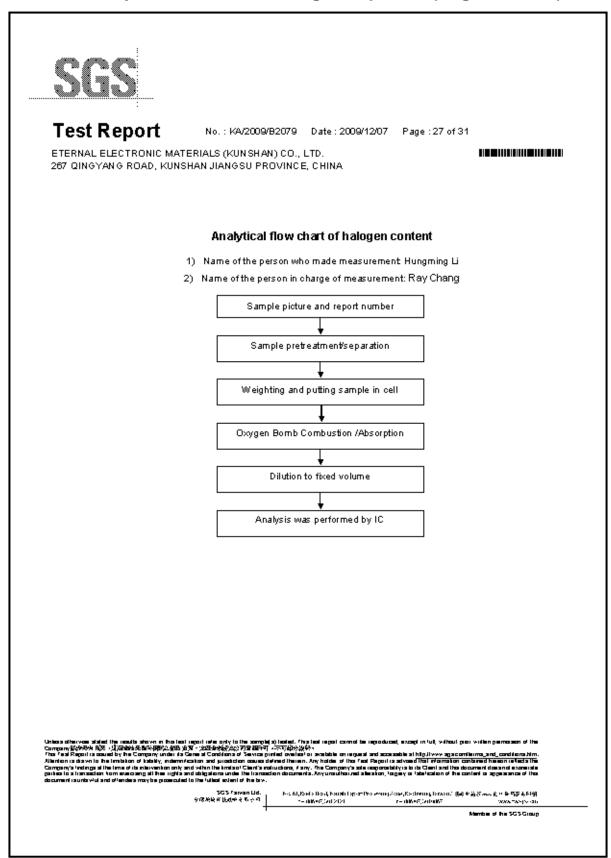


Annex 1: Analysis Result of Molding Compound (Page 26 of 31)



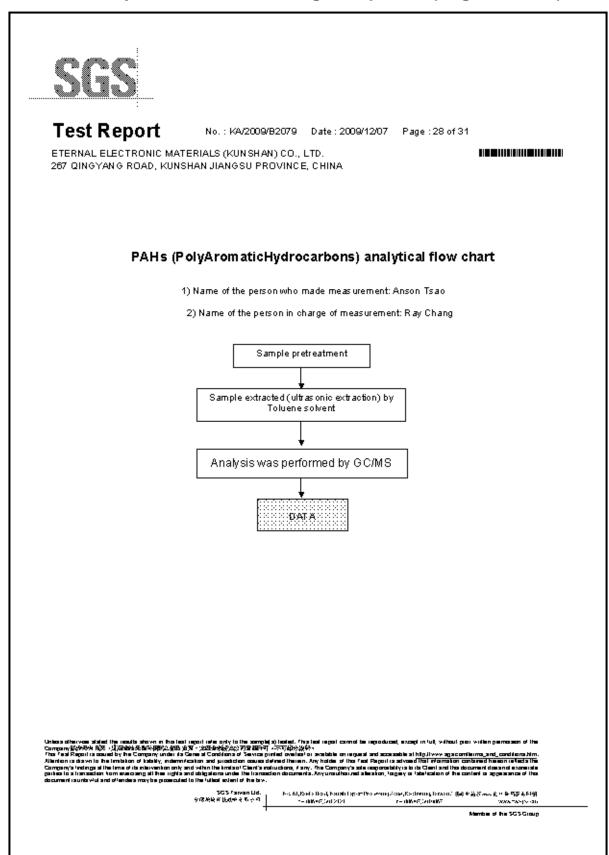


Annex 1: Analysis Result of Molding Compound (Page 27 of 31)



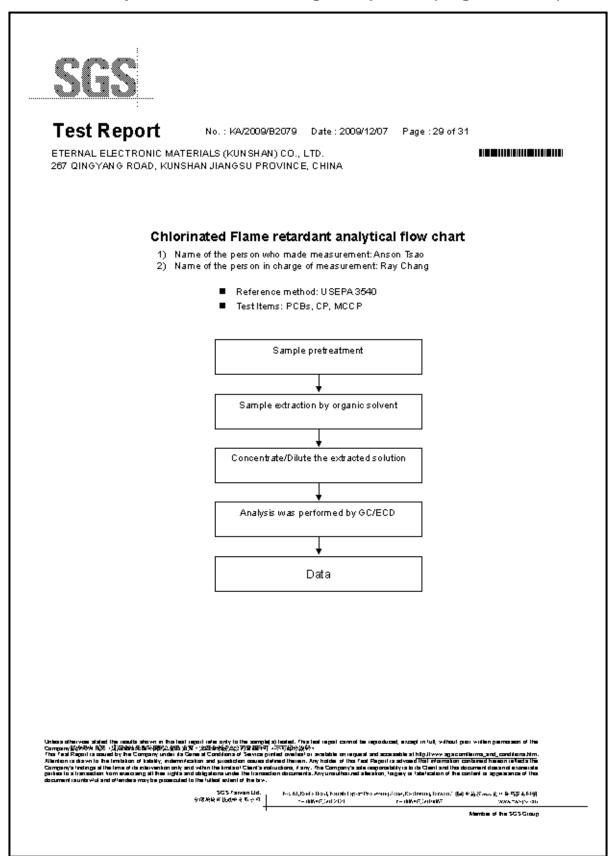


Annex 1: Analysis Result of Molding Compound (Page 28 of 31)



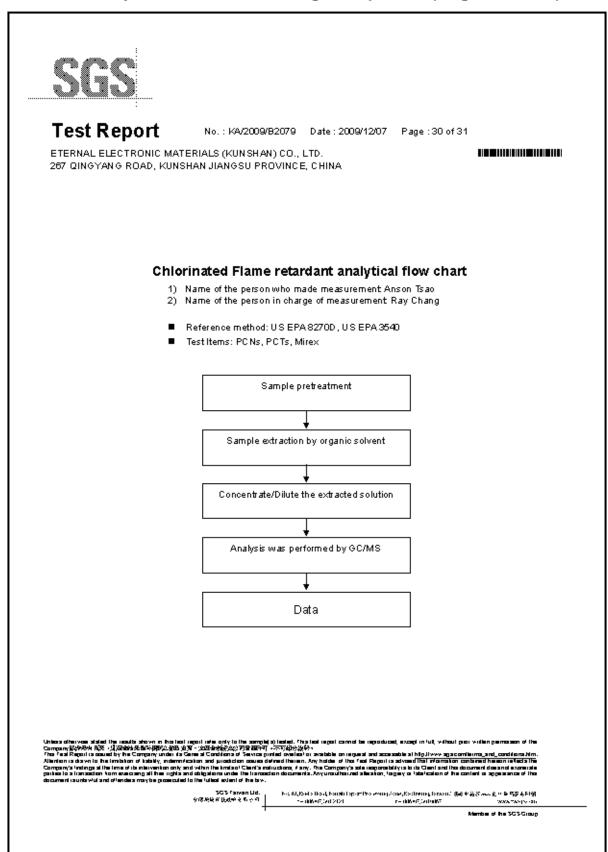


Annex 1: Analysis Result of Molding Compound (Page 29 of 31)



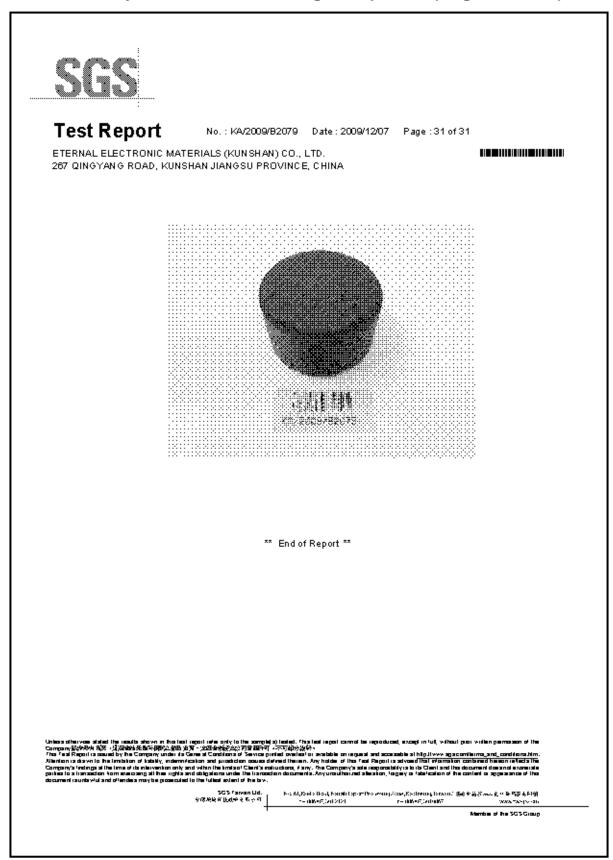


Annex 1: Analysis Result of Molding Compound (Page 30 of 31)





