TÜVRheinland®
Precisely Right.

Report No.:	180113625a 002
Client:	**ZHEJIANG WOWTECH M&E PRODUCTS CO., LTD**
Contact Information:	No.1 Gaoqiu Road, Dongqianhu Innovative Industrial Park, Yinzhou District, Ningbo 315124, CN
Identification/ Model No(s):	EcoLaundry G3 / EcoLaundry G4 /Eco Mini Purifier / Eco Commercial Purifier Test Model No(s):OLK-W-03 Reference Model No(s): OLK-W-01/OLK-W-02/OLK-W-04/OLK-P-01/OLK-C-01
Sample Receiving date:	2019-09-19
Testing Period:	2019-09-19 to 2019-10-15

Test Specification:	*Test result:*
Customer's requirement:	
1. According to RoHS (recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and its amendment Directive (EU) 2015/863	PASS

Other information:

Remark: Per client's request, selected items were tested.
Please be kindly informed that all the content recorded in the captioned report 180113625a 001 is cancelled and now superseded by 180113625a 002

For and on behalf of
TÜV Rheinland/CCIC (Ningbo) Co., Ltd.

Cherry Yan

2019-11-05 Yan Cherry / Senior Project Engineer

Date *Name/Position*

Test result is drawn according to the kind and extent of tests performed.
This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

Material List:

Item: EcoLaundry G3 / EcoLaundry G4 /Eco Mini Purifier / Eco Commercial Purifier
Test Model No(s):OLK-W-03
Reference Model No(s): OLK-W-01/OLK-W-02/OLK-W-04/OLK-P-01/OLK-C-01

Material No.	Material	Color	Location
M001	Plastic	transparent	refer to photo
M002	Plastic	white	refer to photo
M003	Plastic	black	refer to photo
M004	Plastic	black translucent	refer to photo
M005	Plastic	white	refer to photo
M006	Coating	blue	refer to photo
M007	Plastic	white	refer to photo
M009	Plastic	white	refer to photo
M010	Plastic	black	refer to photo
M011	Glue	transparent	refer to photo
M012	Electronic components	green	refer to photo
M013	Electronic components	black	refer to photo
M014	PCB board	green	refer to photo
M015	Plastic + printing + adhesive	black	refer to photo
M016	Plastic	black	refer to photo
M018	Plastic	white	refer to photo
M019	Plastic	black	refer to photo
M020	Plastic	gray	refer to photo
M021	Metal	silver	refer to photo
M022	Plastic	white transparent	refer to photo
M023	Magnet	gray	refer to photo
M024	Plastic	blue translucent	refer to photo
M025	Plastic	transparent	refer to photo
M026	Plastic	black	refer to photo
M027	Plastic	black	refer to photo
M029	Solder	silvery	refer to photo

M030	Plastic	white	refer to photo
M031	Plastic	black	refer to photo
M033	Plastic	white	refer to photo
M034	Metal	silver	refer to photo
M035	Metal	silver	refer to photo
M036	Plastic	gray	refer to photo
M037	Plastic	white	refer to photo
M038	Plastic	black	refer to photo
M039	Plastic	white	refer to photo
M040	Plastic	black	refer to photo
M044	Metal	silver	refer to photo
M045	Metal	copper	refer to photo
M048	Metal	silver	refer to photo
M049	Metal	silver	refer to photo
M050	Magnet	gray	refer to photo
M051	Metal	silver	refer to photo
M052	Metal	silver	refer to photo
M055	Metal	silver	refer to photo
M056	Electronic components	black	refer to photo
M057	Metal	golden	refer to photo
M058	Plastic	black	refer to photo
M059	Ceramic	white	refer to photo
M060	Electronic components	blue	refer to photo
M061	Solder	silver	refer to photo
M062	PCB board	green	refer to photo
M063	Solder	silver	refer to photo
M064	Electronic components	black	refer to photo
M065	Electronic components	black	refer to photo
M066	PCB board	green	refer to photo
M067	Plastic	white	refer to photo
M069	Plastic	transparent	refer to photo
M071	Plastic	white	refer to photo

M074	PCB board	green	refer to photo
M075	Plastic	pink	refer to photo
M076	Metal	silver	refer to photo
M077	Plastic	black	refer to photo
M079	Plastic	red	refer to photo
M080	Plastic	white	refer to photo
M081	Metal	silver	refer to photo
M082	Metal	silver	refer to photo
M083	Plastic	red	refer to photo
M084	Glue	black	refer to photo
M086	Metal	silver	refer to photo
M087	Plastic	white	refer to photo
M089	Plastic	white transparent	refer to photo
M091	Electronic components	silver + green	refer to photo
M093	Metal	silver	refer to photo
M094	Glass	transparent	refer to photo
M095	Metal	silver	refer to photo
M096	Plastic	transparent	refer to photo
M098	Metal	silver	refer to photo
M099	Plastic	transparent	refer to photo
M100	Plastic	black	refer to photo
M101	Plastic	red	refer to photo
M103	Plastic	black	refer to photo
M105	PCB board	green	refer to photo
M108	Metal	silver	refer to photo
M110	Plastic	black	refer to photo
M111	Metal	silver	refer to photo
M113	Metal	copper	refer to photo
M114	Plastic	black	refer to photo
M115	Metal	silver	refer to photo
M118	Metal	silver	refer to photo
M119	Plastic	white	refer to photo

M122	PCB board	green	refer to photo
M123	Plastic	orange	refer to photo
M124	Plastic	black	refer to photo
M125	Magnet	gray	refer to photo
M126	Plastic	beige	refer to photo
M127	Metal	copper	refer to photo
M128	Metal	silver	refer to photo
M130	Ceramic	white	refer to photo
M131	Metal	silver	refer to photo
M132	Textile	white	refer to photo
M133	Metal	copper	refer to photo
M134	Ceramic	white	refer to photo
M135	Ceramic	brown	refer to photo
M142	Plastic + Textile	white	refer to photo
M143	Metal	silver	refer to photo
M144	Electronic components	black	refer to photo
M145	PCB board	blue	refer to photo
M147	Plastic	yellow	refer to photo
M148	Plastic	red	refer to photo
M149	Plastic	black	refer to photo
M150	Plastic	black	refer to photo
M153	Electronic components	yellow	refer to photo
M154	Metal	silver	refer to photo
M155	Electronic components	black	refer to photo
M156	Metal	silver	refer to photo
M157	Electronic components	multicolor	refer to photo
M158	Electronic components	black	refer to photo
M159	Electronic components	black	refer to photo
M160	Glue	white	refer to photo
M161	Magnet	green	refer to photo
M162	Electronic components	green	refer to photo
M163	Plastic + adhesive	yellow	refer to photo

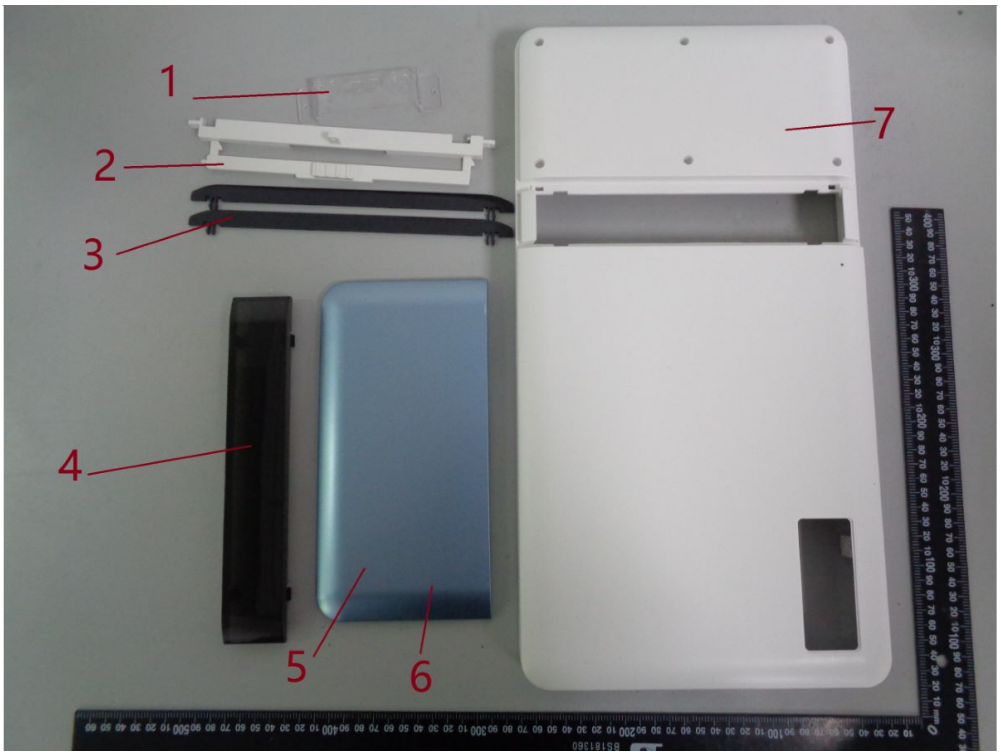
M164	Magnet	black	refer to photo
M165	Electronic components	black	refer to photo
M166	Metal	silver	refer to photo
M167	Plastic	black	refer to photo
M168	Metal	red	refer to photo
M169	Metal	copper	refer to photo
M170	Electronic components	orange	refer to photo
M171	Plastic	black	refer to photo
M172	Plastic + printing	black + white	refer to photo
M173	Electronic components	black	refer to photo
M174	PCB board	beige	refer to photo
M175	Electronic components	black	refer to photo
M176	Electronic components	green	refer to photo
M177	Metal	silver	refer to photo
M178	Plastic	black	refer to photo
M179	Plastic	black	refer to photo
M180	Solder	silver	refer to photo
M181	Solder	silver	refer to photo
M182	Plastic	black	refer to photo
M183	Plastic	black	refer to photo
M184	Metal	silver	refer to photo
M185	Plastic	black	refer to photo
M186	Metal	silver	refer to photo
M187	Metal	silver	refer to photo
M188	Plastic	white	refer to photo
M189	Metal	silver	refer to photo
M190	Metal	silver	refer to photo
M191	Metal	silver	refer to photo
M192	Metal	silver	refer to photo
M193	Metal	silver	refer to photo
M194	Plastic	transparent	refer to photo
M195	Metal	silver	refer to photo

M196	Metal	silver	refer to photo
M197	Plastic	black	refer to photo
M198	Metal	silver	refer to photo
M199	Magnet	black	refer to photo
M200	Electronic components	red	refer to photo
M201	Magnet	black	refer to photo
M203	Electronic components	multicolour	refer to photo
M204	Plastic	black	refer to photo
M205	Solder	silver	refer to photo
M206	PCB board	green	refer to photo

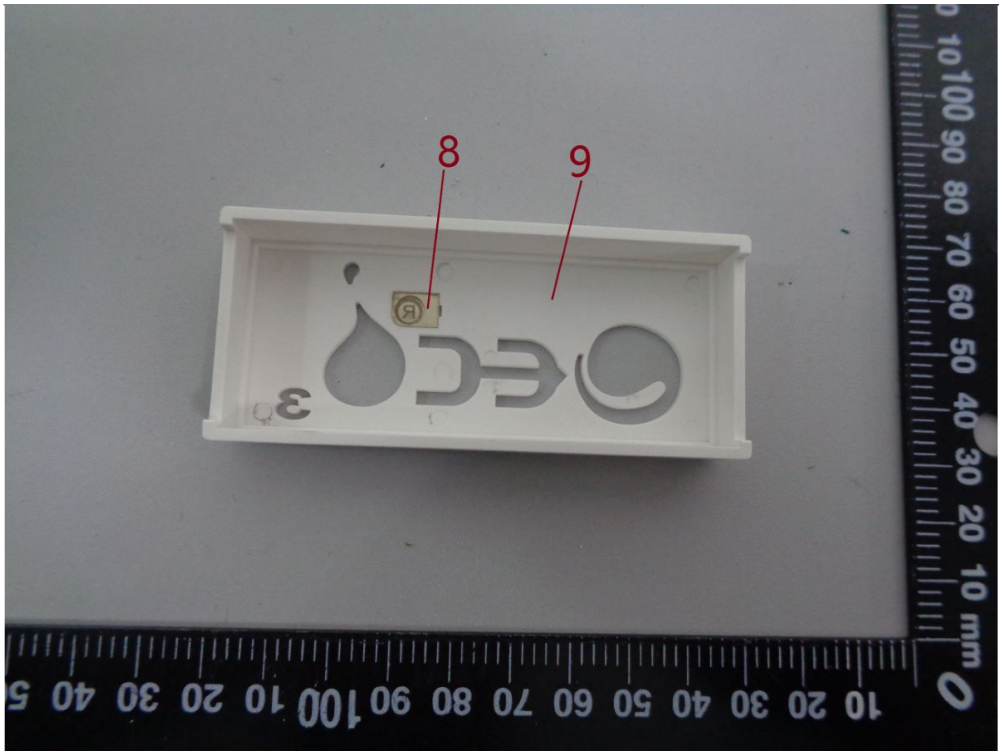
1.Screening Test by XRF spectroscopy

Test Method: Cadmium, Lead, Mercury, Chromium, Bromine
-- With reference to IEC 62321-3-1:2013

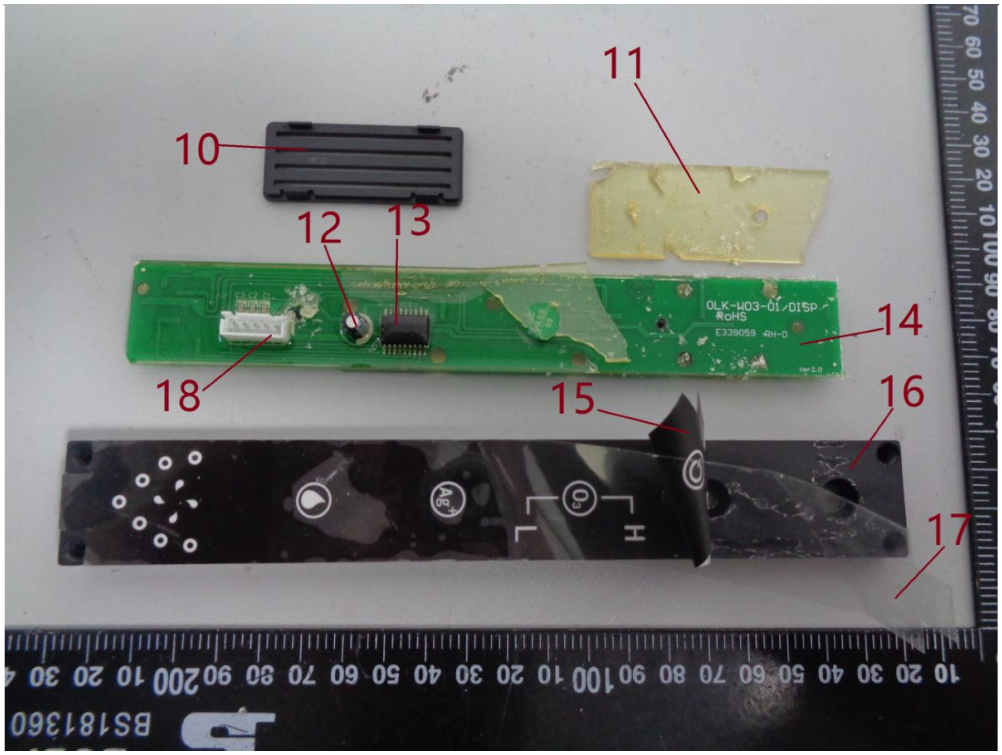
Test Result:



