

# Test Report

Report No.: RLSZA000099740001

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**Applicant** : SHENZHEN SURONG GAPACITORS CO., LTD.

**Address** : SU RONG IND. PARK, KU KENG, GUAN LAN TOWN, SHENZHEN,  
GUANGDONG, CHINA

**Report on the submitted sample(s) said to be:**

No.	Sample Names	Sample Description	Part No.
1	Solder	Silver color metal	CL11、CL21、 CL20、CL21B、 CL21X、CL233X、 CBB13、CBB81、 CBB81B、CBB20、 CBB21、CBB21B、 CBB22、CBB6、 CBB62、CBB90、 MPX/MKP、 MKP/MPX
2	Cp lead	Silver color metal wire	
3	Aluminium foil	Silver color foil	
4	Plastic film	Transparent plastic film	
5	Plastic box(black)	Black plastic	
6	Pet tape(yellow)	Yellow tape	
7	UV ink(silvery)	Silver color ink	
8	Epoxy-resin(red)	Red epoxy-resin	
9	Metallized film	Silver color film	
10	Epoxy-resin(yellow)	Yellow epoxy-resin	
11	Epoxy-resin(black)	Black epoxy-resin	
12	UV ink(black)	Black ink	
13	Plastic box(yellow)	Yellow plastic	
14	Plastic box(gray)	Gray plastic	

Sample Received Date : Dec. 5, 2008

Testing Period : Dec. 5, 2008 to Dec. 13, 2008

**Test Requested** : As specified by client, to determine the Lead, Mercury, Cadmium, Hexavalent Chromium, Perfluorooctanoic Acid, Perfluorooctane Sulfonates, Phthalates, Polycyclic Aromatic Hydrocarbons(PAHs), PBBs&PBDEs content in the submitted sample.

**Test Method/Test Result(s):** Please refer to the following page(s).

Tested by \_\_\_\_\_

Inspected by Jed

Approved by \_\_\_\_\_

Date Dec. 13, 2008



Technical Manager

No. 11609998

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**Test Method:**

Tested Item(s)	Pretreatment Method	Measured Equipment(s)	Report Limit
Lead (Pb)	Refer to US EPA 3052:1996	ICP-AES	2ppm
Mercury (Hg)	Refer to US EPA 3052:1996	ICP-AES	2ppm
Cadmium (Cd)	Refer to EN 1122:2001 method B	ICP-AES	2ppm
	Refer to US EPA 3050B:1996 or other acid digestion		
Hexavalent Chromium (Cr <sup>6+</sup> )	Refer to US EPA 3060A:1996	UV-Vis	2ppm
Perfluorooctanoic Acid (PFOA)	Refer to US EPA 3550C:2007	LC-MS-MS	5ppm
Perfluorooctane Sulfonates (PFOS)	Refer to US EPA 3550C:2007	LC-MS-MS	5ppm
Phthalates	Refer to ASTM D3421	GC-MSD	50ppm
Polycyclic Aromatic Hydrocarbons (PAHs)	Refer to US EPA 8270D:2007	GC-MSD	0.2ppm
Polybrominated Biphenyls (PBBs)	Refer to US EPA 3540C:1996	GC-MSD	5ppm
Polybrominated Diphenyl Ethers (PBDEs)	Refer to US EPA 3540C:1996	GC-MSD	5ppm

**Test Result(s):**

Tested Item(s)	Content			
	Sample No.1	Sample No.2	Sample No.3	Sample No.4
Lead (Pb)	49ppm	22ppm	15ppm	N.D.
Mercury (Hg)	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium (Cr <sup>6+</sup> )	N.D.	N.D.	N.D.	N.D.

Tested Item(s)	Content			
	Sample No.5	Sample No.6	Sample No.7	Sample No.8
Lead (Pb)	N.D.	N.D.	N.D.	N.D.
Mercury (Hg)	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium (Cr <sup>6+</sup> )	N.D.	N.D.	N.D.	N.D.