Annex 1: Analysis Result of Molding Compound (Page 31 of 31)



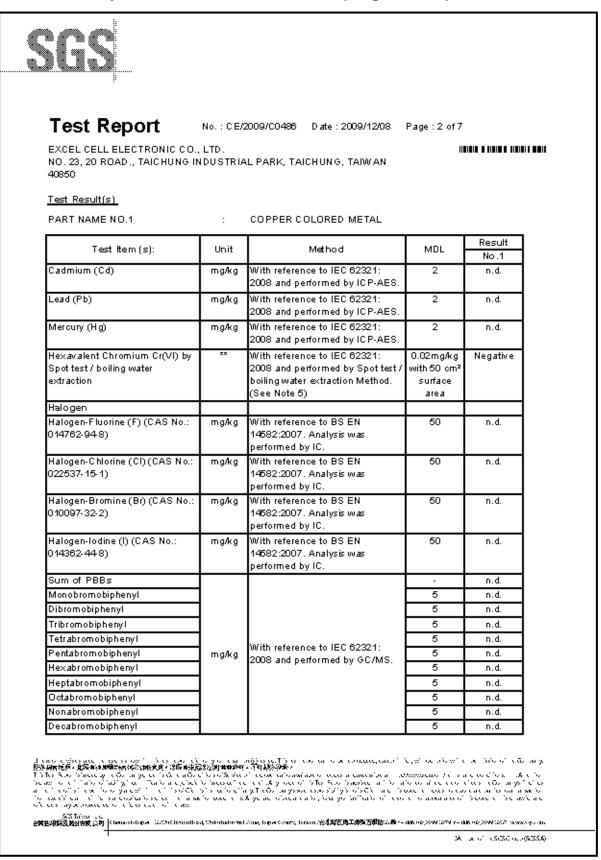


Annex 2: Analysis Result of Lead frame (Page 1 of 7)

SGS		Validity-unknown For Queston Please Contractivith SGS www.tw.sgSktati
Test Report Excel cell electronic c NO. 23, 20 ROAD., TAICHUNG 40850	No. : CE/2009/C0488 Date : 2009/12/08 :O., LTD. 3 INDUSTRIAL PARK, TAICHUNG, TAIW AN	Page : 1 of 7
The following sample(s) was	/vere submitted and identified by/on behalf	of the client as :
Sample Description Sample Receiving Date Testing Period	: KFC : 2009/12/01 : 2009/12/01 TO 2009/12/08	
Chenyu Kung / Opertyon Me Signed for and on Vehalf di SGS TAIWAN LTD, Chemicial Laboratory – Taipei	ŝ	ບໍ່ໄປ, ພຳພະກ່ວນທີ່ ເຫຼືອງການ
Taska non-sacco y costanyo costanyo costanyo costanyo na jaka na polatika n	(1) シッカーでは、「(1)) Source To control of the cont	либлимиция Летанского состоят Ластон Габологи Састонского Состанув Состану Голастски ословански састански поласти Состон поласали собъемает събелибеле
ENERGY CLEAR AND LEVEL	need and an and a second relation of the second relation of the second second second second second second second	ж. ж. с. соде жилорода. А. ж. с. соде жилорода.

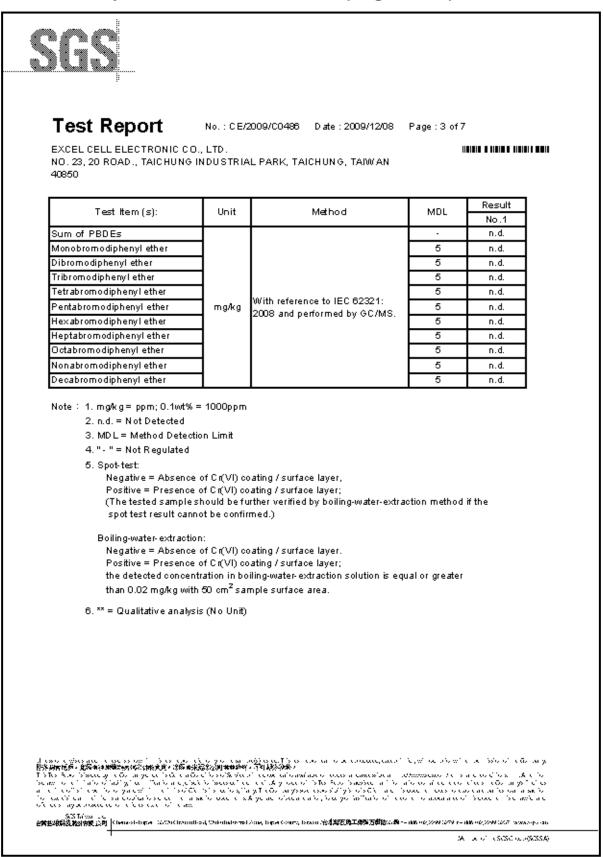


Annex 2: Analysis Result of Lead frame (Page 2 of 7)



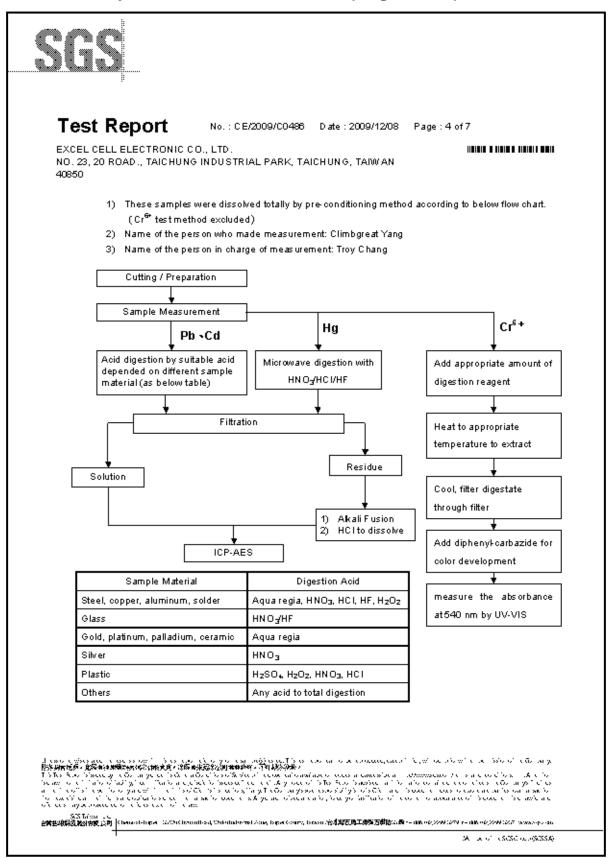


Annex 2: Analysis Result of Lead frame (Page 3 of 7)



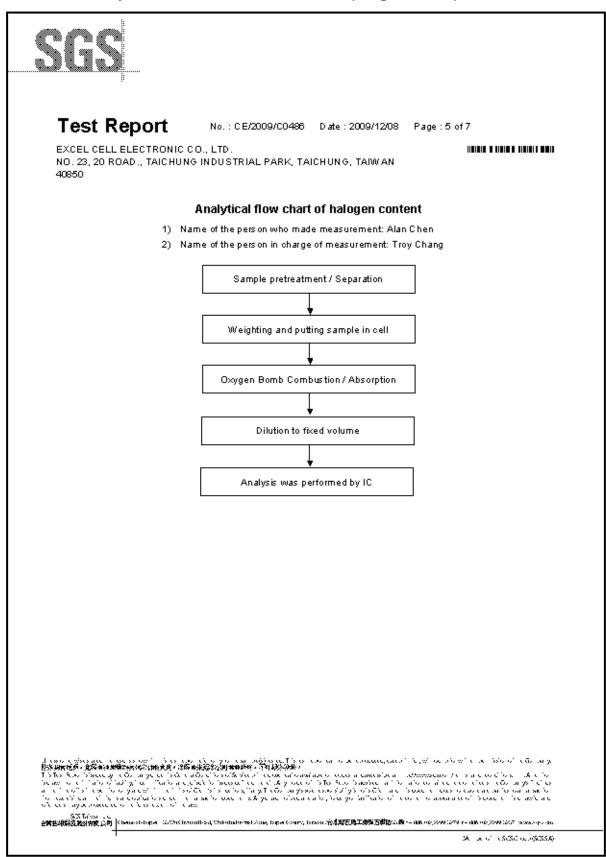


Annex 2: Analysis Result of Lead frame (Page 4 of 7)