Material No.	Cd	Cr	Pb	Hg	Br
M001	n.d.	n.d.	n.d.	n.d.	n.d.
M002	n.d.	n.d.	n.d.	n.d.	d.(*1)
M003	n.d.	n.d.	n.d.	n.d.	d.(*1)
M004	n.d.	n.d.	n.d.	n.d.	n.d.
M005	n.d.	n.d.	n.d.	n.d.	d.(*1)
M006	n.d.	n.d.	n.d.	n.d.	d.(*1)
M007	n.d.	n.d.	n.d.	n.d.	d.(*1)



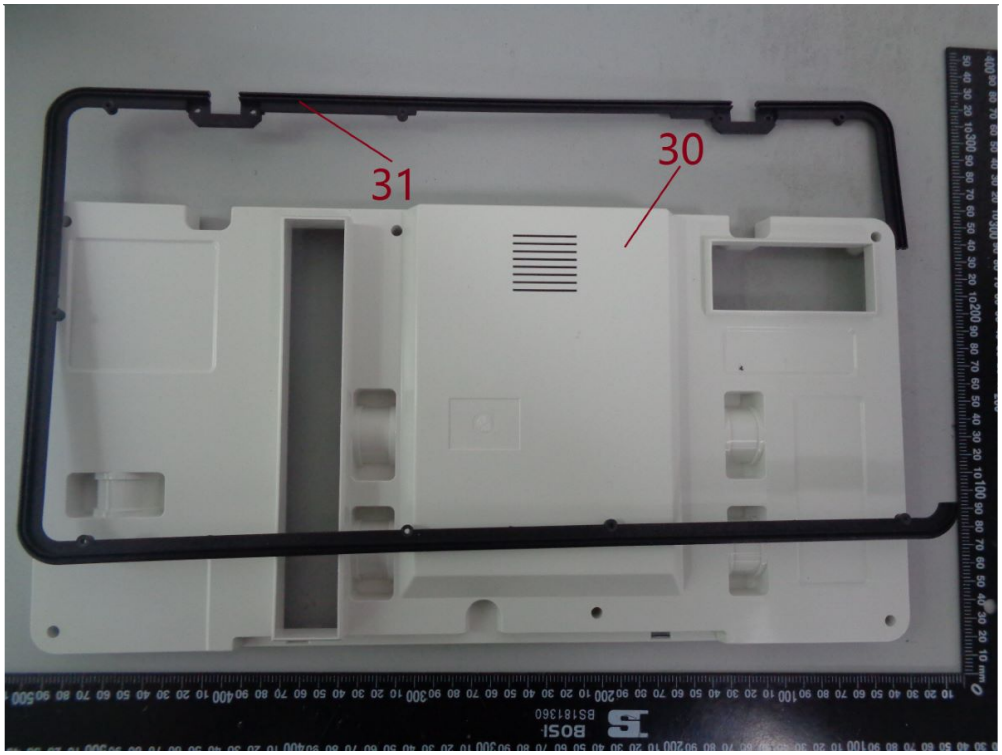
Material No.	Cd	Cr	Pb	Hg	Br
M009	n.d.	n.d.	n.d.	n.d.	d.(*1)



Material No.	Cd	Cr	Pb	Hg	Br
M010	n.d.	n.d.	n.d.	n.d.	d.(*1)
M011	n.d.	n.d.	n.d.	n.d.	n.d.
M012	n.d.	n.d.	n.d.	n.d.	n.d.
M013	n.d.	n.d.	n.d.	n.d.	n.d.
M014	n.d.	n.d.	n.d.	n.d.	d.(*1)
M015	n.d.	n.d.	n.d.	n.d.	n.d.
M016	n.d.	n.d.	n.d.	n.d.	d.(*1)
M018	n.d.	n.d.	n.d.	n.d.	n.d.



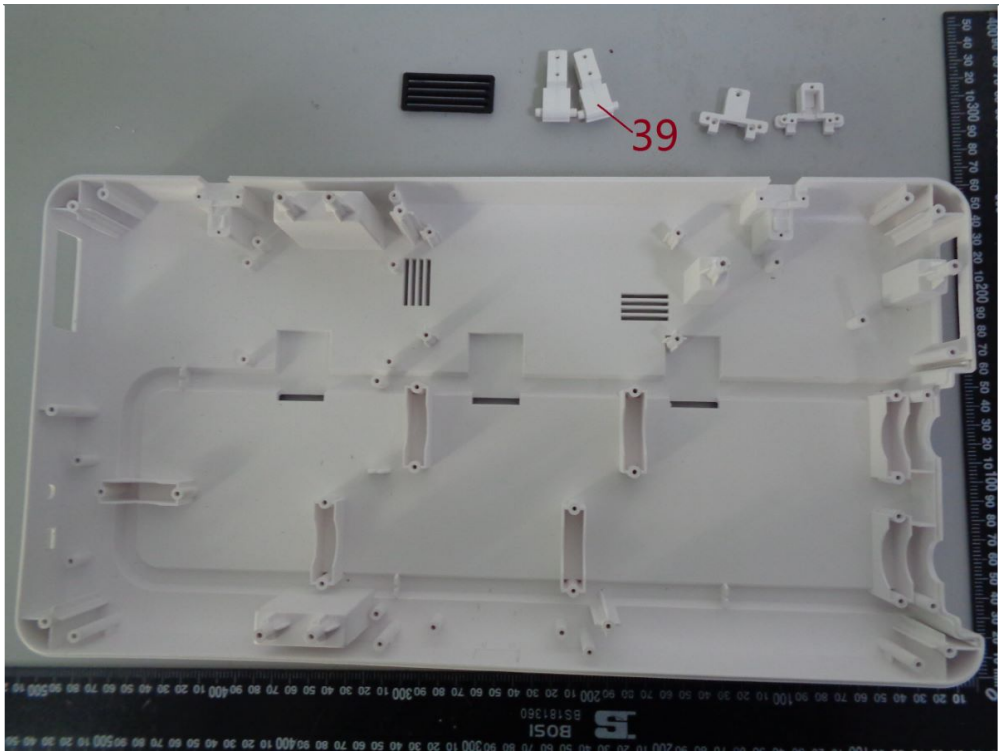
Material No.	Cd	Cr	Pb	Hg	Br
M019	n.d.	n.d.	n.d.	n.d.	n.d.
M020	n.d.	n.d.	n.d.	n.d.	n.d.
M021	n.d.	d.(*3)	n.d.	n.d.	n.a.
M022	n.d.	n.d.	n.d.	n.d.	n.d.
M023	n.d.	n.d.	n.d.	n.d.	n.a.
M024	n.d.	n.d.	n.d.	n.d.	n.d.
M025	n.d.	n.d.	n.d.	n.d.	n.d.
M026	n.d.	n.d.	n.d.	n.d.	n.d.
M027	n.d.	n.d.	n.d.	n.d.	n.d.



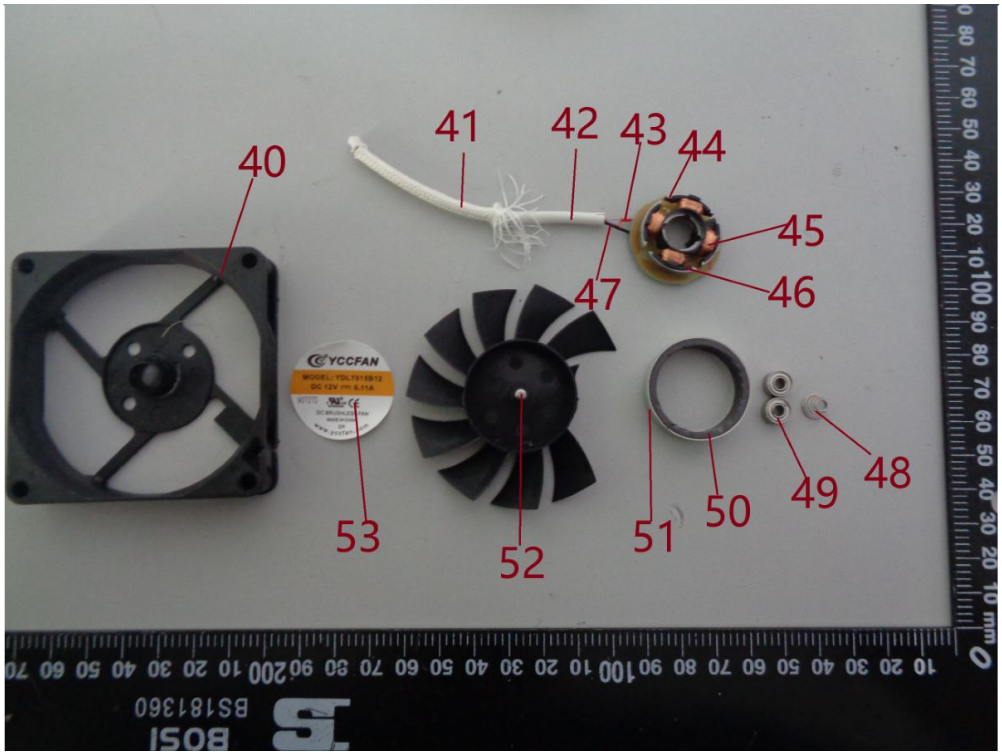
Material No.	Cd	Cr	Pb	Hg	Br
M030	n.d.	n.d.	n.d.	n.d.	d.(*1)
M031	n.d.	n.d.	n.d.	n.d.	d.(*1)



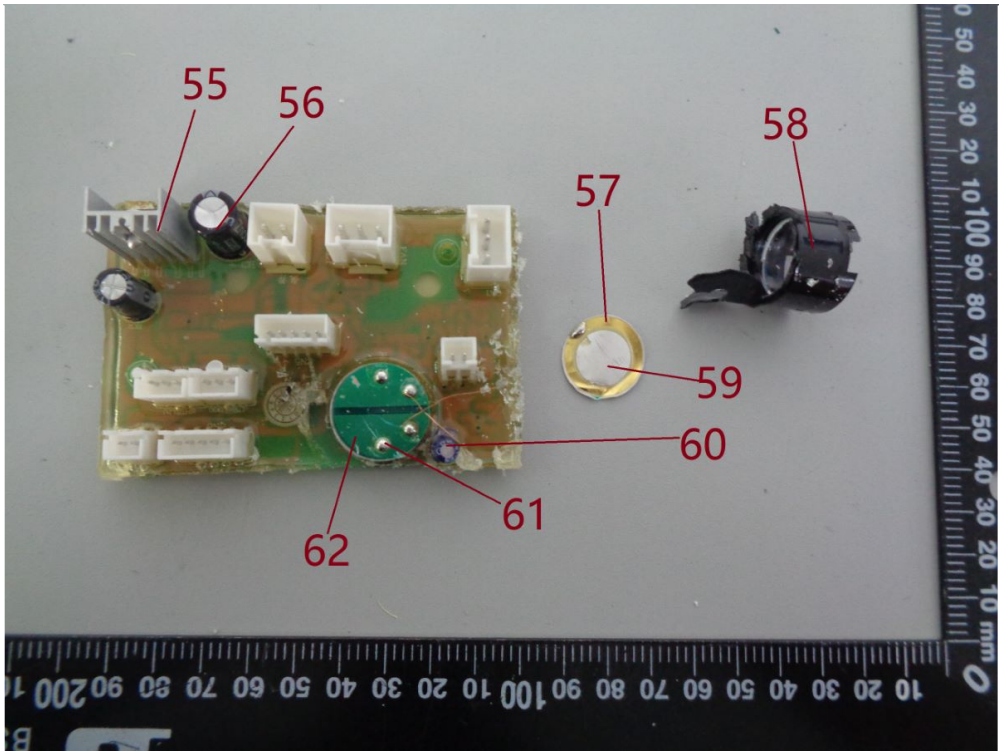
Material No.	Cd	Cr	Pb	Hg	Br
M033	n.d.	n.d.	n.d.	n.d.	n.d.
M034	n.d.	d.(*3)	n.d.	n.d.	n.a.
M035	n.d.	d.(*3)	n.d.	n.d.	n.a.
M036	n.d.	n.d.	n.d.	n.d.	n.d.
M037	n.d.	n.d.	n.d.	n.d.	n.d.
M038	n.d.	n.d.	n.d.	n.d.	n.d.



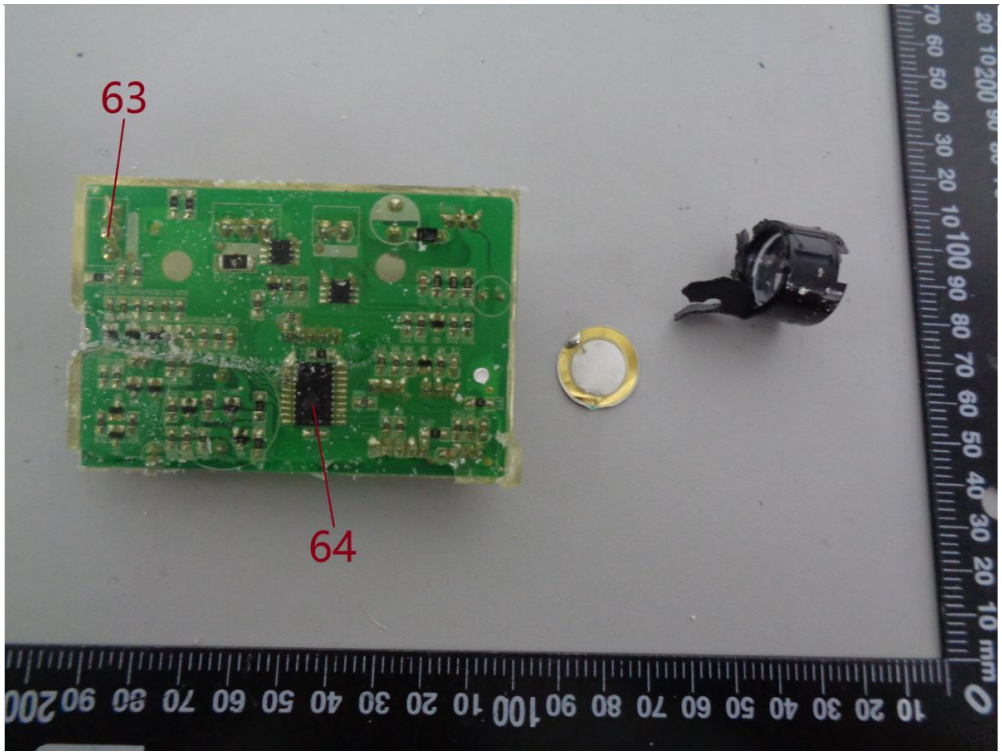
Material No.	Cd	Cr	Pb	Hg	Br
M039	n.d.	n.d.	n.d.	n.d.	d.(*1)



