

Test Report

VISHAY TANTALUM DIVISION
P.O.B 87, DIMONA 86100, ISRAEL

ReportNo.:CE/2009/77547

Date :2009/10/05

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

Sample Description : TANTALUM CAPACITORS MOLDED CHIP
Sample Received : 2009/10/05
Testing Period : 2009/10/05TO2009/10/13

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Test Result(s) : - Please see the next page(s) -


Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

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Test Result(s)

PART NAME NO.1 : MIXED ALL PARTS

Test Item (s):	Unit	Method	MDL	Result
				No.1
Chromium VI (Cr+6)	mg/Kg	With referece to US EPA 3060A. Analyzed by UV-VIS (US EPA 7196A)	2	N.D.
Cadmium (Cd)	mg/Kg	With reference to EN 1122; method B:2001. Analyzed by ICP-AES.	2	N.D.
Mercury (Hg)	mg/Kg	With reference to US EPA 3052. Analyzed by ICP-AES.	2	N.D.
Lead (Pb)	mg/Kg	With reference to US EPA 3050B. Analyzed by ICP-AES.	2	N.D.
Formaldehyde(CAS No:000050-00-0)	mg/Kg	With reference to DIN 53315. Analysis was performed by HPLC/DAD/MS.	0.2	N.D.
PVC (CAS No:9002-86-2)	%	Analysis was performed by FTIR/ATR and Pyrolyzer-GC/MS.	1	Negative
Mirex(CAS NO:002385-85-5)	mg/Kg	Analysis was performed by GC/MS.	4	N.D.
Asbestos	---	---	---	---
Amosite(CAS NO.012172-73-5)	%	As per NIOSH 9000 method. Analysis was performed by XRD.	1	Negative
Chrysotile(CAS NO.012001-29-5)	%	As per NIOSH 9000 method. Analysis was performed by XRD.	1	Negative
Crocidolite(CAS NO.012001-28-4)	%	As per NIOSH 9000 method. Analysis was performed by XRD.	1	Negative

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Test Item (s):	Unit	Method	MDL	Result
				No.1
Anthrophyllite(CAS NO.017068-78-9)	%	As per NIOSH 9000 method. Analysis was performed by XRD.	1	Negative
Tremolite(CAS NO.014567-73-8)	%	As per NIOSH 9000 method. Analysis was performed by XRD.	1	Negative
Actinolite(CAS NO.013768-00-8)	%	As per NIOSH 9000 method. Analysis was performed by XRD.	1	Negative
AZO	---	As per LMBG 8202-2	---	---
1): 4-AMINODIPHENYL (CAS NO.92-67-1)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
2): BENZIDINE (CAS NO.92-87-5)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
3): 4-CHLORO-O-TOLUIDINE (CAS NO.95-69-2)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
4): 2-NAPHTHYLAMINE (CAS NO.91-59-8)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
5): O-AMINOAZOTOLUENE (CAS NO.97-56-3)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
6): 2-AMINO-4-NITROTOLUENE (CAS NO.99-55-8)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
7): P-CHLOROANILINE (CAS NO.106-47-8)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
8): 2,4-DIAMINOANISOLE (CAS NO.615-05-4)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.

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Test Item (s):	Unit	Method	MDL	Result
				No.1
9): 4,4'-DIAMINODIPHENYLMETHANE (CAS NO.101-77-9)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
10): 3,3'-DICHLOROBENZIDINE (CAS NO.91-94-1)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
11): 3,3'-DIMETHOXYBENZIDINE (CAS NO.119-90-4)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
12): 3,3'-DIMETHYLBENZIDINE (CAS NO.119-93-7)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
13): 3,3'-DIMETHYL-4,4'-DIAMINODIPHENYLMETHANE (CAS NO.838-88-0)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
14): P-CRESIDINE(2-METHOXY-5-METHYLANILINE) (CAS NO.120-71-8)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
15): 4,4'-METHYLENE-BIS-(2-CHLOROANILINE) (CAS NO.101-14-4)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
16): 4,4'-OXYDIANILINE (CAS NO.101-80-4)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
17): 4,4'-THIODIANILINE (CAS NO.139-65-1)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
18): O-TOLUIDINE (CAS NO.95-53-4)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
19): 2,4-TOLUYLENEDIAMINE (CAS NO.95-80-7)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.

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Test Item (s):	Unit	Method	MDL	Result
				No.1
20): 2,4,5-TRIMETHYLANILINE (CAS NO.137-17-7)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
21): O-ANISIDINE (CAS NO.90-04-0)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
24): P-AMINOAZOBENZENE (CAS NO.60-09-3)	mg/Kg	With reference to LMBG 82.02-2. Analysis was performed by GC/MS.	3	N.D.
Organic-tin compounds	---	---	---	---
Triphenyl Tin(TPT)(CAS NO:000668-34-8)	mg/Kg	With reference to 89/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	N.D.
Tributyl Tin(TBT)	mg/Kg	With reference to 89/677/EEC & DIN 38407. Analysis was performed by GC/FPD.	0.03	N.D.
PBBs (Polybrominated biphenyls)	---	---	---	---
Monobromobiphenyl	mg/Kg	With reference to USEPA3540C, Analyzed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	5	N.D.
Dibromobiphenyl	mg/Kg		5	N.D.
Tribromobiphenyl	mg/Kg		5	N.D.
Tetrabromobiphenyl	mg/Kg		5	N.D.
Pentabromobiphenyl	mg/Kg		5	N.D.
Hexabromobiphenyl	mg/Kg		5	N.D.
Heptabromobiphenyl	mg/Kg		5	N.D.
Octabromobiphenyl	mg/Kg		5	N.D.
Nonabromobiphenyl	mg/Kg		5	N.D.
Decabromobiphenyl	mg/Kg		5	N.D.
Total PBBs (Polybrominated biphenyls)/Sum of above	mg/Kg		-	N.D.