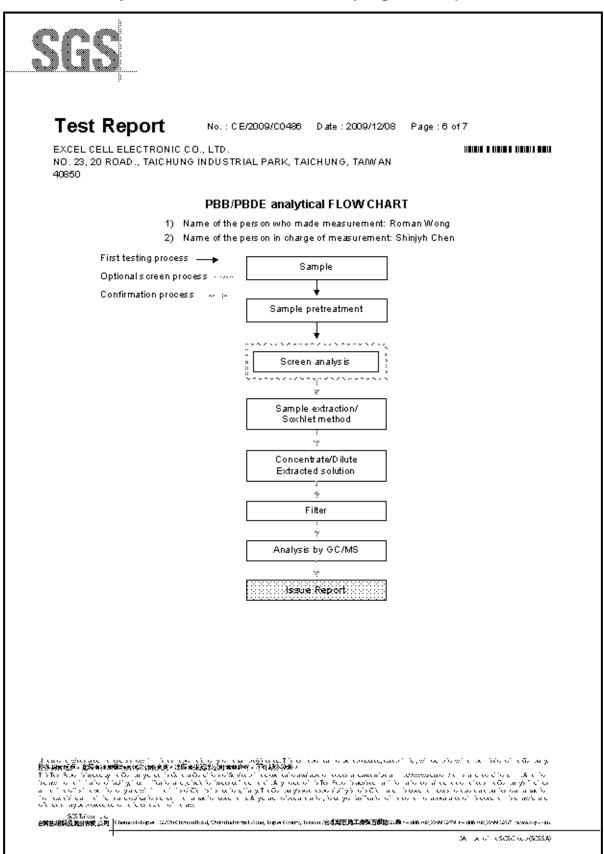


Annex 2: Analysis Result of Lead frame (Page 5 of 7)



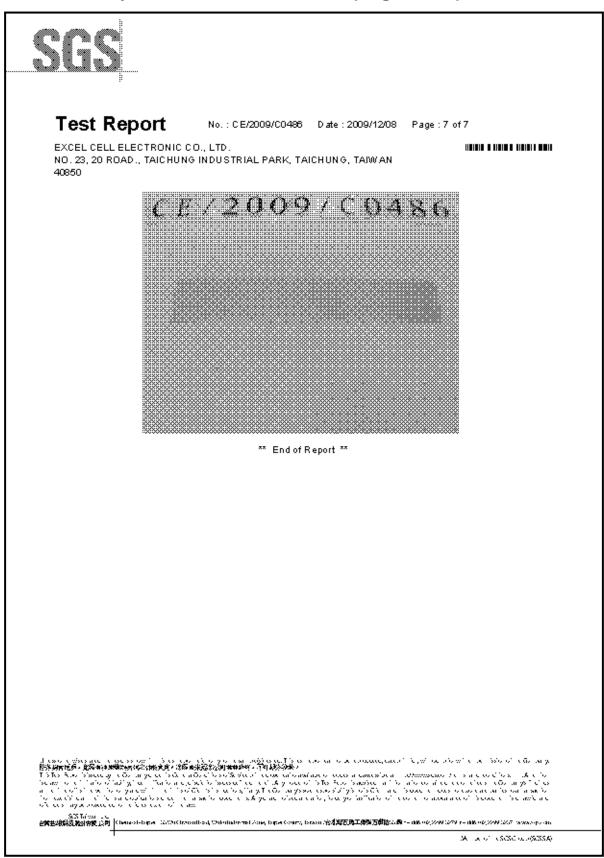


Annex 2: Analysis Result of Lead frame (Page 6 of 7)





Annex 2: Analysis Result of Lead frame (Page 7 of 7)



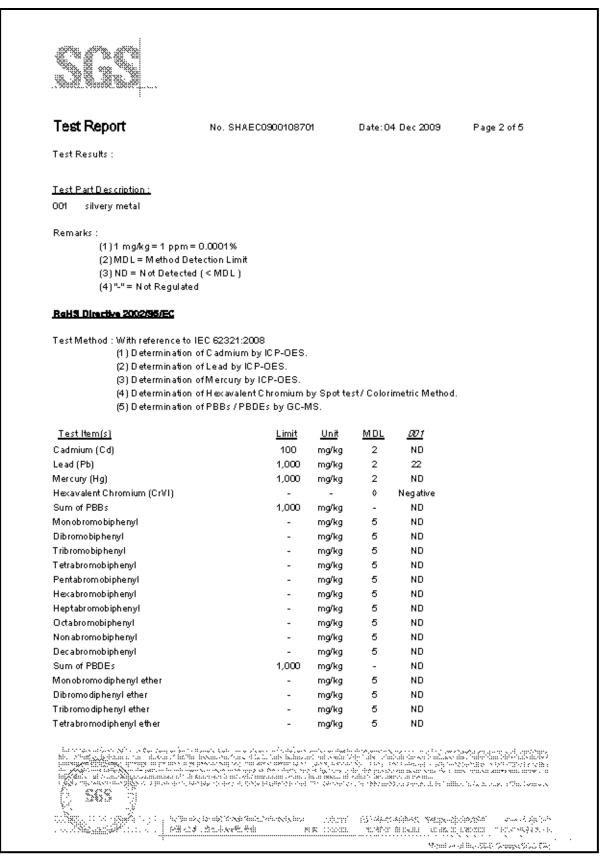


Annex 3: Analysis Result of Tin plating (page 1 of 5)

Test Report	No. SHAEC0900108701	Date:04 Dec 2009	Page 1 of 5
KUNSHAN TONGLONG EL NO. 1698 ZIZHU RD. KUNS	ECTRO PLATE (BANDL PLANT) 3HAN CITY		
The following sample(s) was	s/were submitted and identified on be	half of the clients as: 技够	采闻物
SGSJobNo.:	SP09-001317 - SH		
Model No. :	Sn/NiLAYER		
Date of Sample Received :	01 Diec 2009		
Testing Period :	01 Dec 2009 - 04 Dec 2009	P 4	
Test Requested :	Selected test(s) as requested by c	lient.	
Fest Method :	Please refer to next page(s).		
Fest Results : Conclusion :	Please refer to next page(s). Based on the performed tests on s		
	RoHS Directive 2002/95/EC and it	s subsequent amendments.	
SGS-CSTC Ltd.			
Signed for and on behalf of SGS-CSTC Ltd. Sandy Maa Hao Jinyu, Sandy			



Annex 3: Analysis Result of Tin plating (page 2 of 5)





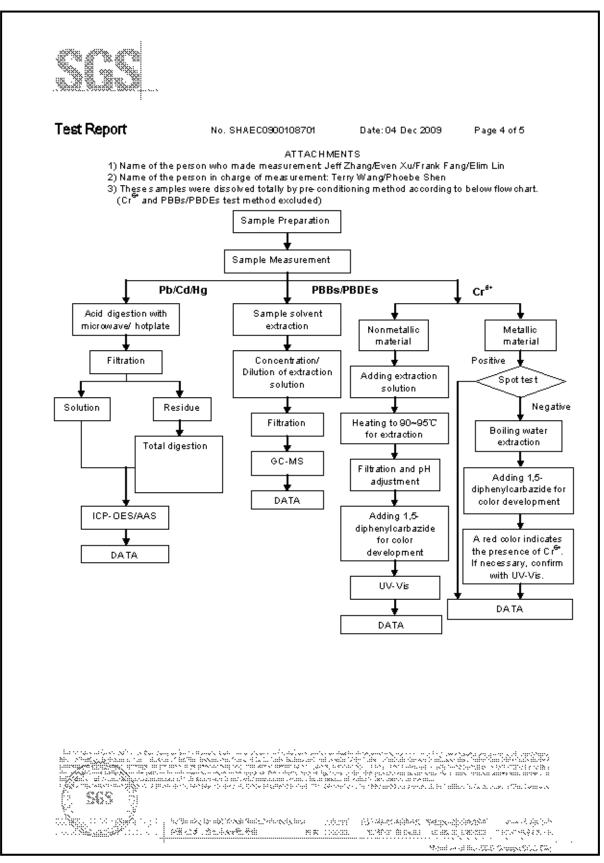
Annex 3: Analysis Result of Tin plating (page 3 of 5)