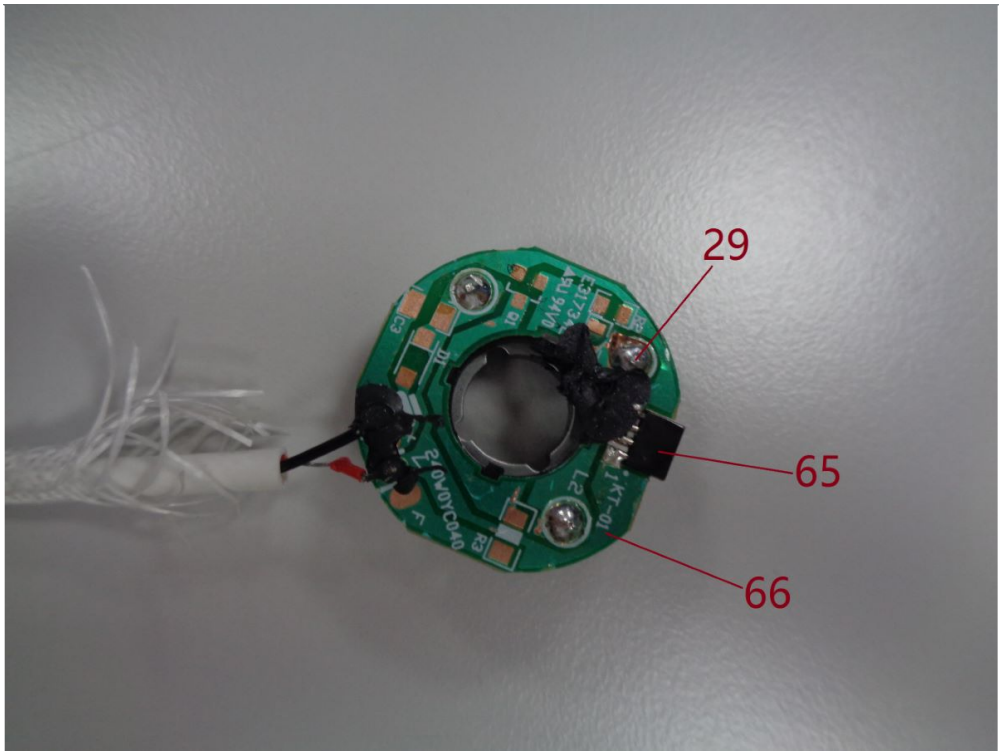
Material No.	Cd	Cr	Pb	Hg	Br
M040	n.d.	n.d.	n.d.	n.d.	d.(*1)
M044	n.d.	d.(*3)	n.d.	n.d.	n.a.
M045	n.d.	n.d.	n.d.	n.d.	n.a.
M048	n.d.	d.(*3)	n.d.	n.d.	n.a.
M049	n.d.	d.(*3)	n.d.	n.d.	n.a.
M050	n.d.	n.d.	n.d.	n.d.	n.a.
M051	n.d.	n.d.	n.d.	n.d.	n.a.
M052	n.d.	d.(*3)	n.d.	n.d.	n.a.



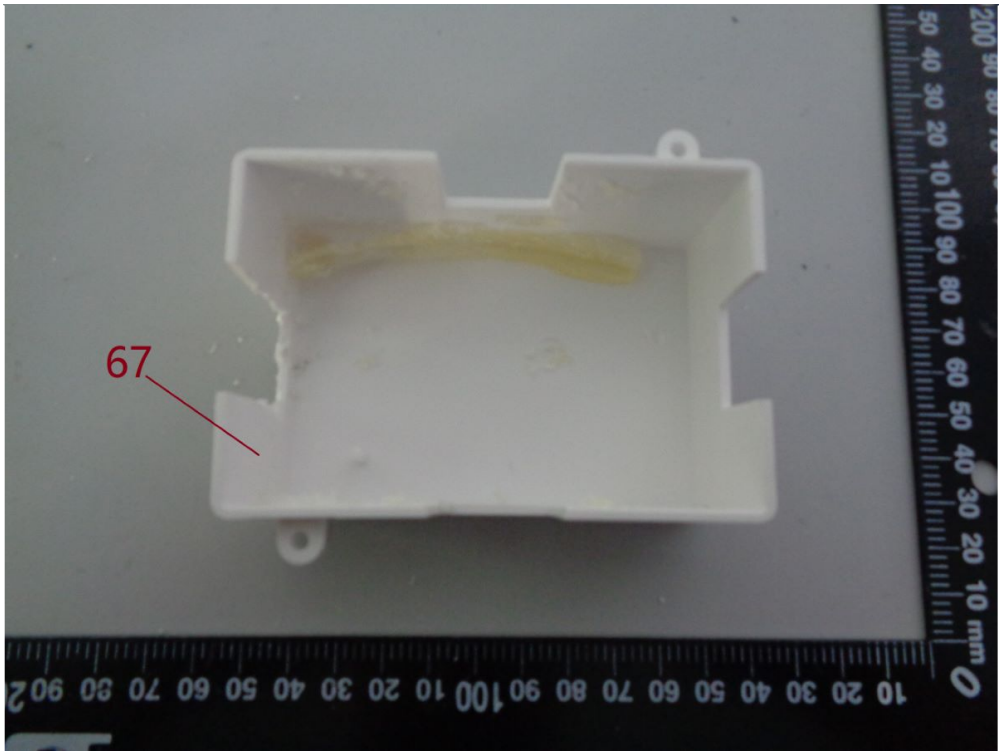
Material No.	Cd	Cr	Pb	Hg	Br
M055	n.d.	n.d.	n.d.	n.d.	n.a.
M056	n.d.	n.d.	n.d.	n.d.	n.d.
M057	n.d.	n.d.	n.d.	n.d.	n.a.
M058	n.d.	n.d.	n.d.	n.d.	d.(*1)
M059	d.(*1)	n.d.	d.(*1)	n.d.	n.a.
M060	n.d.	n.d.	n.d.	n.d.	n.d.
M061	n.d.	n.d.	n.d.	n.d.	n.a.
M062	n.d.	n.d.	n.d.	n.d.	n.d.



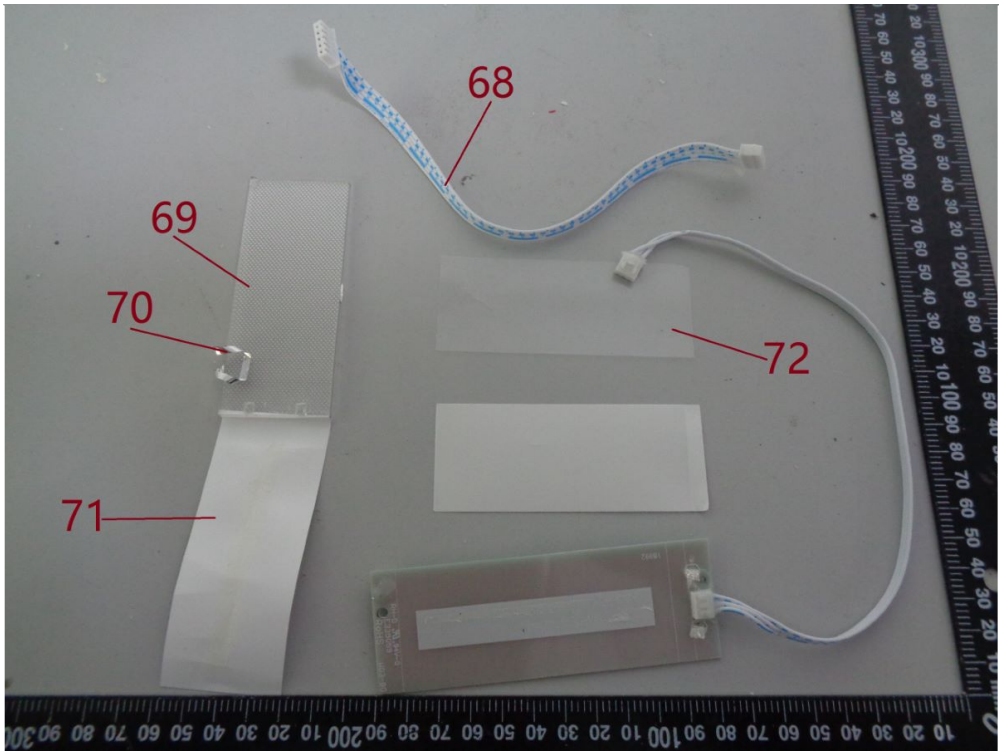
Material No.	Cd	Cr	Pb	Hg	Br
M063	n.d.	n.d.	d.(*1)	n.d.	n.a.
M064	n.d.	n.d.	n.d.	n.d.	n.d.



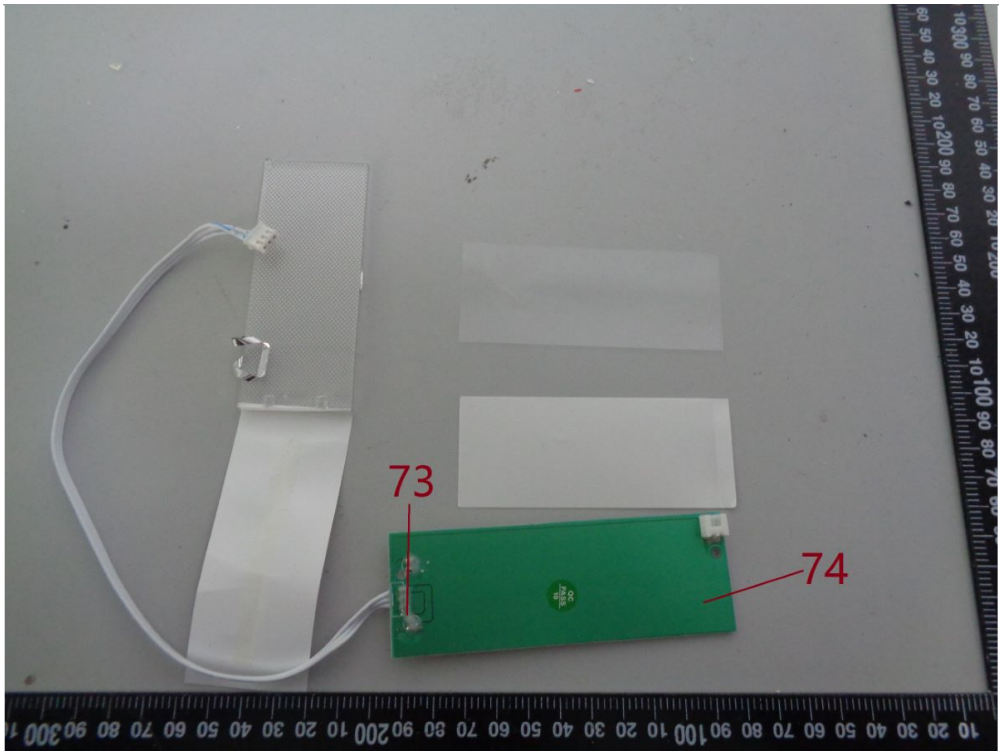
Material No.	Cd	Cr	Pb	Hg	Br
M029	n.d.	n.d.	n.d.	n.d.	n.a.
M065	n.d.	n.d.	n.d.	n.d.	n.d.
M066	n.d.	n.d.	n.d.	n.d.	d.(*1)



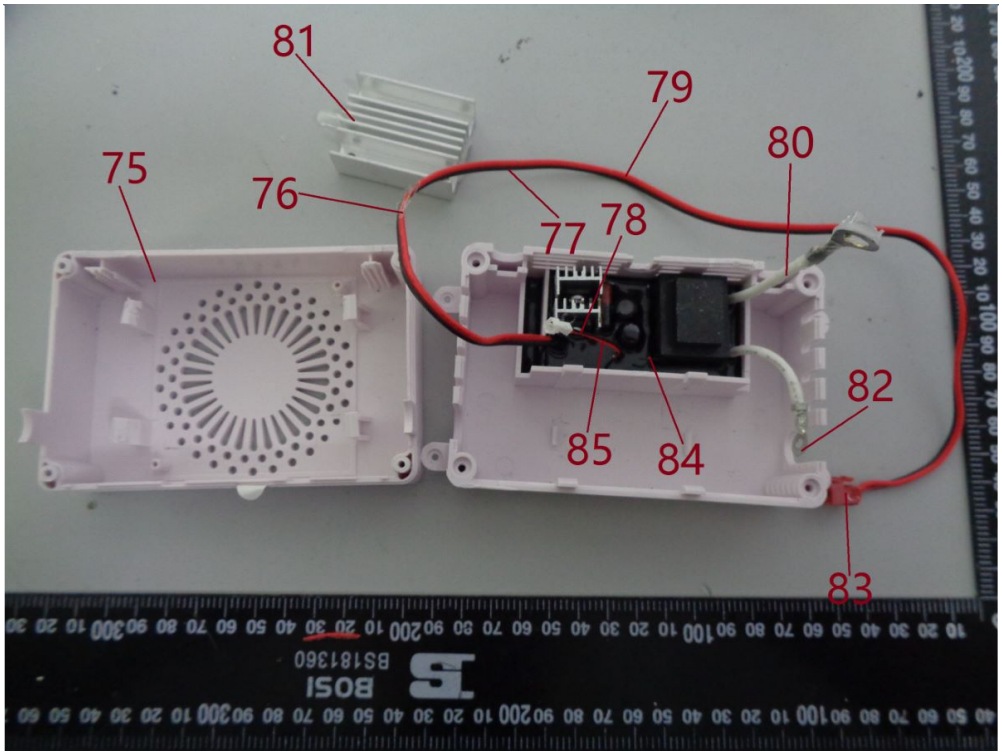
Material No.	Cd	Cr	Pb	Hg	Br
M067	n.d.	n.d.	n.d.	n.d.	d.(*1)



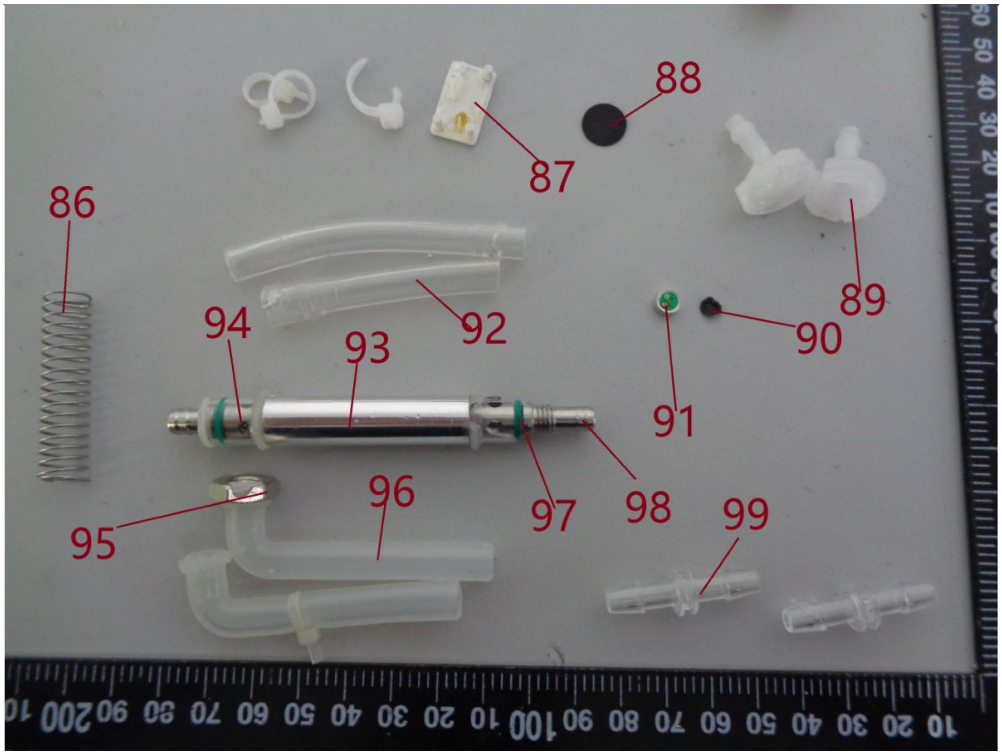
Material No.	Cd	Cr	Pb	Hg	Br
M069	n.d.	n.d.	n.d.	n.d.	n.d.
M071	n.d.	n.d.	n.d.	n.d.	n.d.