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**Test Result(s):**

Tested Item(s)	Content		
	Sample No.9	Sample No.10	Sample No.11
Lead (Pb)	N.D.	N.D.	N.D.
Mercury (Hg)	N.D.	N.D.	N.D.
Cadmium (Cd)	N.D.	N.D.	N.D.
Hexavalent Chromium (Cr <sup>6+</sup> )	N.D.	N.D.	N.D.
Perfluorooctanoic Acid (PFOA)	N.D.	N.D.	N.D.
Perfluorooctane Sulfonates(PFOS)	N.D.	N.D.	N.D.

Tested Item(s)	Content		
	Sample No.12	Sample No.13	Sample No.14
Lead (Pb)	N.D.	N.D.	N.D.
Mercury (Hg)	N.D.	N.D.	N.D.
Cadmium (Cd)	N.D.	N.D.	N.D.
Hexavalent Chromium (Cr <sup>6+</sup> )	N.D.	N.D.	N.D.
Perfluorooctanoic Acid (PFOA)	N.D.	N.D.	N.D.
Perfluorooctane Sulfonates(PFOS)	N.D.	N.D.	N.D.

**Note:** The samples had been dissolved totally tested for Lead, Mercury, Cadmium.

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**Test Result(s):**

Tested Item(s)	Content			
	Sample No.4	Sample No.5	Sample No.6	Sample No.7
<b>Polybrominated Biphenyls(PBBs)</b>				
Monobromobiphenyl	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl	N.D.	N.D.	N.D.	N.D.
Tribromobiphenyl	N.D.	N.D.	N.D.	N.D.
Tetrabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Pentabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Hexabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Heptabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Octabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Nonabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Decabromobiphenyl	N.D.	N.D.	N.D.	N.D.
<b>Polybrominated Diphenyl Ethers(PBDEs)</b>				
Monobromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Dibromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Tribromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Tetrabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Pentabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Hexabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Heptabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Octabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Nonabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Decabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.

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**Test Result(s):**

Tested Item(s)	Content			
	Sample No.8	Sample No.9	Sample No.10	Sample No.11
<b>Polybrominated Biphenyls(PBBs)</b>				
Monobromobiphenyl	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl	N.D.	N.D.	N.D.	N.D.
Tribromobiphenyl	N.D.	N.D.	N.D.	N.D.
Tetrabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Pentabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Hexabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Heptabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Octabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Nonabromobiphenyl	N.D.	N.D.	N.D.	N.D.
Decabromobiphenyl	N.D.	N.D.	N.D.	N.D.
<b>Polybrominated Diphenyl Ethers(PBDEs)</b>				
Monobromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Dibromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Tribromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Tetrabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Pentabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Hexabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Heptabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Octabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Nonabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.
Decabromodiphenyl ether	N.D.	N.D.	N.D.	N.D.

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**Test Result(s):**

Tested Item(s)	Content		
	Sample No.12	Sample No.13	Sample No.14
<b>Polybrominated Biphenyls(PBBs)</b>			
Monobromobiphenyl	N.D.	N.D.	N.D.
Dibromobiphenyl	N.D.	N.D.	N.D.
Tribromobiphenyl	N.D.	N.D.	N.D.
Tetrabromobiphenyl	N.D.	N.D.	N.D.
Pentabromobiphenyl	N.D.	N.D.	N.D.
Hexabromobiphenyl	N.D.	N.D.	N.D.
Heptabromobiphenyl	N.D.	N.D.	N.D.
Octabromobiphenyl	N.D.	N.D.	N.D.
Nonabromobiphenyl	N.D.	N.D.	N.D.
Decabromobiphenyl	N.D.	N.D.	N.D.
<b>Polybrominated Diphenyl Ethers(PBDEs)</b>			
Monobromodiphenyl ether	N.D.	N.D.	N.D.
Dibromodiphenyl ether	N.D.	N.D.	N.D.
Tribromodiphenyl ether	N.D.	N.D.	N.D.
Tetrabromodiphenyl ether	N.D.	N.D.	N.D.
Pentabromodiphenyl ether	N.D.	N.D.	N.D.
Hexabromodiphenyl ether	N.D.	N.D.	N.D.
Heptabromodiphenyl ether	N.D.	N.D.	N.D.
Octabromodiphenyl ether	N.D.	N.D.	N.D.
Nonabromodiphenyl ether	N.D.	N.D.	N.D.
Decabromodiphenyl ether	N.D.	N.D.	N.D.