Test Report	No. SHAEC	090010870	И	Date: 04	Dec 2009	Page 3 of 5
<u>Test Item(s)</u>		<u>Limit</u>	<u>Unit</u>	MDL	<u>001</u>	
Pentabromodiphenyl ether		-	mg/kg	5	ND	
Hexabromodiphenyl ether		-	mg/kg	5	ND	
Heptabromodiphenyl ether		-	mg/kg	5	ND	
Octabromodiphenyl ether		-	mg/kg	5	ND	
Non abromo dip henyl ether		-	mg/kg	5	ND	
Decabromodiphenyl ether		-	mg/kg	5	ND	
Notes :						
	oermissible limit is q	uoted from	the docur	ment2005/	/618/EC amer	nding RoHS directive
(2) ◊ Spoŧtest:						
	e of CrVI coating, P	ositive = Pi	resence of	f C rVI coat	ing;	
-	should be further ve				-	ie spottest result is
Negative or cannot	be confirmed.					
♦ Boiling-water-ext						
-	e of CrVI coating: P				-	
	entration in boiling-w	vater-extra	tion soluti:	ion is equa	al or greater th	an 0.02 mg/kg with
50 cm [•] sample surf						
	ction coatings on m			-		•
	s unavailable and th	us results	տողտյո	epresents	tatus of the s	ample at the time of
testing						
han ta tapa an dawa sa Safa a sa Qua yung yu	·					
La trata a facto de la composición de la compo	- Jun T. Burry's Loth and a Ass in The Bower Loth and a Ass in The Bower Loth and the Ass		a suite e a suite a			
		n				
	 South Barry Color and Annual An	en of subjects In the following of the subject of the subject of the subject of the subject of t	entites en des la nitrative en des la nitrative en des la nitrative en des la nitrative nitrative en des la nitrative nitrativ			
	 John Barry College and Angele Martin Boom, Angele Martin Boo	en of statistics In the Kalman Statistics and statistics Statistics for the	entite en dest nit und statut de la transferie			
	¹ Jun J., Harroy K. Kathamara, J. Yun Y., Mar Hang, Hawan J., Yun Y., Hang Y., Yun Y., Hang Hawan J., Yun Y., Hang Y., Yun Y., Kathalawan J., Yun Yang, Yun X., Yun Y., Kathalawan J., Yun Yang, Yun Yun Y., Yun Yang, Yang Y., Yun Yang, Yun Yang, Yun Yun Yun Yun Yang, Yun Yun Yun Yun Yun Yun Yun Yun Yun Yun Yun Yun Yun Yun Yun Yun Yun Yun	n	porties on dept in the second se			
	¹ Jun J., Barrada, Kasharana a Alay Mari Mana Jawa Kasharana a Mari Mari Mana Kasharana a Mari Mari Makamatana a Mana Jawa Mari Makamatana a Mana Jawa Mana Jawa Jawa Jawa Kasaja Kasiy Minana Aga Jawaba Mana Jawa Kasiya Minana Aga Jawaba Mana Jawa Kasiya Kasiya	Sape (Spin)	senter en desta la desta en desta de la desta en desta	e generative e		perenden i de la dese

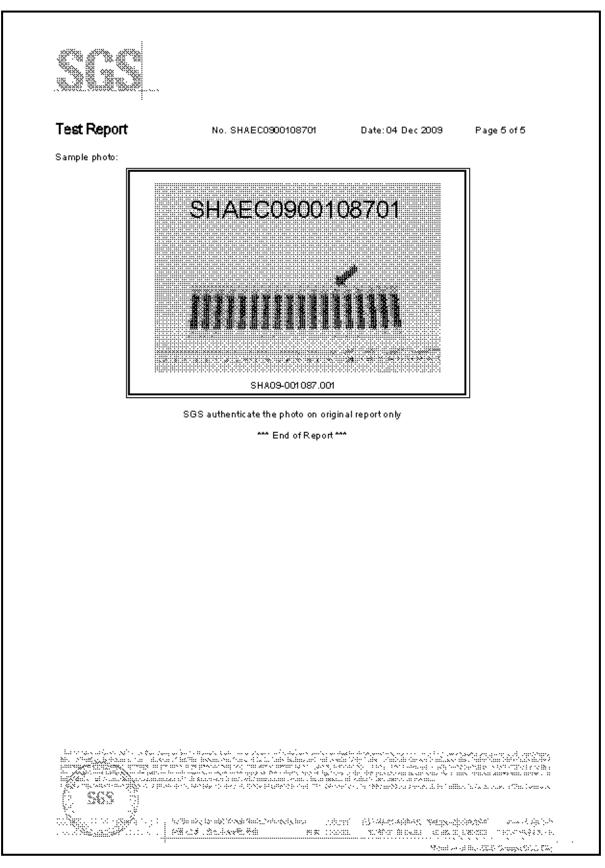


Annex 3: Analysis Result of Tin plating (page 4 of 5)





Annex 3: Analysis Result of Tin plating (page 5 of 5)





Annex 4: Analysis Result of Ni-plated Wafer (Page 1 of 7)

TES	T REPORT	NUMBER	R: WUXH00002719
APPLICANT:	LTD. EAST 1#,ZHE	U, CHINA	E: AUG 06, 2010
SAMPLE DES		TTED SAMPLE SAID TO BE : SILVER (
ITEM NAN VENDOR COMPONEN TEST ITN	ME NT OR PART NO EM	: SILICON WAFER WITH NICKEL : CONCORD.). : SILICON+NICKEL. : Pb,Cd,Hg,CrVI,PBB PBDE,F,	PLATING. Cl,Br,I.
TESTS CONDU		APPLICANT, FOR DETAILS REFER T	
~		APPLICANT, FOR DETAILS REFER T	
SUMMA	ARY: E d Sample	ตำห.ง. เก. ห. อ. ก.	RESULT
		WITH REFERENCE TO TEST METHOD IEC 62321 EDITION 1.0: 2008 AN MAXIMUM CONCENTRATION LIMITS QUOTED FROM ROHS DIRECTIVES 2002/95/EC AND AMENDMENT 2005/618/EC	OF PASS
*******	*******	****	
			TO BE CONTINUED



Annex 4: Analysis Result of Ni-plated Wafer (Page 2 of 7)

TEST REPORT	NUMBER: WUXH0000271
TS CONDUCTED	
(A) TEST RESULT SUMMARY:	
TESTING ITEM	RESULT
CADMIUM (Cd) CONTENT (mg/kg)	ND
LEAD (Pb) CONTENT (mg/kg)	ND
MERCURY (Hg) CONTENT (mg/kg)	ND
CHROMIUM (VI)(Cr ⁶⁺) RESULT (BY BOILING WATER EXTRACTION ON METAL)	
(mg/kg WITH 50 cm ²)	
POLYBROMINATED BIPHENYLS (PBBs) (mg/l	(q)
MONOBROMO BIPHENYLS (MonoBB)	ND
DIBROMO BIPHENYLS (DiBB)	ND
TRIBROMO BIPHENYLS (TriBB)	ND
TETRABROMO BIPHENYLS (TetraBB)	ND
PENTABROMO BIPHENYLS (PentaBB)	ND
HEXABROMO BIPHENYLS (HexaBB)	ND
HEPTABROMO BIPHENYLS (HeptaBB)	ND
OCTABROMO BIPHENYLS (OctaBB)	ND
NONABROMO BIPHENYLS (NonaBB)	ND
DECABROMO BIPHENYL (DecaBB)	ND
POLYBROMINATED DIPHENYL ETHERS (PBDE:	
MONOBROMO DIPHENYL ETHERS (MonoBDE)	ND
DIBROMO DIPHENYL ETHERS (DiBDE)	ND
TRIBROMO DIPHENYL ETHERS (TriBDE)	ND
TETRABROMO DIPHENYL ETHERS	ND
(TetraBDE)	
PENTABROMO DIPHENYL ETHERS	ND
(PentaBDE)	
HEXABROMO DIPHENYL ETHERS (HexaBDE)	ND
HEPTABROMO DIPHENYL ETHERS	ND
(HeptaBDE)	
OCTABROMO DIPHENYL ETHERS (OctaBDE)	ND
NONABROMO DIPHENYL ETHERS (NonaBDE)	ND
DECABROMO DIPHENYL ETHER (DecaBDE)	ND
REMARK: mg/kg = MILLIGRAM PER KILOGRAM BASED ND = NOT DETECTED mg/kg WITH 50cm ² = MILLIGRAM PER KILO CENTIMETER ******	GRAM WITH 50 SQUARE

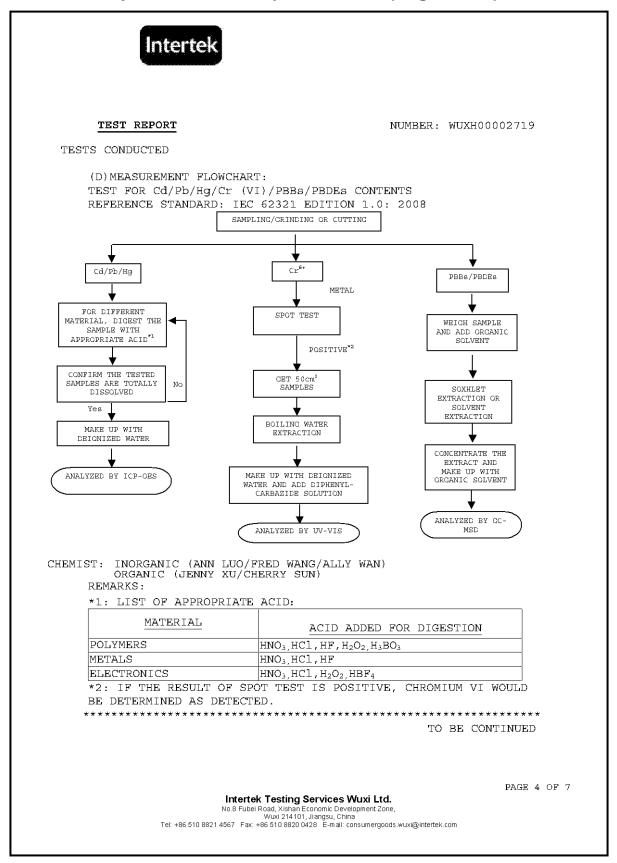


Annex 4: Analysis Result of Ni-plated Wafer (Page 3 of 7)