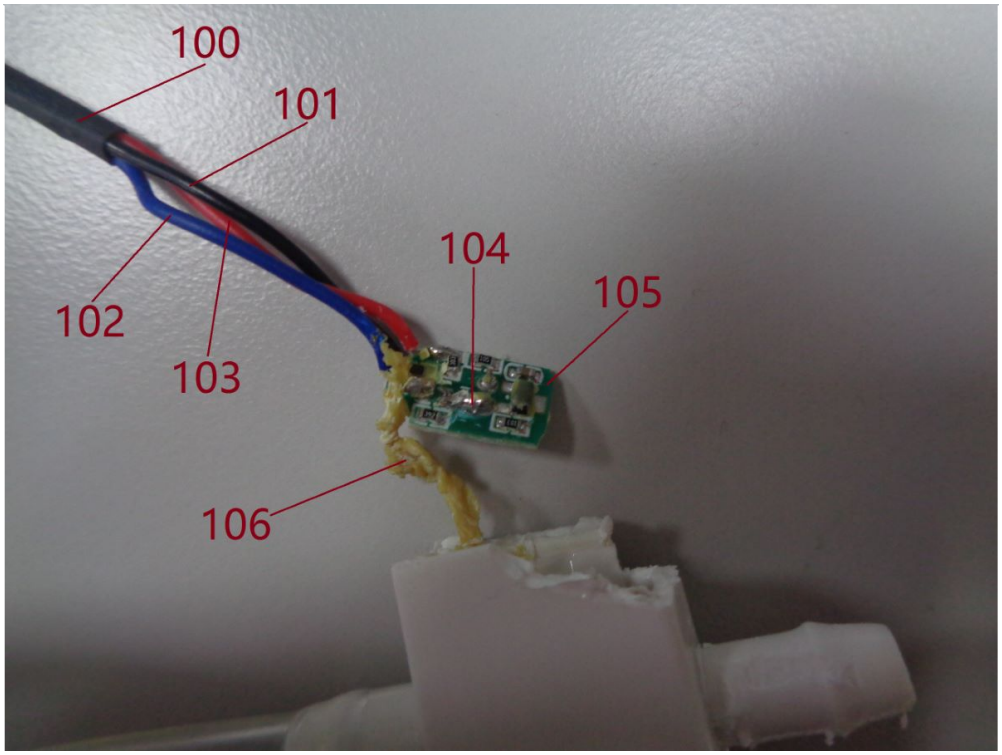
Material No.	Cd	Cr	Pb	Hg	Br
M074	n.d.	n.d.	n.d.	n.d.	n.d.



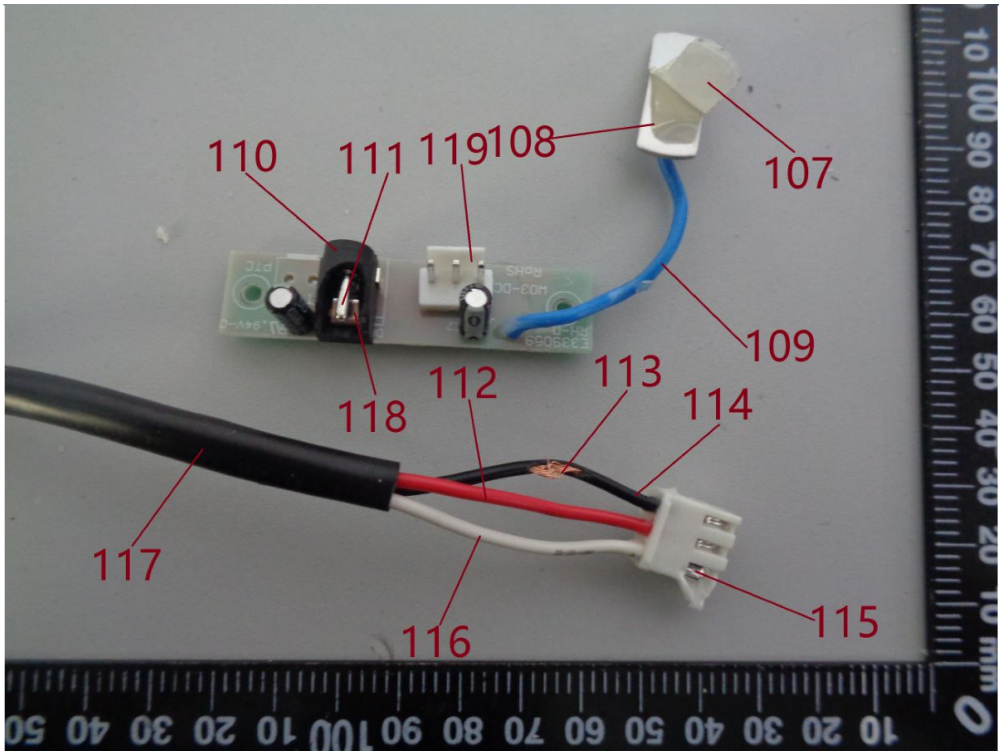
Material No.	Cd	Cr	Pb	Hg	Br
M075	n.d.	n.d.	n.d.	n.d.	d.(*1)
M076	n.d.	n.d.	n.d.	n.d.	n.a.
M077	n.d.	n.d.	n.d.	n.d.	n.d.
M079	n.d.	n.d.	n.d.	n.d.	n.d.
M080	n.d.	n.d.	n.d.	n.d.	n.d.
M081	n.d.	n.d.	n.d.	n.d.	n.a.
M082	n.d.	n.d.	n.d.	n.d.	n.a.
M083	n.d.	n.d.	n.d.	n.d.	n.d.
M084	n.d.	n.d.	n.d.	n.d.	n.d.



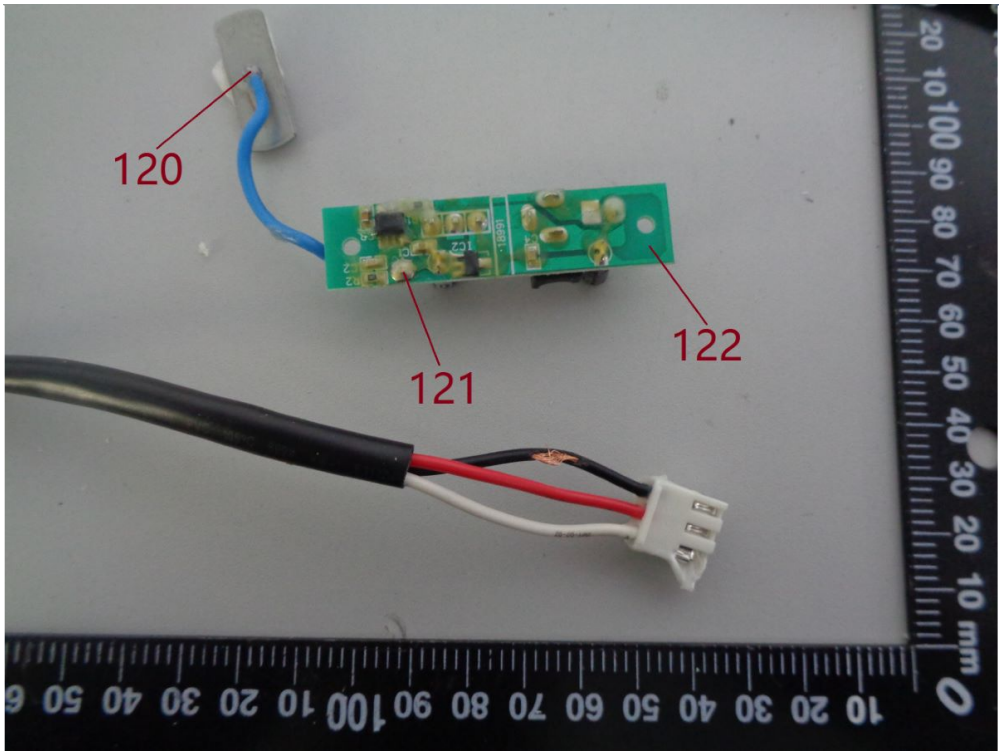
Material No.	Cd	Cr	Pb	Hg	Br
M086	n.d.	d.(*3)	n.d.	n.d.	n.a.
M087	n.d.	n.d.	n.d.	n.d.	d.(*1)
M089	n.d.	n.d.	n.d.	n.d.	n.d.
M091	n.d.	n.d.	n.d.	n.d.	n.d.
M093	n.d.	d.(*3)	n.d.	n.d.	n.a.
M094	n.d.	d.(*3)	n.d.	n.d.	n.a.
M095	n.d.	n.d.	d.(*1)	n.d.	n.a.
M096	n.d.	n.d.	n.d.	n.d.	n.d.
M098	n.d.	n.d.	n.d.	n.d.	n.a.
M099	n.d.	n.d.	n.d.	n.d.	n.d.



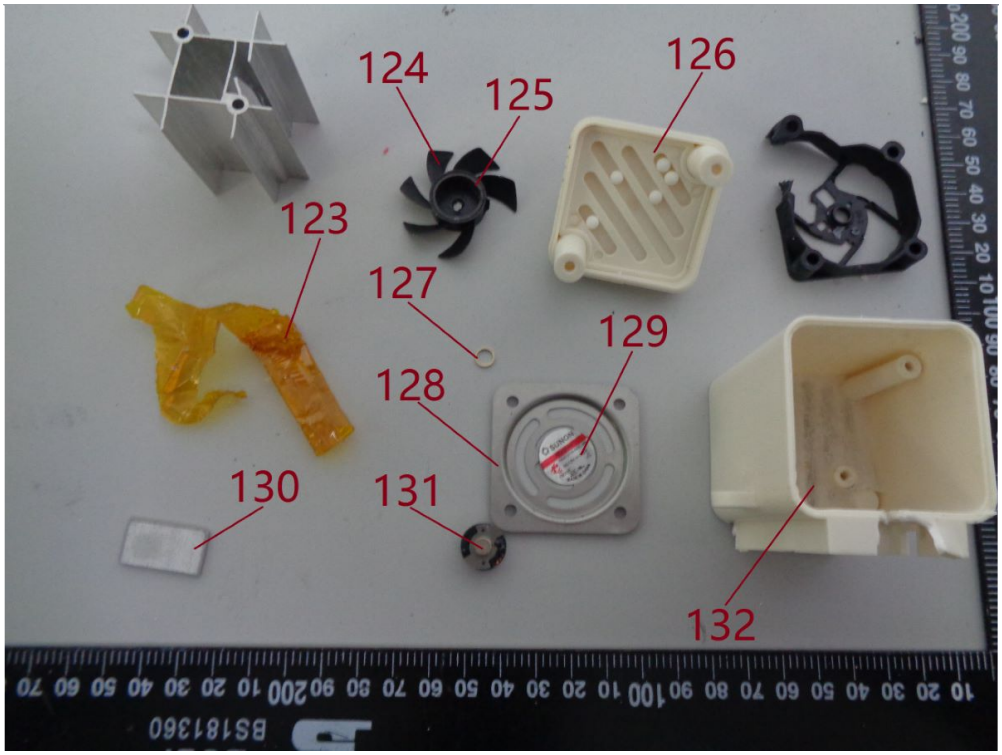
Material No.	Cd	Cr	Pb	Hg	Br
M100	n.d.	n.d.	n.d.	n.d.	n.d.
M101	n.d.	n.d.	n.d.	n.d.	n.d.
M103	n.d.	n.d.	n.d.	n.d.	n.d.
M105	n.d.	n.d.	n.d.	n.d.	n.d.



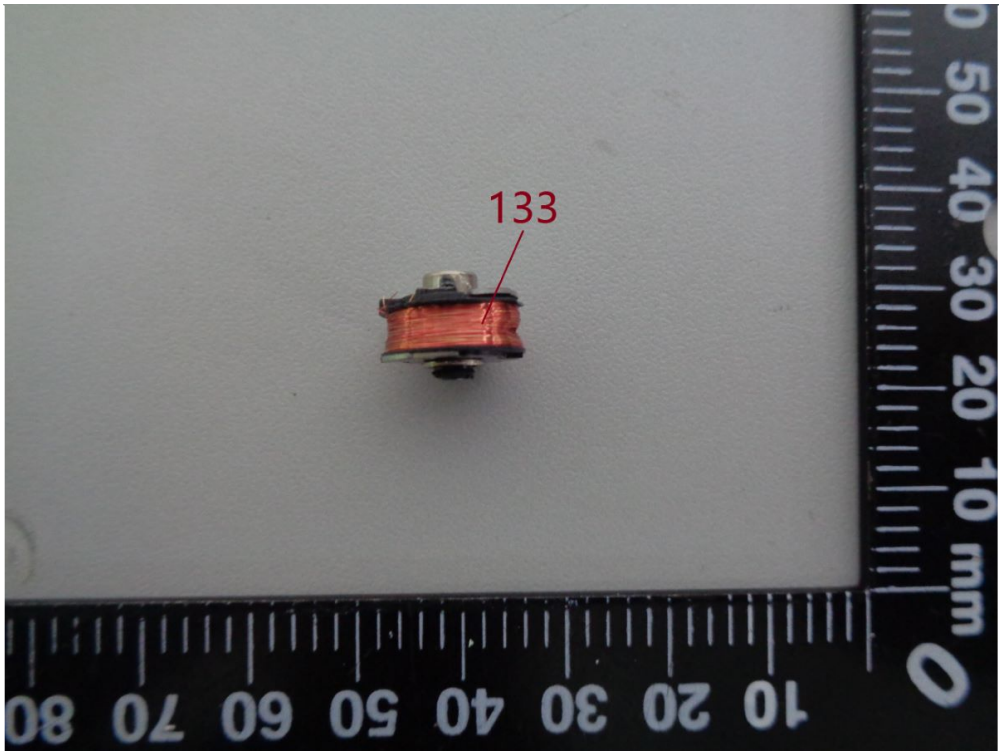
Material No.	Cd	Cr	Pb	Hg	Br
M108	n.d.	d.(*3)	n.d.	n.d.	n.a.
M110	n.d.	n.d.	n.d.	n.d.	n.d.
M111	n.d.	n.d.	n.d.	n.d.	n.a.
M113	n.d.	n.d.	n.d.	n.d.	n.a.
M114	n.d.	n.d.	n.d.	n.d.	n.d.
M115	n.d.	n.d.	n.d.	n.d.	n.a.
M118	n.d.	n.d.	n.d.	n.d.	n.a.
M119	n.d.	n.d.	n.d.	n.d.	n.d.