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**Test Result(s):**

Tested Item(s)	Content		
	Sample No.9	Sample No.10	Sample No.11
<b>Phthalates</b>			
Dimethyl phthalate(DMP)	N.D.	N.D.	N.D.
Diethyl phthalate(DEP)	N.D.	N.D.	N.D.
Dipropyl phthalate(DPRP)	N.D.	N.D.	N.D.
Diisobutyl phthalate(DIBP)	N.D.	N.D.	N.D.
Dibutyl phthalate(DBP)	N.D.	N.D.	N.D.
Dipentyl phthalate(DPP)	N.D.	N.D.	N.D.
Diheptyl phthalate(DHP)	N.D.	N.D.	N.D.
Benzylbutyl phthalate(BBP)	N.D.	N.D.	N.D.
Dicyclohexyl phthalate(DCHP)	N.D.	N.D.	N.D.
Di-2-ethylhexyl phthalate(DEHP)	N.D.	N.D.	N.D.
Diisooctyl phthalate(DIOP)	N.D.	N.D.	N.D.
Di-n-octyl phthalate(DNOP)	N.D.	N.D.	N.D.
Diisononyl phthalate(DINP)	N.D.	N.D.	N.D.
Diisodecyl phthalate(DIDP)	N.D.	N.D.	N.D.
Dinonyl phthalate(DNP)	N.D.	N.D.	N.D.
Diisononyl adipate(DINA)	N.D.	N.D.	N.D.

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**Test Result(s):**

Tested Item(s)	Content		
	Sample No.12	Sample No.13	Sample No.14
<b>Phthalates</b>			
Dimethyl phthalate(DMP)	N.D.	N.D.	N.D.
Diethyl phthalate(DEP)	N.D.	N.D.	N.D.
Dipropyl phthalate(DPRP)	N.D.	N.D.	N.D.
Diisobutyl phthalate(DIBP)	N.D.	N.D.	N.D.
Dibutyl phthalate(DBP)	N.D.	N.D.	N.D.
Dipentyl phthalate(DPP)	N.D.	N.D.	N.D.
Diheptyl phthalate(DHP)	N.D.	N.D.	N.D.
Benzylbutyl phthalate(BBP)	N.D.	N.D.	N.D.
Dicyclohexyl phthalate(DCHP)	N.D.	N.D.	N.D.
Di-2-ethylhexyl phthalate(DEHP)	N.D.	N.D.	N.D.
Diisooctyl phthalate(DIOP)	N.D.	N.D.	N.D.
Di-n-octyl phthalate(DNOP)	N.D.	N.D.	N.D.
Diisononyl phthalate(DINP)	N.D.	N.D.	N.D.
Diisodecyl phthalate(DIDP)	N.D.	N.D.	N.D.
Dinonyl phthalate(DNP)	N.D.	N.D.	N.D.
Diisononyl adipate(DINA)	N.D.	N.D.	N.D.