			WUXH0000271
STS CONDUCTED			
(B) ROHS REQUIRE			
RESTRICTED SUBS	TANCES		MITS
CADMIUM (Cd)			L00 mg/kg)
LEAD (Pb) MERCURY (Hg)			00 mg/kg
CHROMIUM (VI) (C~ ⁶⁺ })00 mg/kg))00 mg/kg)
	BIPHENYLS (PBBs)		000 mg/kg/ 000 mg/kg)
	DIPHENYL ETHERS (PBDEs)		000 mg/kg)
	S WERE QUOTED FROM 2002/9		
	HOMOGENEOUS MATERIAL.	,	
(c) TEST METHOD	:		
TESTING ITEM	TESTING METHOD	2	REPORTING LIMIT
	WITH REFERENCE TO IEC 6	WITH REFERENCE TO IEC 62321	
CADMIUM (Cd)		EDITION 1.0: 2008, BY ACID	
CONTENT		DIGESTION AND DETERMINED BY ICP-	
	OES WITH REFERENCE TO IEC 62321		
LEAD (Pb)	EDITION 1.0: 2008, BY A		n
CONTENT	DIGESTION AND DETERMINE	D BY ICP-	2 mg/kg
	OES	0001	
MERCURY (Hq)	WITH REFERENCE TO IEC 6 EDITION 1.0: 2008, BY A		
CONTENT	DIGESTION AND DETERMINE		2 mg/kg
	OES		
CHROMIUM (VI)	WITH REFERENCE TO IEC 6		0.02 mg/kg
(Cr ⁶⁺) CONTENT	EDITION 1.0: 2008, BY B WATER EXTRACTION AND DE		WITH 50cm ² (IN TESTING
(FOR METAL)	BY UV-VIS SPECTROPHOTOM		SOLUTION)
POLYBROMINATED	WITH REFERENCE TO IEC I		
	& EDITION 1.0: 2008, BY S		
POLYBROMINATED	EXTRACTION AND DETERMIN		5 mg/kg
DIPHENYL ETHERS	GC/MS AND FURTHER HPLC		
(PBDEs)	CONFIRMATION WHEN NECES	SARY.	
(PBDEs) DATE SAMPLE REC TESTING PERIOD:		010	********* BE CONTIN



Annex 4: Analysis Result of Ni-plated Wafer (Page 4 of 7)



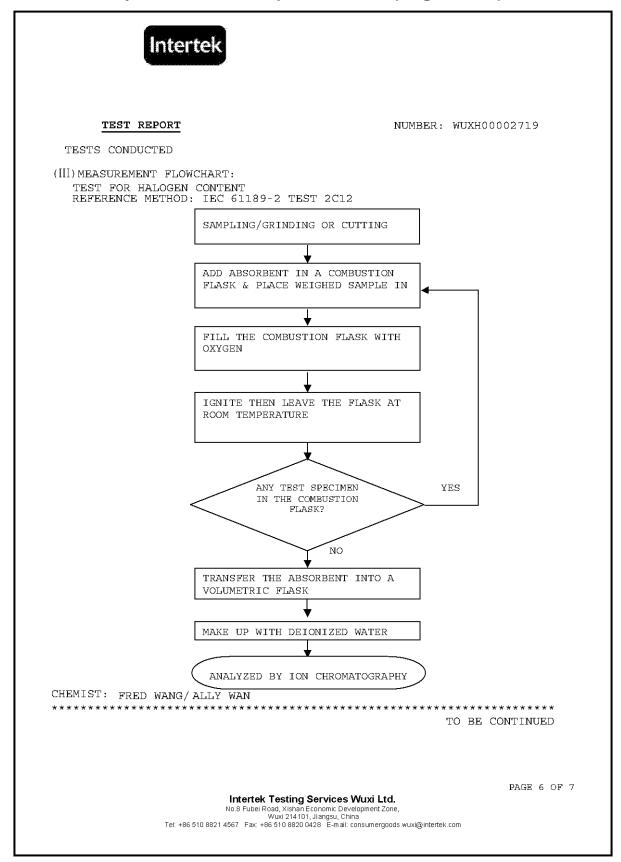


Annex 4: Analysis Result of Ni-plated Wafer (Page 5 of 7)

TEST REPORT		NUMBER: W	UXH00002719
TESTS CONDUCTED			
(]) TEST RESULT SUMMARY	:		
HALOGEN CONTENT :			
TESTING	ITEM	RESU	LT (ppm)
FLUORINE (F) CONTENT			ND
CHLORINE (Cl)CONTENT			ND
BROMINE (Br) CONTENT			ND
IODINE (I) CONTENT			ND
ND = NOT DETE DATE SAMPLE RECEIVE: AUG TEST PERIOD: AUG 02, 2010	02, 2010		
(II) TEST METHOD :			
TESTING ITEM	TESTING METH		REPORTING LIMI
HALOGEN (F,Cl, Br,I) CONTENT	WITH REFERENCE TO IEG 2:2006 BY COMBUSTION DETERMINED BY ION CHROMATOGRAPHY		50 ppm
REMARKS : REPORTING LIMIT			
REMARKS : REPORTING LIMIT			

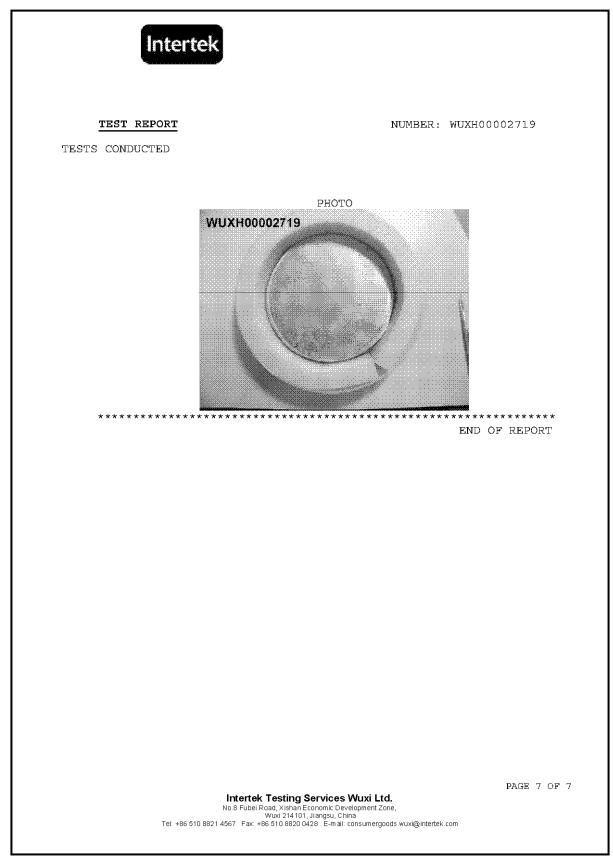


Annex 4: Analysis Result of Ni-plated Wafer (Page 6 of 7)





Annex 4: Analysis Result of Ni-plated Wafer (Page 7 of 7)





Annex 5: Analysis Result of Passivation Glass (Page 1 of 7)

TEST	<u>report</u>		NUMBER: WUXH00002	2721
APPLICANT:	LTD. EAST 1#,ZHENFA	HINA		2010
ITEM NAM VENDOR COMPONEM TEST ITE	IECE OF SUBMITTE ME NT OR PART NO. EM	D SAMPLE SAID TO BE : WAFER PASSIVATION : PROPRIETY. : PROPRIETY. : Pb,Cd,Hg,CrVI,PBE	I. 9 PBDE,F,Cl,Br,I.	****
TESTS CONDU	ICTED ·			
	ESTED BY THE APP	PLICANT, FOR DETAILS		
	ESTED BY THE APP			* * * * * *
	ESTED BY THE APP		* * * * * * * * * * * * * * * * * * * *	* * * * * *
	ESTED BY THE APP		* * * * * * * * * * * * * * * * * * * *	* * * * * *
	ESTED BY THE APP		* * * * * * * * * * * * * * * * * * * *	* * * * * *
	ESTED BY THE APP		* * * * * * * * * * * * * * * * * * * *	* * * * * *
	ESTED BY THE APP		* * * * * * * * * * * * * * * * * * * *	* * * * * *
	ESTED BY THE APP		* * * * * * * * * * * * * * * * * * * *	* * * * * *
	ESTED BY THE APP		* * * * * * * * * * * * * * * * * * * *	* * * * * *
********* PREPARED AN	ESTED BY THE APP	****	* * * * * * * * * * * * * * * * * * * *	* * * * * *
********* PREPARED AN	ESTED BY THE APP	****	* * * * * * * * * * * * * * * * * * * *	* * * * * *