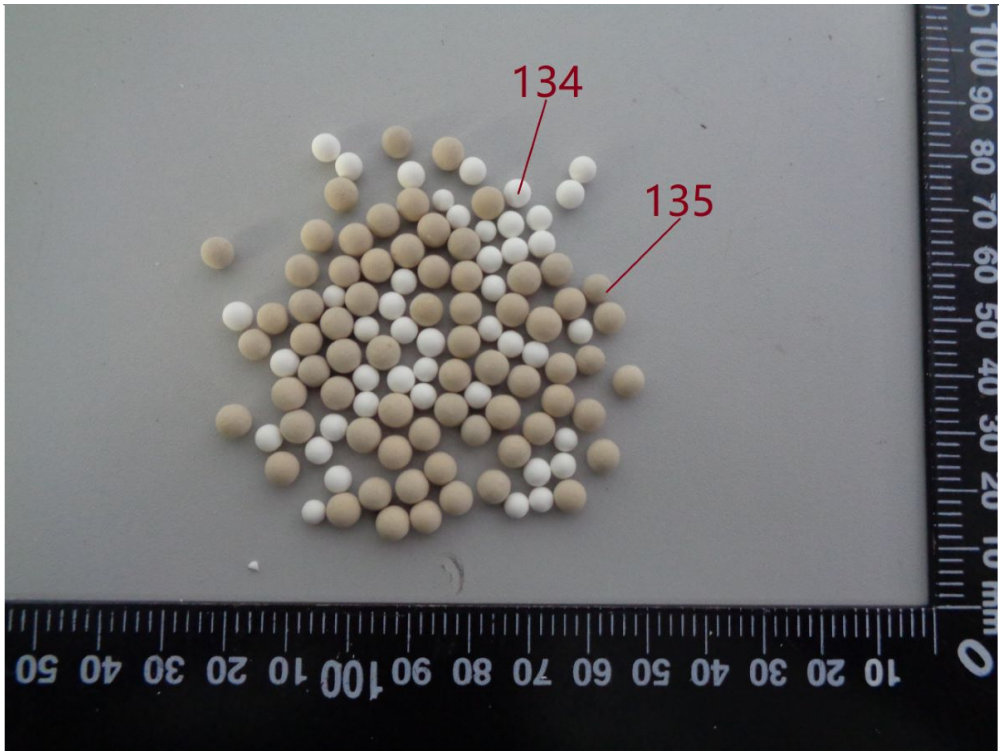
Material No.	Cd	Cr	Pb	Hg	Br
M122	n.d.	n.d.	n.d.	n.d.	d.(*1)



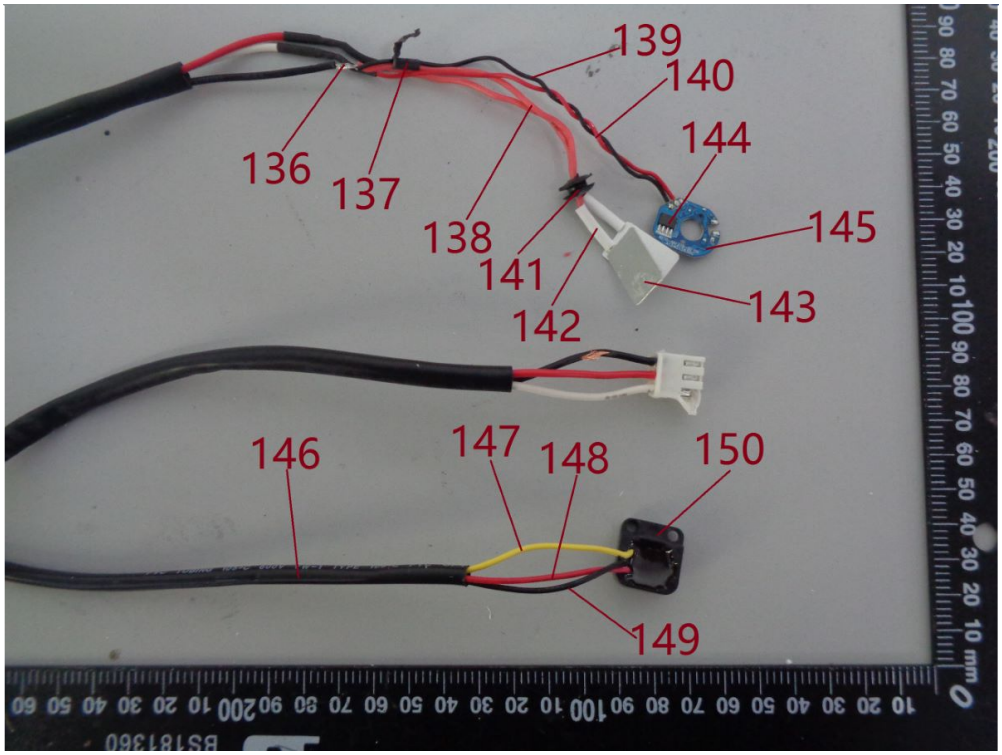
Material No.	Cd	Cr	Pb	Hg	Br
M123	d.(*1)	n.d.	n.d.	n.d.	n.d.
M124	n.d.	n.d.	n.d.	n.d.	d.(*1)
M125	n.d.	n.d.	n.d.	n.d.	n.a.
M126	n.d.	n.d.	n.d.	n.d.	d.(*1)
M127	n.d.	n.d.	d.(*1)	n.d.	n.a.
M128	n.d.	d.(*3)	n.d.	n.d.	n.a.
M130	n.d.	n.d.	d.(*1)	n.d.	n.a.
M131	n.d.	n.d.	n.d.	n.d.	n.a.
M132	n.d.	n.d.	n.d.	n.d.	d.(*1)



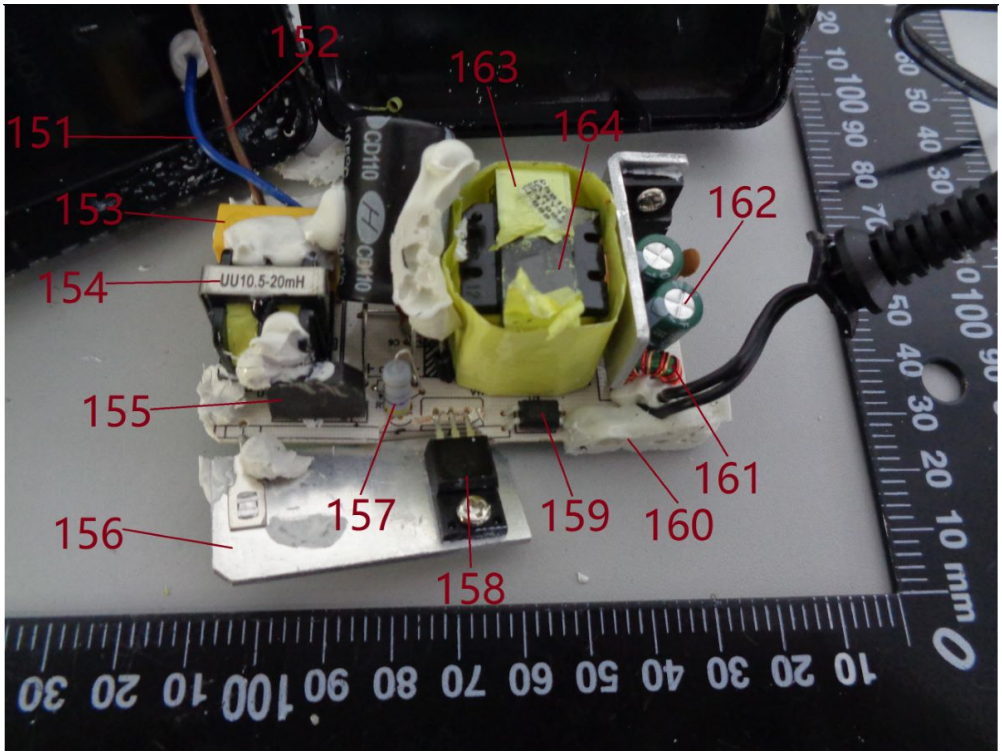
Material No.	Cd	Cr	Pb	Hg	Br
M133	n.d.	n.d.	n.d.	n.d.	n.a.



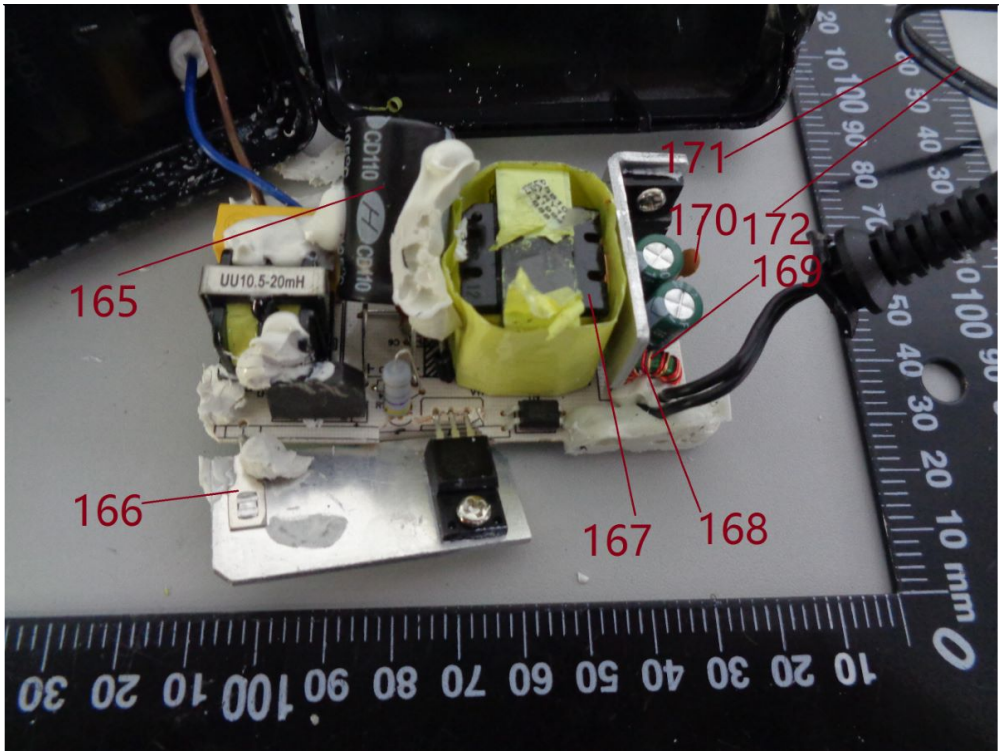
Material No.	Cd	Cr	Pb	Hg	Br
M134	n.d.	n.d.	n.d.	n.d.	n.a.
M135	n.d.	n.d.	n.d.	n.d.	n.a.



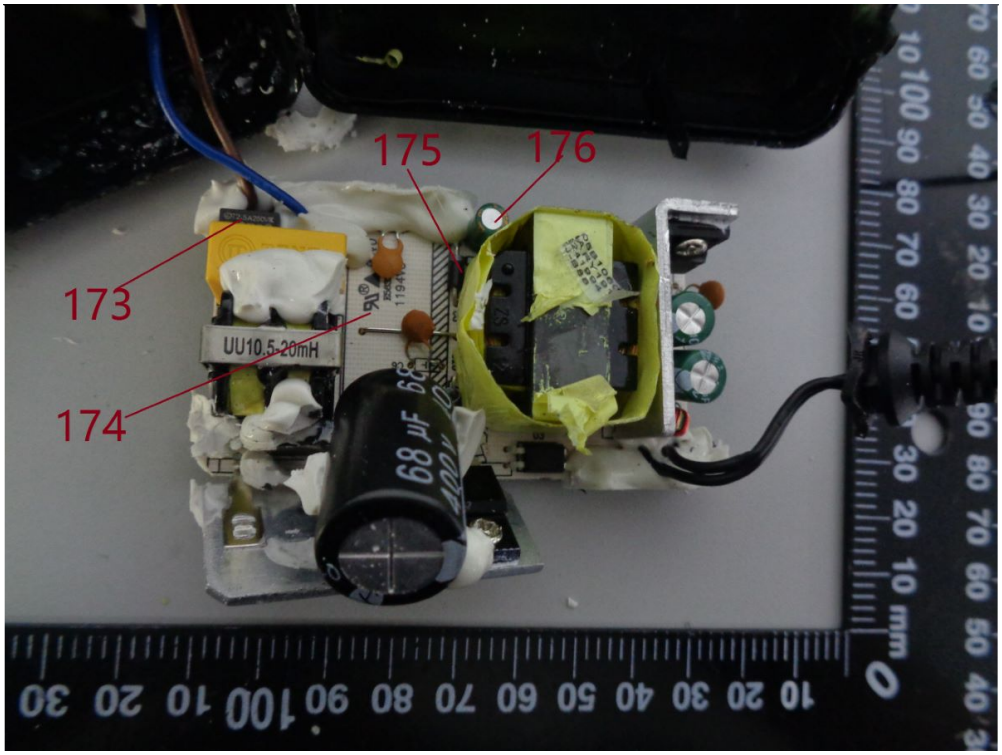
Material No.	Cd	Cr	Pb	Hg	Br
M142	n.d.	n.d.	n.d.	n.d.	n.d.
M143	n.d.	n.d.	n.d.	n.d.	n.a.
M144	n.d.	n.d.	n.d.	n.d.	n.d.
M145	n.d.	n.d.	n.d.	n.d.	d.(*1)
M147	n.d.	n.d.	n.d.	n.d.	n.d.
M148	n.d.	n.d.	n.d.	n.d.	n.d.
M149	n.d.	n.d.	n.d.	n.d.	n.d.
M150	n.d.	n.d.	n.d.	n.d.	n.d.