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Test Item (s):	Unit	Method	MDL	Result
				No.1
PBBEs(PBDEs) (Polybrominated biphenyl ethers)	---	---	---	---
Monobromobiphenyl ether	mg/Kg	With reference to USEPA3540C, Analyzed by GC/MS and screening via USEPA 3550C with HPLC/DAD/MS	5	N.D.
Dibromobiphenyl ether	mg/Kg		5	N.D.
Tribromobiphenyl ether	mg/Kg		5	N.D.
Tetrabromobiphenyl ether	mg/Kg		5	N.D.
Pentabromobiphenyl ether	mg/Kg		5	N.D.
Hexabromobiphenyl ether	mg/Kg		5	N.D.
Heptabromobiphenyl ether	mg/Kg		5	N.D.
Octabromobiphenyl ether	mg/Kg		5	N.D.
Nonabromobiphenyl ether	mg/Kg		5	N.D.
Decabromobiphenyl ether	mg/Kg		5	N.D.
Total PBBEs(PBDEs) (Polybrominated biphenyl ethers)/Sum of above	mg/Kg		-	N.D.
Total of Mono to Nona- brominated biphenyl ether. (Note 4)	mg/Kg		-	N.D.

- NOTE: (1) N.D. = Not Detected (<MDL)
 (2) mg/Kg = ppm, 0.1% = 1000 ppm(mg/Kg), 0.0005% = 5 ppm(mg/Kg)
 (3) MDL = Method Detection Limit
 (4) Decabromobiphenyl ether (DecaBDE) in polymeric applications is exempted by Commission Decision of 13 Oct 2005 amending Directive 2002/95/EC notified under document 2005/717/EC.
 (5) PBBEs=PBDEs=Polybrominated Diphenyl Ethers=PBDOs=PBBOs.
 (6) " - " = Not Regulated
 (7) " --- " = Not Applicable
 (8) Sample was totally digested for Pb, Cd, Hg and totally extracted for Cr⁺⁶ and PBBs/PBDEs.
 (9) Negative = Undetectable / Positive = Detectable

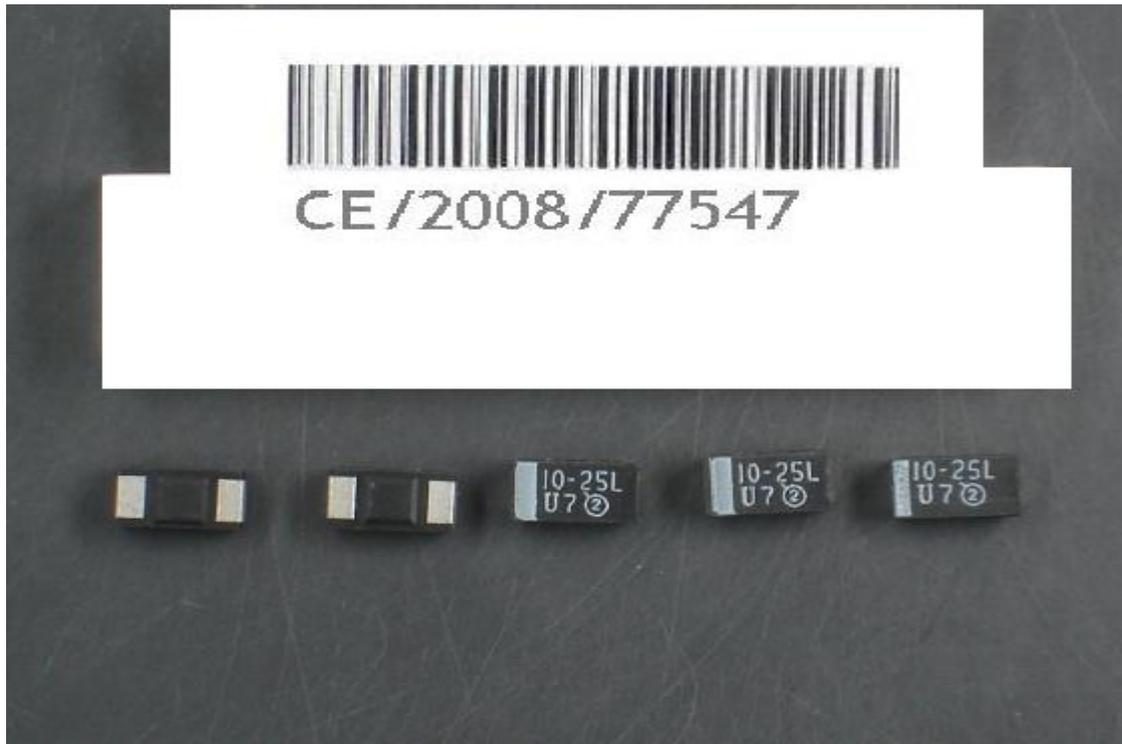
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