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**Test Result(s):**

Tested Item(s)	Content		
	Sample No.9	Sample No.10	Sample No.11
<b>Polycyclic Aromatic Hydrocarbons(PAHs)</b>			
Naphthalene	N.D.	N.D.	N.D.
Acenaphthylene	N.D.	N.D.	N.D.
Acenaphthene	N.D.	N.D.	N.D.
Fluorene	N.D.	N.D.	N.D.
Phenanthrene	N.D.	N.D.	N.D.
Anthracene	N.D.	N.D.	N.D.
Fluoranthene	N.D.	N.D.	N.D.
Pyrene	N.D.	N.D.	N.D.
Benzo[a]anthracene	N.D.	N.D.	N.D.
Chrysene	N.D.	N.D.	N.D.
Benzo[b]fluoranthene	N.D.	N.D.	N.D.
Benzo[k]fluoranthene	N.D.	N.D.	N.D.
Benzo[a]pyrene	N.D.	N.D.	N.D.
Indenol[1,2,3-cd]pyrene	N.D.	N.D.	N.D.
Dibenz[a,h]anthracene	N.D.	N.D.	N.D.
Benzo[g,h,i]perylene	N.D.	N.D.	N.D.

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**Test Result(s):**

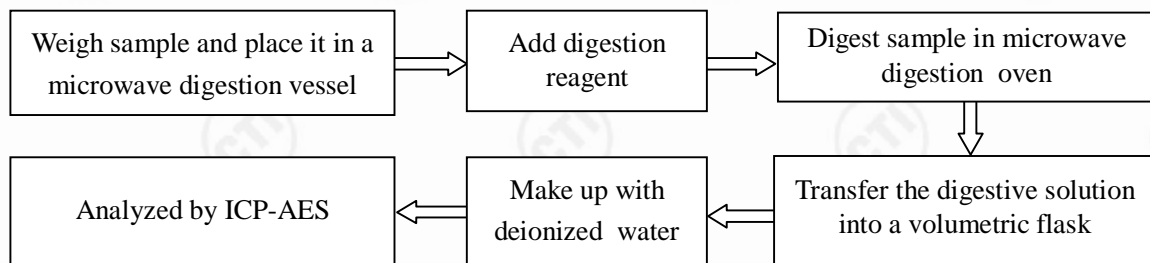
Tested Item(s)	Content		
	Sample No.12	Sample No.13	Sample No.14
<b>Polycyclic Aromatic Hydrocarbons(PAHs)</b>			
Naphthalene	0.7ppm	N.D.	N.D.
Acenaphthylene	N.D.	N.D.	N.D.
Acenaphthene	N.D.	N.D.	N.D.
Fluorene	N.D.	N.D.	N.D.
Phenanthrene	N.D.	N.D.	N.D.
Anthracene	N.D.	N.D.	N.D.
Fluoranthene	N.D.	N.D.	N.D.
Pyrene	9.7ppm	N.D.	N.D.
Benzo[a]anthracene	N.D.	N.D.	N.D.
Chrysene	N.D.	N.D.	N.D.
Benzo[b]fluoranthene	N.D.	N.D.	N.D.
Benzo[k]fluoranthene	N.D.	N.D.	N.D.
Benzo[a]pyrene	N.D.	N.D.	N.D.
Indenol[1,2,3-cd]pyrene	N.D.	N.D.	N.D.
Dibenz[a,h]anthracene	N.D.	N.D.	N.D.
Benzo[g,h,i]perylene	3.0ppm	N.D.	N.D.

