



# TEST REPORT

REPORT NO.KA/2005/70990/A-1  
DATE: 2005/7/22  
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THE FOLLOWING MERCHANDISE WAS(WERE) SUBMITTED AND IDENTIFIED BY THE CLIENT AS :

**CLIENT** : Skywell Electronics Corp..  
: 10-1, NO. 161, KungYi Rd., Taichung,Taiwan, R.O.C..  
**PRODUCT DESCRIPTION** : CHIP RESISTOR.  
**STYLE/ITEM NO.** : ALL SERIES(LEAD FREE).  
**SAMPLE** : AS ATTACHED PHOTO.  
**TESTING DATE** : 2005/07/19 TO 2005/08/01  
**SAMPLE RECEIVED** : 2005/07/15.

WE HAVE TESTED THE SAMPLE(S) SUBMITTED AS REQUESTED AND THE FOLLOWING RESULTS WERE OBTAINED.

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
ASBESTOS ANALYSIS	---	---	---	---
Anthrophyllite(CAS NO.017068-78-9)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Crocidolite(CAS NO.012001-28-4)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Amosite(CAS NO.012172-73-5)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Tremolite(CAS NO.014567-73-8)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Chrysotile(CAS NO.012001-29-5)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
Actinolite(CAS NO.013768-00-8)	---	As per NIOSH 9000 method. Analysis was performed by XRD.	---	n.d.
FORMALDEHYDE	ppm	DIN 53315 METHOD B (HPLC)	0.2	n.d.
PVC FREE TEST	---	FTIR/ATR AND FLAME TEST	---	n.d.
<b>ORGANOTIN COMPOUNDS</b>	---	---	---	---
TRIBUTYL TIN(TBT)	ppm	BY USING GC/FPD WITH THE PROCEDURE OUTLINE IN DIN 38407.	0.03	n.d.
TRIPHENYL TIN(TPT)	ppm	BY USING GC/FPD WITH THE PROCEDURE OUTLINE IN DIN 38407.	0.03	n.d.
<b>HCFCs</b>	---	---	---	---
HYDROCHLOROFLUOROCARBON-21	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-22	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.



*Kueilan Chen*

**Kueilan Chen / Asst. Supervisor  
Sign for and on behalf of  
SGS Taiwan Limited**

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TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
HYDROCHLOROFLUOROCARBON-31	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-121	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-122	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-123	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-124	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-131	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-132b	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-133a	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-141b	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-142b	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-221	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-222	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-223	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-224	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-225ca	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-225cb	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-226	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-231	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-232	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-233	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-234	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.



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TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
HYDROCHLOROFLUOROCARBON-235	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-241	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-242	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-243	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-244	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-251	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-252	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-253	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-261	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-262	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HYDROCHLOROFLUOROCARBON-271	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
<b>CFCs &amp; HALON</b>	---	---	---	---
CHLOROFLUOROCARBON-11	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-12	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-113	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-114	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-115	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HALON-1211	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HALON-1301	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HALON-2402	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-13	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-111	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-112	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-211	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-212	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-213	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-214	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-215	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-216	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CHLOROFLUOROCARBON-217	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
CARBON TETRACHLORIDE	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
METHYL CHLOROFORM	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.



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TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
<b>HBFC</b>	---	---	---	---
HBFC-21B2	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-22B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-31B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-121B4	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-122B3	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-123B2	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-124B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-131B3	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-132B2	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-133B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-141B2	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-142B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-151B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-221B6	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-222B5	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-223B4	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-224B3	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-225B2	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-226B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-231B5	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-232B4	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-233B3	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-234B2	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-235B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-241B4	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-242B3	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-243B2	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-244B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-251B3	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-252B2	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-253B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-261B2	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-262B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
HBFC-271B1	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
BROMOMETHANE	ppm	ANALYZED BY GC/MS LINKED HEADSPACE	1	n.d.
<b>AZO</b>	---	---	---	---
1):4-AMINODIPHENYL (CAS NO.92-67-1)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
2):BENZIDINE (CAS NO.92-87-5)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
3):4-CHLORO-O-TOLUIDINE (CAS NO.95-69-2)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.



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4):2-NAPHTHYLAMINE (CAS NO.91-59-8)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
5):O-AMINO-AZOTOLUENE (CAS NO.97-56-3)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
6):5-NITRO-O-TOLUIDINE (CAS NO.99-55-8)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
7):4-CHLOROANILINE (CAS NO.106-47-8)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
8):4-METHOXY-M-PHENYLENEDIAMINE (CAS NO.615-05-4)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
9):4,4'-DIAMINODIPHENYLMETHANE (CAS NO.101-77-9)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
10):3,3'-DICHLOROBENZIDINE (CAS NO.91-94-1)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
11):3,3'-DIMETHOXYBENZIDINE (CAS NO.119-90-4)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
12):3,3'-DIMETHYLBENZIDINE (CAS NO.119-93-7)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
13):4,4'-METHYLENEDI-O-TOLUIDINE (CAS NO.838-88-0)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
14):P-CRESIDINE (CAS NO.120-71-8)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
15):4,4'-METHYLENE-BIS-(2-CHLORANILINE) (CAS NO.101-14-4)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
16):4,4'-OXYDIANILINE (CAS NO.101-80-4)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
17):4,4'-THIODIANILINE (CAS NO.139-65-1)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
18):O-TOLUIDINE (CAS NO.95-53-4)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
19):4-METHYL-M-PHENYLENEDIAMINE (CAS NO.95-80-7)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
20):2,4,5-TRIMETHYLANILINE (CAS NO.137-17-7)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
21):O-ANISIDINE (CAS NO.90-04-0)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.
22):4-AMINOAZOBENZENE (CAS NO.60-09-3)	ppm	LMBG 82.02-2 (GC/MS)	3	n.d.

NOTE : n.d. = not detected.

<END>



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