Annex 5: Analysis Result of Passivation Glass (Page 2 of 7)

TEST REPORT	NUMBER: WUXH0000272
TS CONDUCTED	
(A) TEST RESULT SUMMARY:	
TESTING ITEM	RESULT
CADMIUM (Cd) CONTENT (mg/kg)	ND
LEAD (Pb) CONTENT (mg/kg)	207400
MERCURY (Hg) CONTENT (mg/kg) CHROMIUM (VI) (Cr ⁶⁺) CONTENT (mg/kg)	ND ND
(FOR NON-METAL) POLYBROMINATED BIPHENYLS (PBBs) (mg/	
MONOBROMO BIPHENYLS (MonoBB)	
DIBROMO BIPHENYLS (DiBB)	ND
TRIBROMO BIPHENYLS (TriBB)	ND
TETRABROMO BIPHENYLS (TetraBB)	ND
PENTABROMO BIPHENYLS (PentaBB)	ND
HEXABROMO BIPHENYLS (HexaBB)	ND
HEPTABROMO BIPHENYLS (HeptaBB)	ND
OCTABROMO BIPHENYLS (OctaBB)	ND
NONABROMO BIPHENYLS (NonaBB)	ND
DECABROMO BIPHENYL (DecaBB)	ND
POLYBROMINATED DIPHENYL ETHERS (PBDE.	s) (mg/kg)
MONOBROMO DIPHENYL ETHERS (MonoBDE)	ND
DIBROMO DIPHENYL ETHERS (DiBDE)	ND
TRIBROMO DIPHENYL ETHERS (TriBDE)	ND
TETRABROMO DIPHENYL ETHERS	ND
(TetraBDE) PENTABROMO DIPHENYL ETHERS	ND
(PentaBDE) HEXABROMO DIPHENYL ETHERS (HexaBDE)	ND
HEPTABROMO DIPHENYL ETHERS (HEXABDE)	ND ND
(HeptaBDE)	
OCTABROMO DIPHENYL ETHERS (OctaBDE)	ND
NONABROMO DIPHENYL ETHERS (NonaBDE)	ND
DECABROMO DIPHENYL ETHER (DecaBDE)	ND
REMARK: mg/kg = MILLIGRAM PER KILOGRAM BASED ND = NOT DETECTED # = THE RESULT IS FOR REFERENCE ONLY ************************************	

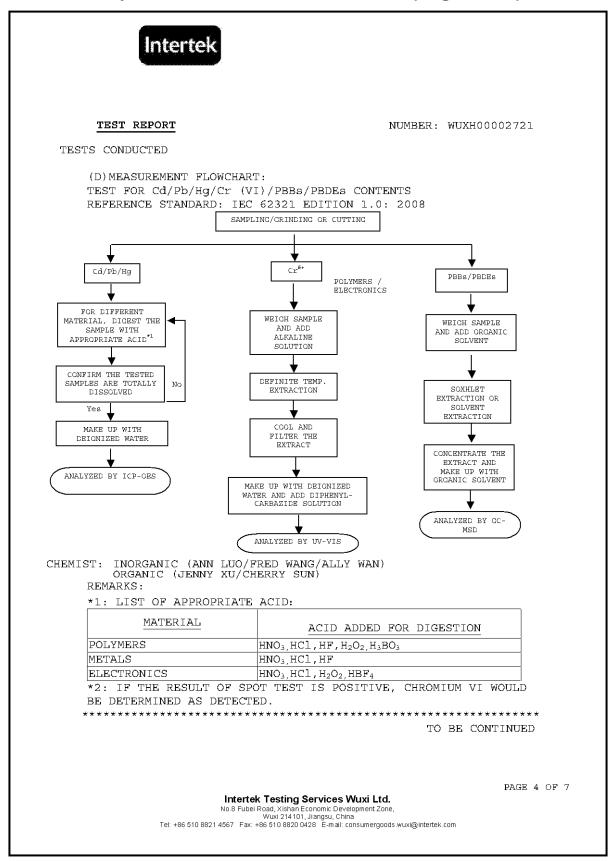


Annex 5: Analysis Result of Passivation Glass (Page 3 of 7)

(B)RoHS REQUIREMENT: RESTRICTED SUBSTANCES CADMIUM (Cd) LEAD (Pb) MERCURY (Hg) CHROMIUM (VI) (Cr ⁶⁺) POLYBROMINATED BIPHENYLS (POLYBROMINATED DIPHENYL ET THE ABOVE LIMITS WERE QUOT 2005/618/EC FOR HOMOGENEOU (c) TEST METHOD:	PBBs) HERS (PBDEs) ED FROM 2002/95/E	LIMIT 0.01% (100 0.1% (1000 0.1% (1000	mg/kg)
RESTRICTED SUBSTANCES CADMIUM (Cd) LEAD (Pb) MERCURY (Hg) CHROMIUM (VI) (Cr ⁵⁺) POLYBROMINATED BIPHENYLS (POLYBROMINATED DIPHENYL ET THE ABOVE LIMITS WERE QUOT 2005/618/EC FOR HOMOGENEOU	PBBs) HERS (PBDEs) ED FROM 2002/95/E	0.01% (100 0.1% (1000 0.1% (1000	mg/kg)
RESTRICTED SUBSTANCES CADMIUM (Cd) LEAD (Pb) MERCURY (Hg) CHROMIUM (VI) (Cr ⁵⁺) POLYBROMINATED BIPHENYLS (POLYBROMINATED DIPHENYL ET THE ABOVE LIMITS WERE QUOT 2005/618/EC FOR HOMOGENEOU	PBBs) HERS (PBDEs) ED FROM 2002/95/E	0.01% (100 0.1% (1000 0.1% (1000	mg/kg)
CADMIUM (Cd) LEAD (Pb) MERCURY (Hg) CHROMIUM (VI) (Cr ⁶⁺) POLYBROMINATED BIPHENYLS (POLYBROMINATED DIPHENYL ET THE ABOVE LIMITS WERE QUOT 2005/618/EC FOR HOMOGENEOU	PBBs) HERS (PBDEs) ED FROM 2002/95/E	0.01% (100 0.1% (1000 0.1% (1000	mg/kg)
LEAD (Pb) MERCURY (Hg) CHROMIUM (VI) (Cr ⁶⁺) POLYBROMINATED BIPHENYLS (POLYBROMINATED DIPHENYL ET THE ABOVE LIMITS WERE QUOT 2005/618/EC FOR HOMOGENEOU	PBBs) HERS (PBDEs) ED FROM 2002/95/E	0.1% (1000 0.1% (1000	
MERCURY (Hg) CHROMIUM (VI) (Cr ⁶⁺) POLYBROMINATED BIPHENYLS (POLYBROMINATED DIPHENYL ET THE ABOVE LIMITS WERE QUOT 2005/618/EC FOR HOMOGENEOU	PBBs) HERS (PBDEs) ED FROM 2002/95/E	0.1% (1000	
CHROMIUM (VI) (Cr ⁶⁺) POLYBROMINATED BIPHENYLS (POLYBROMINATED DIPHENYL ET THE ABOVE LIMITS WERE QUOT 2005/618/EC FOR HOMOGENEOU	PBBs) HERS (PBDEs) ED FROM 2002/95/E		
POLYBROMINATED BIPHENYLS (POLYBROMINATED DIPHENYL ET THE ABOVE LIMITS WERE QUOT 2005/618/EC FOR HOMOGENEOU	PBBs) HERS (PBDEs) ED FROM 2002/95/E	0.1% (1000	
THE ABOVE LIMITS WERE QUOT 2005/618/EC FOR HOMOGENEOU	HERS (PBDEs) ED FROM 2002/95/E	0.1% (1000	
2005/618/EC FOR HOMOGENEOU		0.1% (1000	
		EC AND AMEN	DMENT
	5 MAIERIAL.		
TESTING ITEM	TESTING METHOD	RI	SPORTING LIMIT
CADMIUM (Cd) EDITION 1 CONTENT DIGESTION OES	RENCE TO IEC 6232 .0: 2008, BY ACID AND DETERMINED E	BY ICP-	2 mg/kg
LEAD (Pb) EDITION 1 CONTENT DIGESTION OES	RENCE TO IEC 6232 .0: 2008, BY ACIE AND DETERMINED E	BY ICP-	2 mg/kg
MERCURY (Hg) EDITION 1 CONTENT DIGESTION OES	RENCE TO IEC 6232 .0: 2008, BY ACIE AND DETERMINED E	SY ICP-	2 mg/kg
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (FOR NON-METAL) DIGESTION	RENCE TO IEC 6232 .0: 2008, BY ALKA AND DETERMINED E ROPHOTOMETER	LINE .	L mg/kg
BIPHENYLS (PBBs)& EDITION 1 POLYBROMINATED EXTRACTIO DIPHENYL ETHERS GC/MS AND	RENCE TO IEC IEC .0: 2008, BY SOLV N AND DETERMINED FURTHER HPLC ION WHEN NECESSAR	ENT BY 5	5 mg/kg
DATE SAMPLE RECEIVED:AUG 0 TESTING PERIOD:AUG 02, 201	0 TO AUG 05, 2010	******	******* CONTINUE