**Note:** -N.D. = Not Detected (<report limit)

-ppm = mg/kg = parts per million

**Test Process:**

**1. Test for Pb/Hg Content**

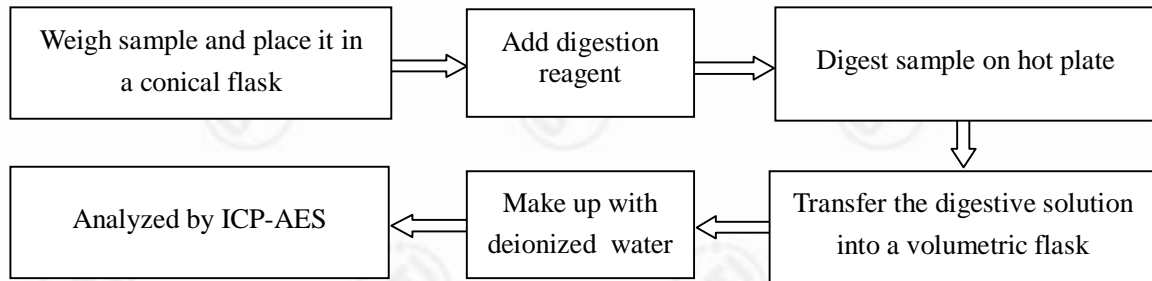


# Test Report

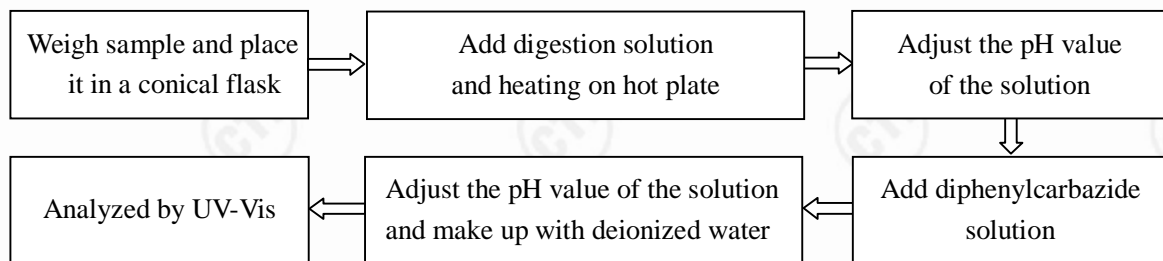
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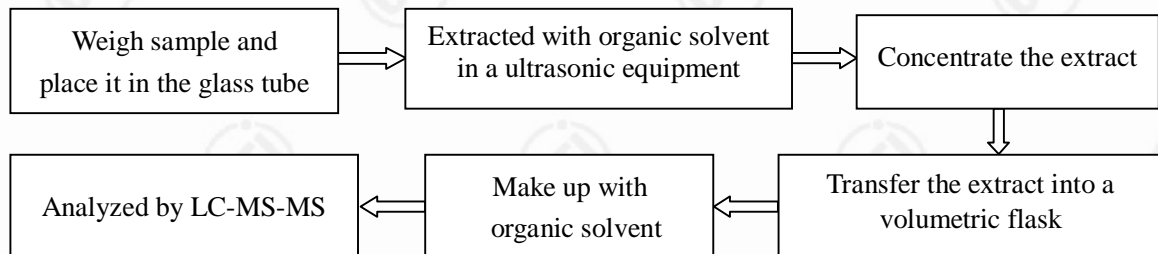
## 2. Test for Cd Content