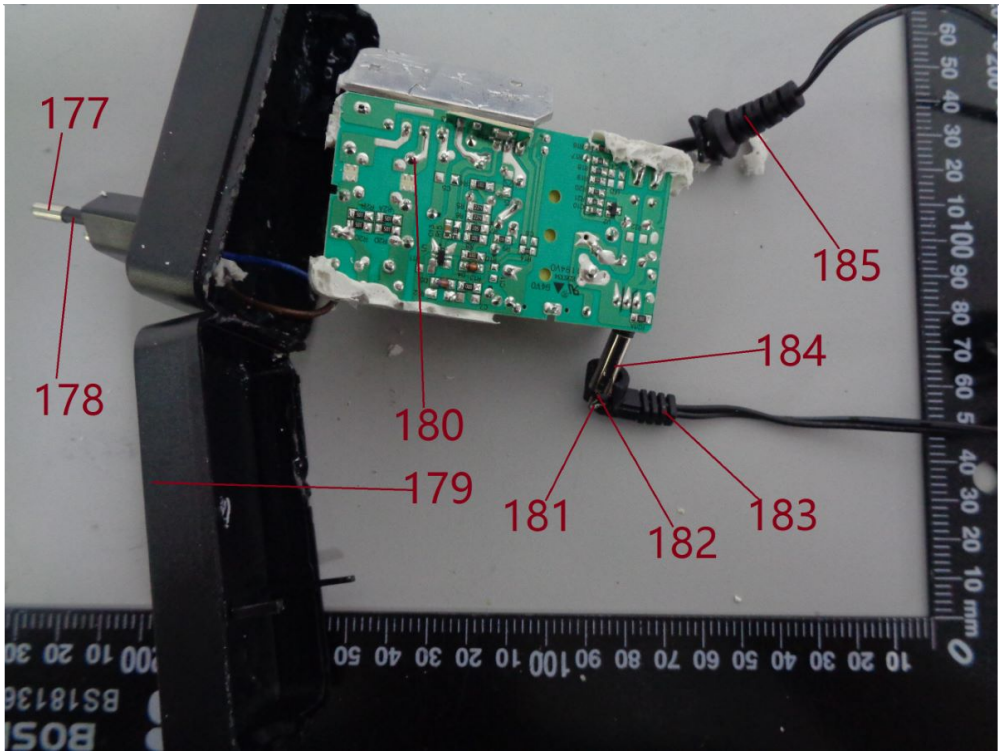
Material No.	Cd	Cr	Pb	Hg	Br
M153	n.d.	n.d.	n.d.	n.d.	d.(*1)
M154	n.d.	d.(*3)	n.d.	n.d.	n.a.
M155	n.d.	n.d.	n.d.	n.d.	d.(*1)
M156	n.d.	n.d.	n.d.	n.d.	n.a.
M157	n.d.	n.d.	n.d.	n.d.	n.d.
M158	n.d.	n.d.	n.d.	n.d.	n.d.
M159	n.d.	n.d.	n.d.	n.d.	d.(*1)
M160	n.d.	n.d.	n.d.	n.d.	n.d.
M161	n.d.	n.d.	n.d.	n.d.	n.a.
M162	n.d.	n.d.	n.d.	n.d.	n.d.
M163	n.d.	n.d.	n.d.	n.d.	n.d.
M164	n.d.	n.d.	n.d.	n.d.	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M165	n.d.	n.d.	n.d.	n.d.	n.d.
M166	n.d.	n.d.	n.d.	n.d.	n.a.
M167	n.d.	n.d.	n.d.	n.d.	n.d.
M168	n.d.	d.(*3)	n.d.	n.d.	n.a.
M169	n.d.	n.d.	n.d.	n.d.	n.a.
M170	n.d.	n.d.	n.d.	n.d.	n.d.
M171	n.d.	n.d.	n.d.	n.d.	n.d.
M172	n.d.	n.d.	n.d.	n.d.	n.d.



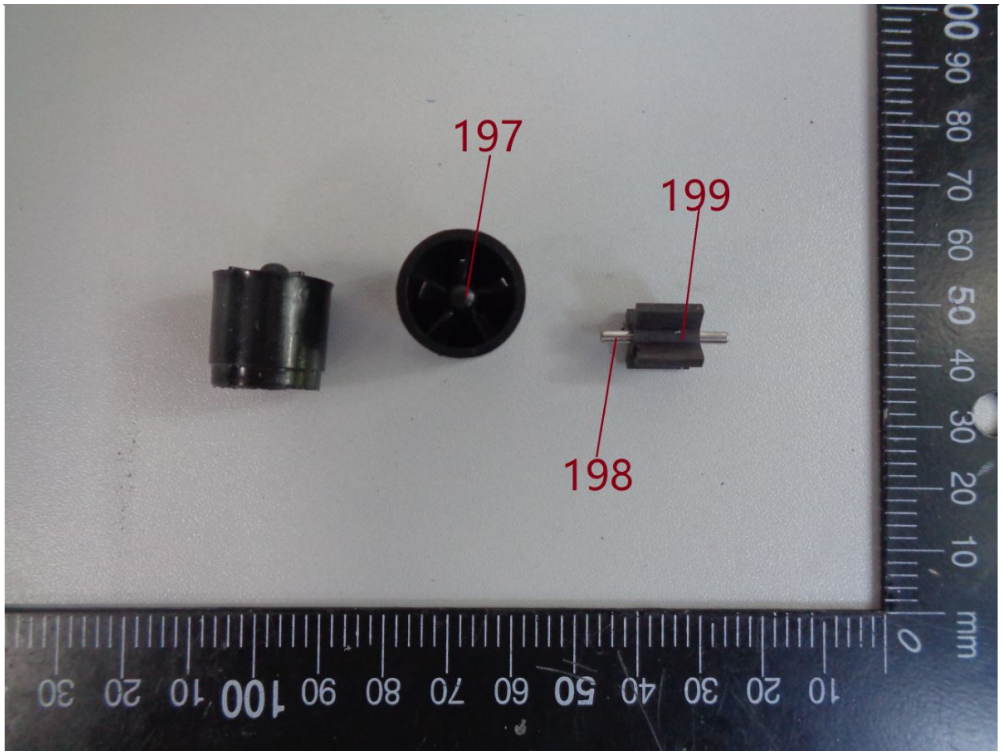
Material No.	Cd	Cr	Pb	Hg	Br
M173	n.d.	n.d.	n.d.	n.d.	n.d.
M174	n.d.	n.d.	n.d.	n.d.	n.d.
M175	n.d.	n.d.	n.d.	n.d.	d.(*1)
M176	n.d.	n.d.	n.d.	n.d.	n.d.



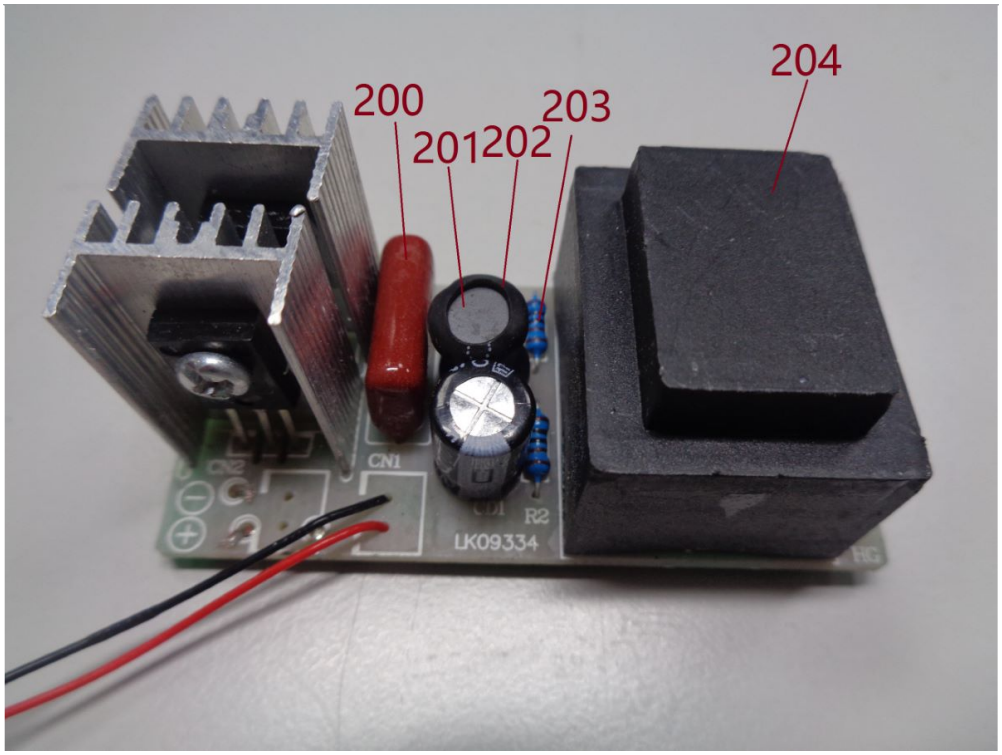
Material No.	Cd	Cr	Pb	Hg	Br
M177	n.d.	n.d.	d.(*1)	n.d.	n.a.
M178	n.d.	n.d.	n.d.	n.d.	d.(*1)
M179	n.d.	n.d.	n.d.	n.d.	n.d.
M180	n.d.	n.d.	n.d.	n.d.	n.a.
M181	n.d.	n.d.	n.d.	n.d.	n.a.
M182	n.d.	n.d.	n.d.	n.d.	d.(*1)
M183	n.d.	n.d.	n.d.	n.d.	n.d.
M184	n.d.	n.d.	n.d.	n.d.	n.a.
M185	n.d.	n.d.	n.d.	n.d.	n.d.



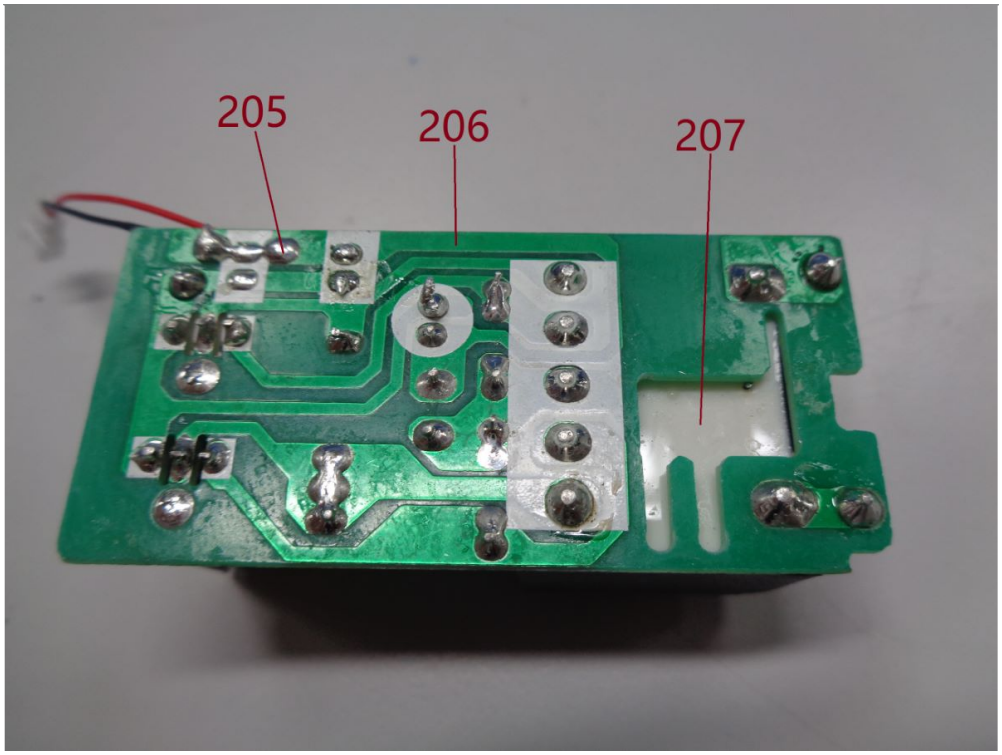
Material No.	Cd	Cr	Pb	Hg	Br
M186	n.d.	d.(*3)	n.d.	n.d.	n.a.
M187	n.d.	d.(*3)	n.d.	n.d.	n.a.
M188	n.d.	n.d.	n.d.	n.d.	n.d.
M189	n.d.	n.d.	n.d.	n.d.	n.a.
M190	n.d.	d.(*3)	n.d.	n.d.	n.a.
M191	n.d.	d.(*3)	n.d.	n.d.	n.a.
M192	n.d.	d.(*3)	n.d.	n.d.	n.a.
M193	n.d.	d.(*3)	n.d.	n.d.	n.a.
M194	n.d.	n.d.	n.d.	n.d.	n.d.
M195	n.d.	d.(*3)	n.d.	n.d.	n.a.
M196	n.d.	d.(*3)	n.d.	n.d.	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M197	n.d.	n.d.	n.d.	n.d.	n.d.
M198	n.d.	d.(*3)	n.d.	n.d.	n.a.
M199	n.d.	n.d.	n.d.	n.d.	n.a.



Material No.	Cd	Cr	Pb	Hg	Br
M200	n.d.	n.d.	n.d.	n.d.	n.d.
M201	n.d.	d.(*3)	n.d.	n.d.	n.a.
M203	n.d.	n.d.	n.d.	n.d.	n.d.
M204	n.d.	n.d.	n.d.	n.d.	d.(*1)



Material No.	Cd	Cr	Pb	Hg	Br
M205	n.d.	n.d.	n.d.	n.d.	n.a.
M206	n.d.	n.d.	n.d.	n.d.	d.(*1)

Abbreviation: Pb = Lead
Cd = Cadmium
Hg = Mercury
Cr = Chromium
Br = Bromine
n.a. = not applicable
n.d.= not detected
d.= detected

Remark:

(*1) The screening result was found in the inconclusive region, thus the further wet chemistry tests are suggested.

(*2) The screening result was detected above the screening limits, thus the further wet chemistry tests are suggested.

(*3) For metal sample, the Chromium (VI) content has been confirmed with reference to IEC 62321-7-1:2015.

(*4) For plastic sample or electronic sample, the Chromium (VI) content has been confirmed with reference to IEC 62321-7-2:2017.

(*5) For leather sample, the Chromium (VI) content has been confirmed with reference to EN ISO 17075-1:2017.

(*6) The screening result of Cr was found in the inconclusive region, thus the chromium (VI) content have been confirmed with EN ISO 17075-1:2017.

(*7) Component(s)/ materials(s) with an area of less than 2mm x2 mm will not be selected for testing according to RoHS Directive 2011/65/EU due to technical reason.
For the test sample does not have detail materials information provided by client, visually identical materials (e.g. wire insulation, solder points, etc.) will be considered as the same material.
Solder points on a printing circuit board will be examined several times based on optical anomalies or discoloration of the solder point(s) unless the solder point(s) is obviously generated automatically during production.
All other materials will be sampled and tested at one test point representatively.

(*8) The Chromium (Cr) and Bromine (Br) in the above result table indicate the total chromium and total bromine by means of XRF screening.
PBBs, or PBDEs content shall be further confirmed with reference to IEC 62321-6:2015.
Chromium (VI) shall be further confirmed with reference to IEC 62321-7-1:2015, IEC 62321-7-2:2017 or EN ISO 17075-1:2017.