Annex 5: Analysis Result of Passivation Glass (Page 4 of 7)



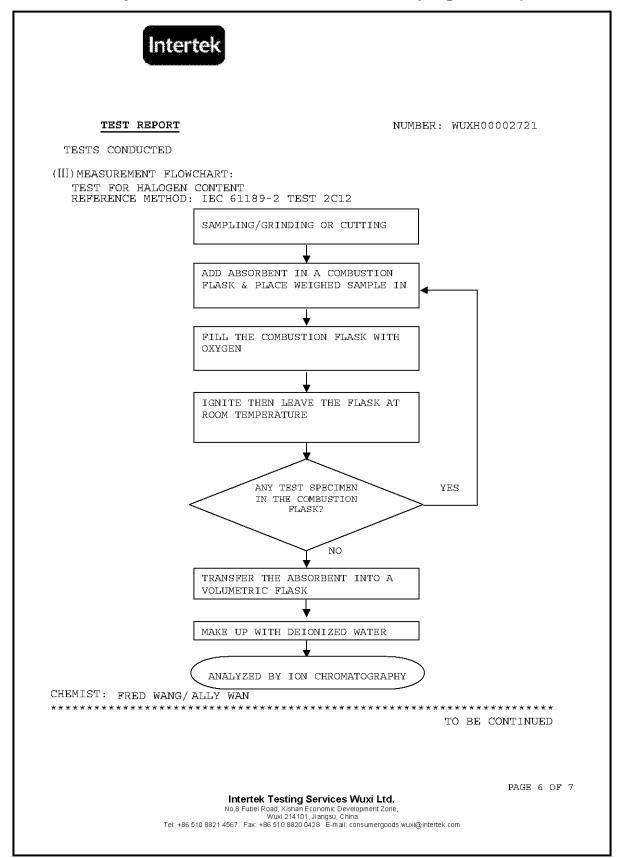


Annex 5: Analysis Result of Passivation Glass (Page 5 of 7)

TEST REPORT		NUMBER: W	UXH00002721
TESTS CONDUCTED			
(]) test result summary halogen content :	:		
TESTING	ITEM	RESU	JLT (ppm)
FLUORINE (F) CONTENT			ND
CHLORINE (Cl)CONTENT			ND
BROMINE (Br) CONTENT			ND
IODINE (I) CONTENT			ND
(II) TEST METHOD : TESTING ITEM	TESTING METH		REPORTING LIMIT
HALOGEN (F,Cl, Br,I) CONTENT	WITH REFERENCE TO IEC 2:2006 BY COMBUSTION DETERMINED BY ION CHROMATOGRAPHY	 C 61189-	50 ppm
REMARKS : REPORTING LIMIT	. –		

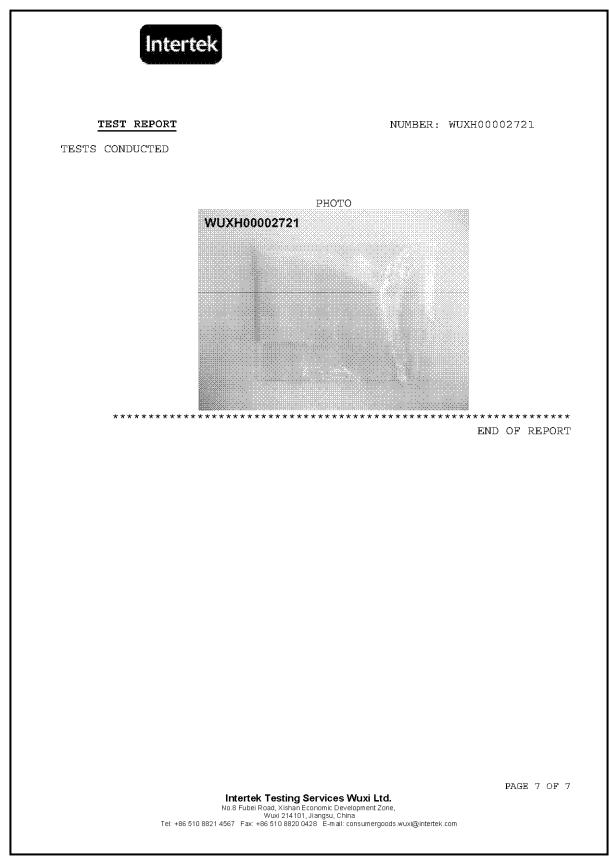


Annex 5: Analysis Result of Passivation Glass (Page 6 of 7)





Annex 5: Analysis Result of Passivation Glass (Page 7 of 7)





Annex 6: Analysis Result of Die Bonding Solder (Page 1 of 5)

SGS	» »			
Test Report	No:	10190434(7)	Date: 26-Mar-10	Page 1 of 5
Heraeus Materials Singapo No. 2 Corporation Road, #I	ore Pte Ltd 06-15/16/17 C	corporation Place, Si	ngapore 618494	
The following sample(s) wa	is/were submi	tted and identified b	y/on behalf of the client as:	
Sample Description	: Pb S	n5Ag2.5 Solder Pas	te	
Sample Receiving Date Testing Period		Mar-10 Mar-10 to 25-Mar- 10		
Test Requested		ccordance with the f stives.	RoHS Directive 2002/95/EC, and	its amendment
Test Result(s)	: Plea	se refer to next pag	e(s).	
Conclusion			tests on submitted sample(s), th	e results compliv
Signed for and on behalfo SGS Testing & Control Ser		ore Pte Ltd		
من من ماریک منابع				
Y.C. Tham				
Y.C. Tham Laboratory Manager Test locator: 26 Ayer Ratch Orescen This document's issued by the Con documents, sutied to Terms and o indeminication and interfactor issues of 8 interumion only and within the in a transaction from secreting at the appearance of this documents under	ipany under ils Ge Conditions for Bec defined herein, Anj nils of Clients insin r lights and obliga Ulland offenders ma sample (s) are re bin	neral Conditions of Serulas (tonic Documents al <u>www.</u> (holder of Histicoument) is a (clore, Ifary. The Company (ons under the transaction y be prosequied to the fulles at for 20 days only. This doc	accessible al <u>www.sgs.com/lems.and_cord</u> g <u>s.com/lems.prd.com</u> ari.him. Allenian is duised hel information contained hearonamico ('s solar esponsibili yis loik Cileni and his do documents. Any unsufrotted al tradion, tong lexiteri of heliaw. Unters oftenviste statist he uneni cannolbe reproduzed except in úli, wih XCD-07 Singapore 12564+1+65 63790111 ft-81	drawn D the limitation of its is he Company's findings at his umeni does not excertate par umeni does not excertate par y or telefication of the comp results shown in his test report pulprior approval of he Comp



Annex 6: Analysis Result of Die Bonding Solder (Page 2 of 5)