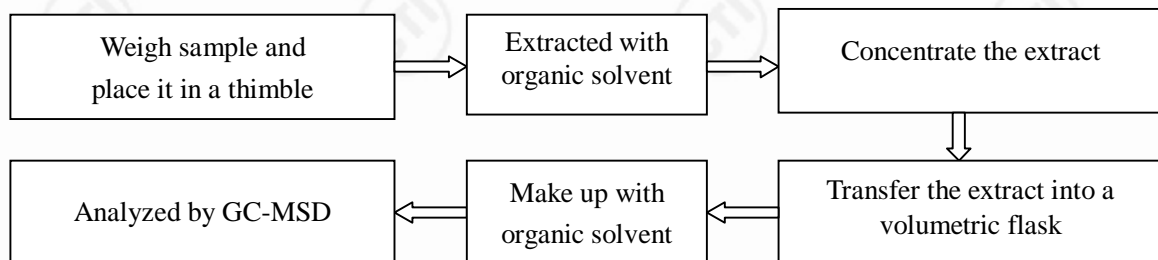
## 3. Test for Chromium(VI) Content



## 4. Test for PFOA/PFOS Content



## 5. Test for Phthalates Content

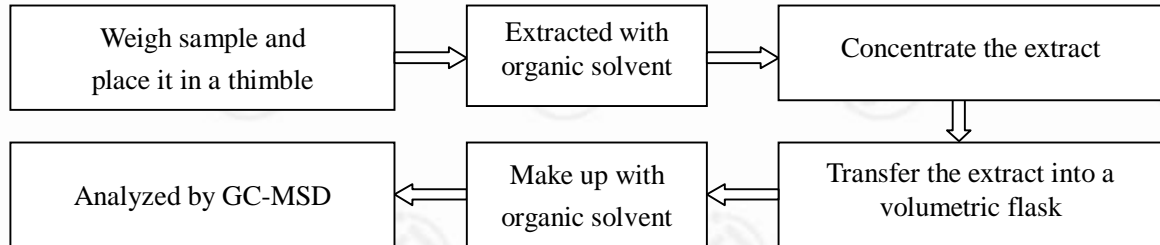


# Test Report

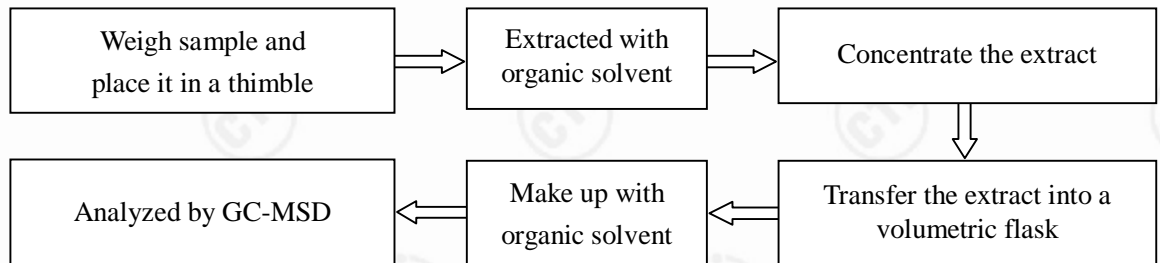
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## 6. Test for PAHs Content



## 7. Test for PBBs/PBDEs Content



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## Photos of the samples

Sample No.1



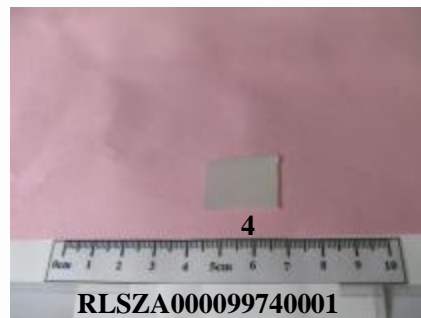
Sample No.2



Sample No.3



Sample No.4



Sample No.5



Sample No.6



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## Photos of the samples

Sample No.7



Sample No.8



Sample No.9



Sample No.10



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## Photos of the samples

Sample No.11



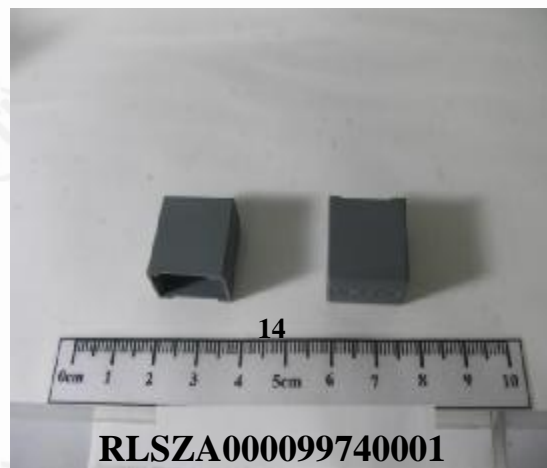
Sample No.12



Sample No.13



Sample No.14



\*\*\* End of report \*\*\*

This report is considered invalidated without the Special Seal for Inspection of the CTI, This report shall not be altered, increased or deleted. The results shown in this test report refer only to the sample(s) tested. Without written approval of CTI, this test report shall not be copied except in full and published as advertisement.

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