XRF Screening limits for different matrices :

Material	Concentration (%)				
	Cd	Cr	Pb	Hg	Br
Polymeric	P≤0.006<X≤0.014<F	P≤0.064<X	P≤0.067<X≤0.133<F	P≤0.066<X≤0.134<F	P≤0.029<X
Metallic	P≤0.006<X≤0.014<F	P≤0.064<X	P≤0.067<X≤0.133<F	P≤0.066<X≤0.134<F	NA
Electronic Components	P≤0.004<X≤0.016<F	P≤0.044<X	P≤0.047<X≤0.153<F	P≤0.046<X≤0.154<F	P≤0.024<X

2.Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)

Test Method: Total Cadmium, Lead, Mercury, Chromium
- Ref. to IEC 62321-4:2013+AMD1:2017 and IEC 62321-5:2013

Chromium (VI)
- For Metal material - Ref. to IEC 62321-7-1:2015
- For Plastic or Electronic material - Ref. to IEC 62321-7-2:2017
- For Leather material - Ref. to EN ISO 17075-1:2017

PBBs, PBDEs - Ref. to IEC 62321-6:2015

Material List:

Material No.	Material	Color	Location	Test plan A = Test HM only B = Test FR only C = Test HM + FR
M002	Plastic	white	refer to photo	B
M003	Plastic	black	refer to photo	B
M005	Plastic	white	refer to photo	B
M006	Coating	blue	refer to photo	B
M007	Plastic	white	refer to photo	B
M009	Plastic	white	refer to photo	B
M010	Plastic	black	refer to photo	B
M014	PCB board	green	refer to photo	B
M016	Plastic	black	refer to photo	B
M021	Metal	silver	refer to photo	A
M030	Plastic	white	refer to photo	B
M031	Plastic	black	refer to photo	B
M034	Metal	silver	refer to photo	A
M035	Metal	silver	refer to photo	A
M039	Plastic	white	refer to photo	B
M040	Plastic	black	refer to photo	B
M044	Metal	silver	refer to photo	A
M048	Metal	silver	refer to photo	A
M049	Metal	silver	refer to photo	A
M052	Metal	silver	refer to photo	A
M058	Plastic	black	refer to photo	B
M059	Ceramic	white	refer to photo	A
M063	Solder	silver	refer to photo	A
M066	PCB board	green	refer to photo	B
M067	Plastic	white	refer to photo	B

M075	Plastic	pink	refer to photo	B
M086	Metal	silver	refer to photo	A
M087	Plastic	white	refer to photo	B
M093	Metal	silver	refer to photo	A
M094	Glass	transparent	refer to photo	A
M095	Metal	silver	refer to photo	A
M108	Metal	silver	refer to photo	A
M122	PCB board	green	refer to photo	B
M123	Plastic	orange	refer to photo	A
M124	Plastic	black	refer to photo	B
M126	Plastic	beige	refer to photo	B
M127	Metal	copper	refer to photo	A
M128	Metal	silver	refer to photo	A
M130	Ceramic	white	refer to photo	A
M132	Textile	white	refer to photo	B
M145	PCB board	blue	refer to photo	B
M153	Electronic components	yellow	refer to photo	B
M154	Metal	silver	refer to photo	A
M155	Electronic components	black	refer to photo	B
M159	Electronic components	black	refer to photo	B
M168	Metal	red	refer to photo	A
M175	Electronic components	black	refer to photo	B
M177	Metal	silver	refer to photo	A
M178	Plastic	black	refer to photo	B
M182	Plastic	black	refer to photo	B
M186	Metal	silver	refer to photo	A
M187	Metal	silver	refer to photo	A
M190	Metal	silver	refer to photo	A
M191	Metal	silver	refer to photo	A
M192	Metal	silver	refer to photo	A
M193	Metal	silver	refer to photo	A
M195	Metal	silver	refer to photo	A
M196	Metal	silver	refer to photo	A
M198	Metal	silver	refer to photo	A
M201	Magnet	black	refer to photo	A

M204	Plastic	black	refer to photo	A
M206	PCB board	green	refer to photo	A

Abbreviation: HM (Heavy metal) = Cd, Pb, Hg, Cr (VI)
FR (Flame Retardant) = PBBs, PBDEs

Test Result:

	Cd	Cr(VI)	Pb	Hg	PBBs (*)	PBDEs (*)
Maximum Permissible Limit (%)	0.01	0.1	0.1	0.1	0.1	0.1

Material No.	(%)					
	Cd	Cr^	Pb	Hg	PBBs (*)	PBDEs (*)
	RL(%)					
	0.001	0.001	0.001	0.001	0.0005	0.0005
M002	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M003	n.a.	n.a.	n.a.	n.a.	n.d.	0.0032
M005	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M006	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M007	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M009	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M010	n.a.	n.a.	n.a.	n.a.	n.d.	0.0062
M014	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M016	n.a.	n.a.	n.a.	n.a.	n.d.	0.0079
M030	n.a.	n.a.	n.a.	n.a.	n.d.	0.0183
M031	n.a.	n.a.	n.a.	n.a.	n.d.	0.0090
M039	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M040	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M058	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M059	n.d.	n.a.	44.0*3	n.a.	n.a.	n.a.
M063	n.a.	n.a.	0.024	n.a.	n.a.	n.a.
M066	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M067	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M075	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M087	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M095	n.a.	n.a.	2.13*4	n.a.	n.a.	n.a.

M122	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M123	n.d.	n.a.	n.a.	n.a.	n.a.	n.a.
M124	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M126	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M127	n.a.	n.a.	2.46*4	n.a.	n.a.	n.a.
M130	n.a.	n.a.	3.13*3	n.a.	n.a.	n.a.
M132	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M145	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M153	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M155	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M159	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M175	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M177	n.a.	n.a.	2.60*4	n.a.	n.a.	n.a.
M178	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M182	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M204	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M206	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.

Material No.	Hexavalent Chromium Content (µg/cm²) (*1) RL: 0.10 µg/cm²
M021	Negative
M034	Negative
M035	Negative
M044	Negative
M048	Negative
M049	Negative
M052	Negative
M086	Negative
M093	Negative
M108	Negative
M128	Negative
M154	Negative
M168	Negative
M186	Negative
M187	Negative
M190	Negative
M191	Negative
M192	Negative
M193	Negative
M195	Negative
M196	Negative
M198	Negative
M201	Negative

Material No.	Hexavalent Chromium Content (%) (*2) RL: 0.01%
M094	n.d.

Abbreviation:

Pb	= Lead
Cd	= Cadmium
Hg	= Mercury
Cr	= Chromium
Cr (VI)	= Chromium (VI)
PBBs	= Total Polybrominated Biphenyls
PBDEs	= Total Polybrominated Diphenyl Ethers
n.d.	= Not Detected (<RL)
RL	= Reporting Limit
n.a.	= Not Applicable
^	= The total Chromium have been determined
%	= percentage

Remark:

(*1) The total chromium content in Metal sample was found to be exceeded the maximum permissible limit (0.1%). Thus, the Chromium (VI) content in surface layer have been confirmed with reference to IEC 62321-7-1:2015 Annex.

	Chromium (VI) concentration	Qualitative result
Negative	<0.1μg/cm²	The sample is negative (-ve) for Cr(VI). The Cr(VI) concentration is below the limit of quantification. The coating is considered a non-Cr(VI) based coating
Inconclusive	≥0.1μg/cm² and ≤0.13 μg/cm²	The result is considered to be inconclusive. Unavoidable coating variations may influence the determination. Recommendation: if additional samples are available, perform a total of 3 trials to increase sampling surface area. Use the averaged result of the 3 trails for the final determination.
Positive	>0.13 μg/cm²	The sample is positive (+ve) for Cr(VI). Concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

* The reporting limit for each individual PBBs and individual PBDEs are :

Reporting Limit (%)		
PBBs	Bromobiphenyl	0.0001
	Dibromobiphenyl	0.0001
	Tribromobiphenyl	0.0001
	Tetrabromobiphenyl	0.0001
	Pentabromobiphenyl	0.0002
	Hexabromobiphenyl	0.0002
	Heptabromobiphenly	0.0002
	Octabromobiphenyl	0.0005
	Nonabromobiphenyl	0.0005
	Decabromobiphenyl	0.0005
PBDEs	Bromodiphenylether	0.0001
	Dibromodiphenyl ether	0.0001
	Tribromodiphenyl ether	0.0001
	Tetrabromodiphenyl ether	0.0001
	Pentabromodiphenyl ether	0.0002
	Hexabromodiphenyl ether	0.0002
	Heptabromodiphenyl ether	0.0002
	Octabromodiphenyl ether	0.0005
	Nonabromodiphenyl ether	0.0005
	Decabromodiphenyl ether	0.0005

(*2) The total chromium content in plastic sample or electronic sample was found to be exceeded the maximum permissible limit (0.1%).Thus, the Chromium (VI) content have been confirmed with reference to IEC 62321-7-2:2017.

*3 According to 2012/50/EU and Annex III of directive 2011/65/EU, Lead in the following electrical & electronic components is exempted from requirement.
Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

*4 According to Annex III of directive 2011/65/EU, Lead as an alloying element in copper alloy containing up to 4 % lead by weight are exempted from requirement

3. BBP, DBP, DEHP, DIBP content

Test Method: IEC 62321-8:2017

Test Result:

	BBP	DBP	DEHP	DIBP
Maximum permissible Limit (%)	0.1	0.1	0.1	0.1

Test No.	Material No.	(%)			
		BBP	DBP	DEHP	DIBP
		RL (%)			
		0.005	0.005	0.005	0.005
T001	M001 + M002 + M003	n.d.	n.d.	0.007	n.d.
T002	M004 + M005 + M007	n.d.	n.d.	0.006	n.d.
T003	M006	n.d.	n.d.	0.006	n.d.
T006	M016 + M018 + M019	n.d.	n.d.	0.006	n.d.
T008	M020 + M022 + M024	n.d.	n.d.	n.d.	n.d.
T009	M025 + M030 + M031	n.d.	n.d.	n.d.	n.d.
T015	M058 + M067 + M069	n.d.	n.d.	0.006	n.d.
T019	M075 + M083 + M087	n.d.	n.d.	n.d.	n.d.
T021	M089 + M099 + M110	n.d.	0.011	n.d.	n.d.
T027	M119 + M123 + M124	n.d.	n.d.	0.015	n.d.
T030	M147 + M148 + M149	n.d.	0.025	0.022	n.d.
T032	M167 + M178 + M179	n.d.	n.d.	0.009	n.d.
T033	M171 + M172 + M142	n.d.	n.d.	0.010	n.d.
T034	M182 + M183 + M185	n.d.	n.d.	n.d.	n.d.
T035	M188 + M194 + M197	n.d.	n.d.	n.d.	n.d.
T037	M014 + M062 + M066	n.d.	n.d.	n.d.	n.d.
T038	M074 + M105 + M122	n.d.	n.d.	n.d.	n.d.
T039	M145 + M174	n.d.	n.d.	n.d.	n.d.
T012	M036 + M039	n.d.	n.d.	0.008	n.d.
T041	M037	n.d.	n.d.	n.d.	n.d.
T044	M026	n.d.	n.d.	0.009	n.d.
T045	M027	n.d.	n.d.	0.027	n.d.

T048	M033	n.d.	n.d.	n.d.	n.d.
T049	M038	n.d.	n.d.	0.018	n.d.
T050	M101	n.d.	0.078	0.038	n.d.
T052	M103	n.d.	0.065	n.d.	n.d.
T054	M114	n.d.	n.d.	0.020	n.d.
T059	M126	n.d.	n.d.	n.d.	n.d.
T061	M150	n.d.	n.d.	n.d.	n.d.
T066	M077	n.d.	0.083	0.039	n.d.
T067	M079	n.d.	n.d.	0.009	n.d.
T068	M011 + M084 + M160	n.d.	n.d.	n.d.	n.d.
T069	M040 + M071	n.d.	n.d.	n.d.	n.d.
T070	M009 + M010 + M015	n.d.	n.d.	n.d.	n.d.
T072	M096 + M100	n.d.	0.024	n.d.	n.d.
T073	M132 + M163	n.d.	n.d.	n.d.	n.d.
T075	M080	n.d.	0.007	n.d.	n.d.
-	M052	n.a.	n.a.	n.a.	n.a.
-	M055	n.a.	n.a.	n.a.	n.a.
-	M056	n.a.	n.a.	n.a.	n.a.
-	M057	n.a.	n.a.	n.a.	n.a.
-	M012	n.a.	n.a.	n.a.	n.a.
-	M013	n.a.	n.a.	n.a.	n.a.
-	M021	n.a.	n.a.	n.a.	n.a.
-	M023	n.a.	n.a.	n.a.	n.a.
-	M029	n.a.	n.a.	n.a.	n.a.
-	M034	n.a.	n.a.	n.a.	n.a.
-	M035	n.a.	n.a.	n.a.	n.a.
-	M044	n.a.	n.a.	n.a.	n.a.
-	M045	n.a.	n.a.	n.a.	n.a.
-	M048	n.a.	n.a.	n.a.	n.a.
-	M049	n.a.	n.a.	n.a.	n.a.
-	M050	n.a.	n.a.	n.a.	n.a.
-	M051	n.a.	n.a.	n.a.	n.a.
-	M059	n.a.	n.a.	n.a.	n.a.
-	M060	n.a.	n.a.	n.a.	n.a.

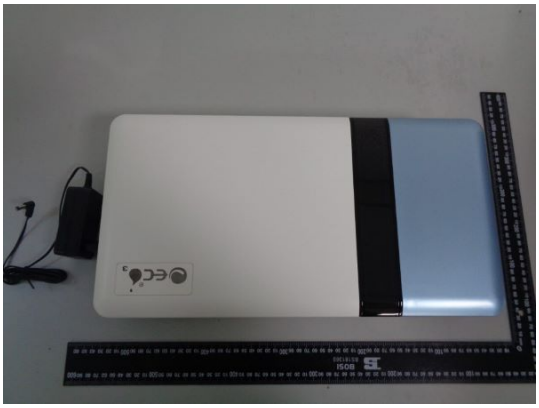
-	M061	n.a.	n.a.	n.a.	n.a.
-	M063	n.a.	n.a.	n.a.	n.a.
-	M064	n.a.	n.a.	n.a.	n.a.
-	M065	n.a.	n.a.	n.a.	n.a.
-	M076	n.a.	n.a.	n.a.	n.a.
-	M081	n.a.	n.a.	n.a.	n.a.
-	M082	n.a.	n.a.	n.a.	n.a.
-	M086	n.a.	n.a.	n.a.	n.a.
-	M091	n.a.	n.a.	n.a.	n.a.
-	M093	n.a.	n.a.	n.a.	n.a.
-	M094	n.a.	n.a.	n.a.	n.a.
-	M095	n.a.	n.a.	n.a.	n.a.
-	M098	n.a.	n.a.	n.a.	n.a.
-	M108	n.a.	n.a.	n.a.	n.a.
-	M111	n.a.	n.a.	n.a.	n.a.
-	M113	n.a.	n.a.	n.a.	n.a.
-	M115	n.a.	n.a.	n.a.	n.a.
-	M118	n.a.	n.a.	n.a.	n.a.
-	M125	n.a.	n.a.	n.a.	n.a.
-	M127	n.a.	n.a.	n.a.	n.a.
-	M128	n.a.	n.a.	n.a.	n.a.
-	M130	n.a.	n.a.	n.a.	n.a.
-	M131	n.a.	n.a.	n.a.	n.a.
-	M133	n.a.	n.a.	n.a.	n.a.
-	M134	n.a.	n.a.	n.a.	n.a.
-	M135	n.a.	n.a.	n.a.	n.a.
-	M143	n.a.	n.a.	n.a.	n.a.
-	M144	n.a.	n.a.	n.a.	n.a.
-	M153	n.a.	n.a.	n.a.	n.a.
-	M154	n.a.	n.a.	n.a.	n.a.
-	M155	n.a.	n.a.	n.a.	n.a.
-	M156	n.a.	n.a.	n.a.	n.a.
-	M157	n.a.	n.a.	n.a.	n.a.
-	M158	n.a.	n.a.	n.a.	n.a.
-	M159	n.a.	n.a.	n.a.	n.a.