Test Report Test Result(s):	No: 101					
<u>Test Result(s):</u>		90 434(7) Date: 26-	Mar-10		Page 2 of 5	
Sample Description :	Pb Sn5A	g2.5 Solder Paste				
Test Item(s):	Unit	Method	Results	MDL	RoHS Lim	
Cadmium(Cd)	mg/kg	With reference to IEC62321, Ed12008 . Analysis was performed by ICP/AES	n.d.	2	100	
Lead (Pb)	mg/kg	With reference to IEC62321, Ed12008 . Analysis was performed by ICP/AES	934724'	2	1000	
Mercury (Hg)	mg/kg	With reference to IEC62321, Ed12008. Analysis was performed by ICP/AES	n.d.	2	1000	
Hexavalent Chromium (CrVI)	mg/kg	With reference to IEC62321, Ed12008. Analysis was performed by UVAAIs Spectrometry	n.d.	2	1000	
Sum of PBBs Monobromobiphenyl	mg/kg mg/kg		n.d. n.d.	5	100.0	
Dibromobiphenyl	mg/kg		n.d.	5	· ·	
Tribromobiphenyl	mg/kg		n.d.	5		
Tetrabromobiphenyl Hexabromobiphenyl	mg/kg mg/kg		n.d. n.d.	5	+ ·	
Pentabromobiphenyl	mg/kg	1	n.d.	5	· ·	
Heptabromobiphenyl	mg/kg		n.d.	5	· ·	
Octabro mobiphenyl Nona bromobiphenyl	mg/kg mg/kg	l	n.d. n.d.	5	<u> </u>	
Decabromobiphenyl	mg/kg	With reference to IEC62321, Ed12008. Analysis was	n.d.	5		
Sum of PBDEs	mg/kg	performed by GC/MS	nd.		1000	
Monobromodiphenyl ether Dibromodiphenyl ether	mg/kg mg/kg	í í	n.d. n.d.	5	· ·	
Tribromodiphenvi ether	mg/kg	1	n.d.	5	 .	
Tetrabromodiphenyl ether	mg/kg	1	n.d.	5		
Pentabromodiphenyl ether	mg/kg		n.d.	5		
Hexabromodiphenyl ether Heptabromodiphenyl ether	mg/kg	4	n.d. n.d.	5	· ·	
Octabromodiphenvi ether	mg/kg mg/kg	1	n.d.	5	<u> </u>	
		1	n.d.	5	1 -	
Nonabromodiphenyl ether	mg/kg					

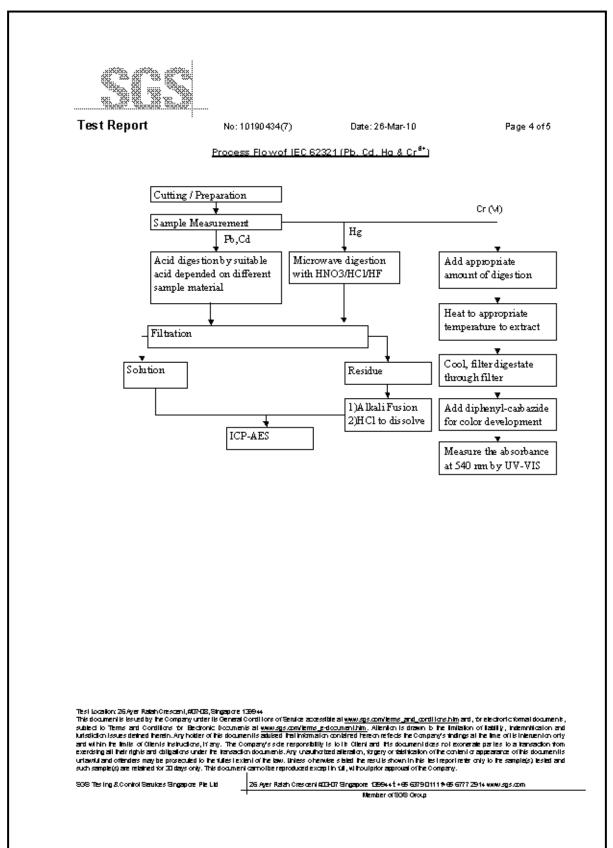


Annex 6: Analysis Result of Die Bonding Solder (Page 3 of 5)

a de la companya de l La companya de la comp			
Test Report	No: 10190434(7)	Date: 26-Mar-10	Page 3 of 5
(2) (3) (4) (6) *Ex emption: Th melting temper Remarks: Samp	overruled by the European Co Deca BDE will be included in th "." = Not regulated * : Exceeds limit e received sample is exempt ature solder type solders (i.e		2008. Subsequently nex Article 7:lead in hi
	,		
<u>Sample photo:</u> Sample Descrip	ion : Pb Sn5Ag2.5	Solder Paste	
SGS authenticat	e the photo on original report (only	
111			
subled to Tems and Conditions for Inisidian issues defined therein. Any i and within he limits of Glenis instruc- exercising all heir rights and chigations unlawful and offenders may be proced.	y unter its General Corditions of Bendra a Bechonic Documents at <u>www.gs.com/en</u> older of the documentis stutistic theil hind lone, if any. The Company's side respons under he travescion documents. Any una- ted to the fullest extent of the taw. Unless o only. This document carmothe reproduced	coassible al <u>www.sgs.com/tems.gnd_contilions.hi</u> majer.documenihim. Altenion is drawn bithe in malen constitued teneon reflects the Company's tim biblig is to its Client and this document docs no i uthorbed alteration, forgety or bisitication or the co otherwise sized the results shown in this telepon except in 12, withoutphore approval of the Company and ACD-07 Singapore (1994+1+45 637901111+65	vision of labilly, indemnitation dings al he line of its indemnitor concrete parties to a lanasadon i hieni or appearance of his documen limiter only to the sample(s) lested

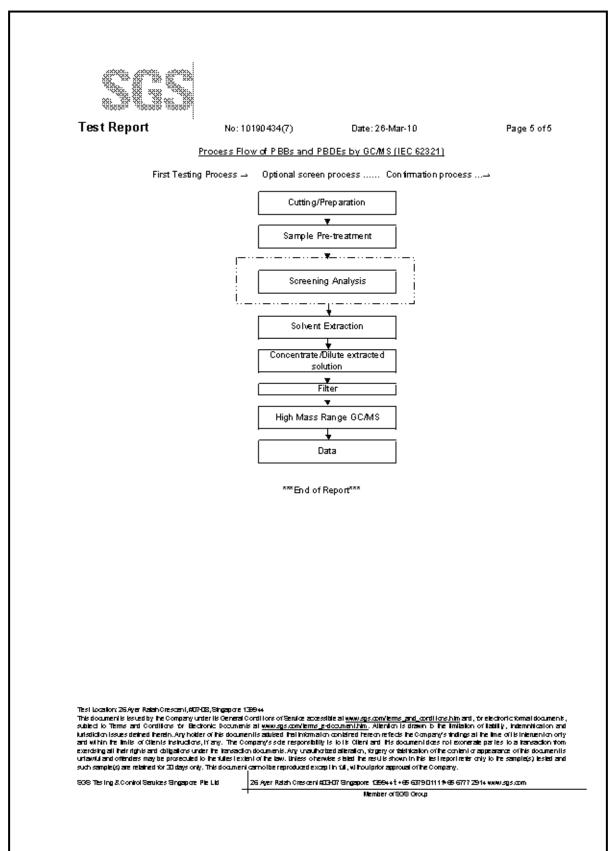


Annex 6: Analysis Result of Die Bonding Solder (Page 4 of 5)





Annex 6: Analysis Result of Die Bonding Solder (Page 5 of 5)





Expertise Applied | Answers Delivered

Annex 7: Applicable RoHS exemptions

13.2,2003 EN Official Journal of	the European Union L 37/19				
	EAN PARLIAMENT AND OF THE COUNCIL nuary 2003				
on the restriction of the use of certain hazardous substances in electrical and electronic equipment					
13.2.2003 EN Official Journal of	to be protected and an overall strategy that in particular resuries the use of cadmium and stimulates research into				
Article 4	substitutes should therefore be implemented. The Reso-				
Prevention					
1. Member States shall ensure that, from 1 July 2006, new electrical and electronic equipment put on the market does not contain lead. mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE). National measures restricting or prohibiting the use of these substances in electrical and electronic equipment which were adopted in line with Community legislation before the adoption of this Directive may be maintained until 1 July 2006.					
2. Paragraph 1 shall not apply to the applications listed in	e European Union L 37/2				
the Annex.					
ANNE	:Х				
Applications of lead, mercury, cadmium and hexavalent cl of Article					
1. Mercury in compact fluorescent lamps not exceeding 5 m	ig per lamp.				
2. Mercury in straight fluorescent lamps for general purposes	s not exceeding:				
— halophosphate	10 mg				
— triphosphate with normal lifetime	5 mg				
triphosphate with long lifetime	8 mg.				
3. Mercury in straight fluorescent lamps for special purposes.	i.				
4. Mercury in other lamps not specifically mentioned in this	Annex.				
5. Lead in glass of cathode ray tubes, electronic components	and fluorescent tubes.				
 Lead as an alloying element in steel containing up to 0.35 by weight and as a copper alloy containing up to 4 % lead 					
7, — Lead in high melting temperature type solders (i.e. tin-					
— lead in solders for servers, storage and storage array sy	/stems (exemption granted until 2010),				
management for telecommunication,	for switching, signalling, transmission as well as network				
— lead in electronic ceramic parts (e.g. piezoelectronic de	evices).				
Cadmium plating except for applications banned under Di relating to restrictions on the marketing and use of certain					