-	M161	n.a.	n.a.	n.a.	n.a.
-	M162	n.a.	n.a.	n.a.	n.a.
-	M164	n.a.	n.a.	n.a.	n.a.
-	M165	n.a.	n.a.	n.a.	n.a.
-	M166	n.a.	n.a.	n.a.	n.a.
-	M168	n.a.	n.a.	n.a.	n.a.
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-	M170	n.a.	n.a.	n.a.	n.a.
-	M173	n.a.	n.a.	n.a.	n.a.
-	M175	n.a.	n.a.	n.a.	n.a.
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-	M177	n.a.	n.a.	n.a.	n.a.
-	M180	n.a.	n.a.	n.a.	n.a.
-	M181	n.a.	n.a.	n.a.	n.a.
-	M184	n.a.	n.a.	n.a.	n.a.
-	M186	n.a.	n.a.	n.a.	n.a.
-	M187	n.a.	n.a.	n.a.	n.a.
-	M189	n.a.	n.a.	n.a.	n.a.
-	M190	n.a.	n.a.	n.a.	n.a.
-	M191	n.a.	n.a.	n.a.	n.a.
-	M192	n.a.	n.a.	n.a.	n.a.
-	M193	n.a.	n.a.	n.a.	n.a.
-	M195	n.a.	n.a.	n.a.	n.a.
-	M196	n.a.	n.a.	n.a.	n.a.
-	M198	n.a.	n.a.	n.a.	n.a.
-	M199	n.a.	n.a.	n.a.	n.a.
-	M200	n.a.	n.a.	n.a.	n.a.
-	M201	n.a.	n.a.	n.a.	n.a.
-	M203	n.a.	n.a.	n.a.	n.a.
-	M204	n.a.	n.a.	n.a.	n.a.
-	M205	n.a.	n.a.	n.a.	n.a.
-	M206	n.a.	n.a.	n.a.	n.a.

Abbreviation:

BBP= Benzylbutyl phthalate
DBP= Dibutyl phthalate
DEHP= Bis(2-ethylhexyl) phthalate
DIBP= Diisobutyl phthalate
n.d.= Not Detected (< Reporting Limit)
RL = Reporting Limit
N.A. = Not Applicable
%= percentage

Sample Photo



- END -

General Terms and Conditions of Business of TÜV Rheinland in Greater China

1. Scope

1.1 These General Terms and Conditions of Business of TÜV Rheinland in Greater China ("GTCB") is made between the client and one or more member entities of TÜV Rheinland in Greater China as applicable as the case may be ("TÜV Rheinland"). The Greater China hereof refers to Mainland China, Hong Kong and Taiwan.The client hereof includes :

(i) a natural person capable to form legally binding contracts under the applicable laws who concludes the contract not for the purpose of a daily use;

(ii) the incorporated or unincorporated entity duly organized, validly existing and capable to form legally binding contracts under the applicable law.

1.2 The following terms and conditions apply to agreed services including consultancy services, information, deliveries and similar services as well as ancillary services and other secondary obligations provided within the scope of contract performance.

1.3 Any standard terms and conditions of the client of any nature shall not apply and shall hereby be expressly excluded. No standard contractual terms and conditions of the client shall form part of the contract even if TÜV Rheinland does not explicitly object to them.

1.4 In the context of an ongoing business relationship with the client, this GTCB shall also apply to future contracts with the client without TÜV Rheinland having to refer to them separately in each individual case.

2. Quotations

Unless otherwise agreed, all quotations submitted by TÜV Rheinland can be changed by TÜV Rheinland without notice prior to its acceptance and confirmation by the other party.

3. Coming into effect and duration of contracts

3.1 The contract shall come into effect for the agreed terms upon the quotation letter of TÜV Rheinland or a separate contractual document being signed by both contracting parties, or upon the works requested by the client being carried out by TÜV Rheinland. If the client instructs TÜV Rheinland without receiving a quotation from TÜV Rheinland (quotation), TÜV Rheinland is, in its sole discretion, entitled to accept the order by giving written notice of such acceptance (including notice sent via electronic means) or by performing the requested services.

3.2 The contract term starts upon the coming into effect of the contract in accordance with article 3.1 and shall continue for the term agreed in the contract.

3.3 If the contract provides for an extension of the contract term, the contract term will be extended by the term provided for in the contract unless terminated in writing by either party with a six-week notice prior to the end of the contractual term.

4. Scope of services

4.1 The scope and type of the services to be provided by TÜV Rheinland shall be specified in the contractually agreed service scope of TÜV Rheinland by both parties. If no such separate service scope of TÜV Rheinland exists, then the written confirmation of order by TÜV Rheinland shall be decisive for the service to be provided.

4.2 The agreed services shall be performed in compliance with the regulations in force at the time the contract is entered into.

4.3 TÜV Rheinland is entitled to determine, in its sole discretion, the method and nature of the assessment unless otherwise agreed in writing or if mandatory provisions require a specific procedure to be followed.

4.4 On execution of the work there shall be no simultaneous assumption of any guarantee of the correctness (proper quality) and working order of either tested or examined parts nor of the installation as a whole and its upstream and/or downstream processes, organisations, use and application in accordance with regulations, nor of the systems on which the installation is based. In particular, TÜV Rheinland shall assume no responsibility for the construction, selection of materials and assembly of installations examined, nor for their use and application in accordance with regulations, unless these questions are expressly covered by the contract.

4.5 In the case of inspection work, TÜV Rheinland shall not be responsible for the accuracy or checking of the safety programmes or safety regulations on which the inspections are based, unless otherwise expressly agreed in writing.

4.6 If mandatory legal regulations and standards or official requirements for the agreed service scope change after conclusion of the contract, with a written notice to the client, TÜV Rheinland shall be entitled to additional remuneration for resulting additional expenses.

4.7The services to be provided by TÜV Rheinland under the contract are agreed exclusively with the client. A contract of third parties with the services of TÜV Rheinland, as well as making available of and justifying confidence in the work results (test reports, test results, expert reports, etc.) is not part of the agreed services. This also applies if the client passes on work results - in full or in extracts - to third parties in accordance with clause 11.4.

5. Performance periods/dates

5.1 The contractually agreed periods/dates of performance are based on estimates of the work involved which are prepared in line with the details provided by the client. They shall only be binding if being confirmed as binding by TÜV Rheinland in writing.

5.2 If binding periods of performance have been agreed, these periods shall not commence until the client has submitted all required documents to TÜV Rheinland.

5.3 Articles 5.1 and 5.2 also apply, even without express approval by the client, to all extensions of agreed periods/dates of performance not caused by TÜV Rheinland.

5.4TÜV Rheinland is not responsible for a delay in performance, in particular if the client has not fulfilled his duties to cooperate in accordance with clause 6.1 or has not done so in time and, in particular, has not provided TÜV Rheinland with all documents and information required for the performance of the service as specified in the contract.

5.5If the performance of TÜV Rheinland is delayed due to unforeseeable circumstances such as force majeure, strikes, business disruptions, governmental regulations, transport obstacles, etc., TÜV Rheinland is entitled to postpone performance for a reasonable period of time which corresponds at least to the duration of the hindrance plus any time period which may be required to resume performance.

6. The client's obligation to cooperate

6.1 The client shall guarantee that all cooperation required on its part, its agents or third parties will be provided in good time and at no cost to TÜV Rheinland.

6.2 Design documents, supplies, auxiliary staff, etc. necessary for performance of the services shall be made available free of charge by the client. Moreover, collaborative action of the client must be undertaken in accordance with legal provisions, standards, safety regulations and accident prevention instructions. And the client represents and warrants that:

a) it has required statutory qualifications;

b) the product, service or management system to be certified complies with applicable laws and regulations; and

c) it doesn't have any illegal and dishonest behaviours or is not included in the list of Enterprises with Serious Illegal and Dishonest Acts of People's Republic of China.

If the client breaches the aforesaid representations and warranties, TÜV Rheinland is entitled to i) immediately terminate the contract/order without prior notice; and ii) withdraw the issued testing report/certificates if any.

6.3 The client shall bear any additional cost incurred on account of work having to be redone or being delayed as a result of late, incorrect or incomplete information provided by or lack of proper cooperation from the client. Even where a fixed or maximum price is agreed, TÜV Rheinland shall be entitled to charge extra fees for such additional expense.

7. Prices

7.1 If the scope of performance is not laid down in writing when the order is placed, invoicing shall be based on costs actually incurred. If no price is agreed in writing, invoicing shall be made in accordance with the price list of TÜV Rheinland valid at the time of performance.

7.2 Unless otherwise agreed, work shall be invoiced according to the progress of the work.

7.3 If the execution of an order extends over more than one month and the value of the contract or the agreed fixed price exceeds €2,500.00 or equivalent value in local currency, TÜV Rheinland may demand payments on account or in instalments.

8. Payment terms

8.1 All invoice amounts shall be due for payment without deduction on receipt of the invoice. No discounts and rebates shall be granted.

8.2 Payments shall be made to the bank account of TÜV Rheinland as indicated on the invoice, stating the invoice and client numbers.

8.3 In cases of default of payment, TÜV Rheinland shall be entitled to claim default interest at the applicable short term loan interest rate publicly announced by a reputable commercial bank in the country where TÜV Rheinland is located. At the same time, TÜV Rheinland reserves the right to claim further damages.

8.4 Should the client default in payment of the invoice despite being granted a reasonable grace period, TÜV Rheinland shall be entitled to cancel the contract, withdraw the certificate, claim damages for non-performance and refuse to continue performance of the contract.

8.5 The provisions set forth in article 8.4 shall also apply in cases involving returned cheques, cessation of payment, commencement of insolvency proceedings against the client's assets or cases in which the commencement of insolvency proceedings has been dismissed due to lack of assets.

8.6 Objections to the invoices of TÜV Rheinland shall be submitted in writing within two weeks of receipt of the invoice.

8.7 TÜV Rheinland shall be entitled to demand appropriate advance payments.

8.8 TÜV Rheinland shall be entitled to raise its fees at the beginning of a month if overheads and/or purchase costs have increased. In this case, TÜV Rheinland shall notify the client in writing of the rise in fees. This notification shall be issued one month prior to the date on which the rise in fees shall come into effect (period of notice of changes in fees). If the rise in fees remains under 5% per contractual year, the client shall not have the right to terminate the contract. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract by the end of the period of notice of changes in fees. If the contract is not terminated, the changed fees shall be deemed to have been agreed upon by the time of the expiry of the notice period.

8.9 Only legally established and undisputed claims may be offset against claims by TÜV Rheinland.

9. Acceptance of work

9.1 Any part of the work result ordered which is complete in itself may be presented by TÜV Rheinland for acceptance as an instalment. The client shall be obliged to accept it immediately.

9.2 If acceptance is required or contractually agreed in an individual case, this shall be deemed to have taken place two (2) weeks after completion and handover of the work, unless the client refuses acceptance within this period stating at least one fundmental breach of contract by TÜV Rheinland.

9.3 The client is not entitled to refuse acceptance due to insignificant breach of contract by TÜV Rheinland.

9.4 If acceptance is excluded according to the nature of the work performance of TÜV Rheinland, the completion of the work shall take its place.

9.5 If the client was unable to make use of the time windows provided for within the scope of a certification procedure for auditing/performance by TÜV Rheinland and the certificate is therefore to be withdrawn (e.g. performance of surveillance audits), TÜV Rheinland is entitled to immediately charge a lump-sum compensation of 10% of the order amount as compensation for expenses. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above lump sum.

9.6 Insofar as the client has undertaken in the contract to accept services, TÜV Rheinland shall also be entitled to charge lump-sum damages in the amount of 10% of the order amount as compensation for expenses if the service is not called within one year after the order has been placed. The client reserves the right to prove that the TÜV Rheinland has incurred no damage whatsoever or only a considerably lower damage than the above mentioned lump sum.

10. Confidentiality

10.1For the purpose of these terms and conditions, "confidential information" means all information, documents, images, drawings, know-how, data, samples and project documentation which one party (the "disclosing party") hands over, transfers or otherwise discloses to the other party (the "receiving party"), and the confidential information created during performance of work by TÜV Rheinland, including product testing data, defects, conformity to the technical standard and related reports. Confidential information also includes paper copies and electronic copies of such information. Confidential information is expressly not the data and know-how collected, compiled or otherwise obtained by TÜV Rheinland (non-personal) within the scope of the provision of services by TÜV Rheinland. TÜV Rheinland is entitled to store, use, further develop and pass on the data obtained in connection with the provision of services for the purposes of developing new services, improving services and analysing the provision of services.

10.2 The disclosing party shall mark all confidential information disclosed in written form as confidential before passing it onto the receiving party. The same applies to confidential information transmitted by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information within five working days of oral disclosure. Where the disclosing party fails to do so within the stipulated period, the receiving party shall not take any confidentiality obligations hereunder towards such information.

10.3 All confidential information which the disclosing party transmits or otherwise discloses to the receiving party and which is created during performance of work by TÜV Rheinland:

a)may only be used by the receiving party for the purposes of performing the contract, unless expressly otherwise agreed in writing by the disclosing party;

b)may not be copied, distributed, published or otherwise disclosed by the receiving party, unless this is necessary for fulfilling the purpose of the contract or TÜV Rheinland is required to pass on confidential information, inspection reports or documentation to the government authorities, judicial court, accreditation bodies or third parties that are involved in the performance of the contract;

c)must be treated by the receiving party with the same level of confidentiality as the receiving party uses to protect its own confidential information, but never with a lesser level of confidentiality than that which is reasonably required.

10.4 The receiving party may disclose any confidential information received from the disclosing party only to those of its employees who need this information to perform the services required for the contract. The receiving party undertakes to oblige these employees to observe the same level of secrecy as set forth in this confidentiality clause.

10.5 Information for which the receiving party can furnish proof that:

a)it was generally known at the time of disclosure or has become general knowledge without violation of this confidentiality clause by the receiving party; or

b)it was disclosed to the receiving party by a third party entitled to disclose this information; or

c)the receiving party already possessed this information prior to disclosure by the disclosing party; or

d)the receiving party developed it itself, irrespective of disclosure by the disclosing party, shall not be deemed to constitute "confidential information" as defined in this confidentiality clause.

10.6 All confidential information shall remain the property of the disclosing party. The receiving party hereby agrees to immediately (i) return all confidential information, including all copies, to the disclosing party, and/or (ii) on request by the disclosing party, to destroy all confidential information, including all copies, and confirm the destruction of this confidential information to the disclosing party in writing, at any time if so requested by the disclosing party but at the latest and without special request after termination or expiry of the contract. This does not extend to include reports and certificates prepared for the client solely for the purpose of fulfilling the obligations under the contract, which shall remain with the client. However, TÜV Rheinland is entitled to make file copies of such reports, certificates and confidential information that forms the basis for preparing these reports and certificates in order to evidence the correctness of its results and for general documentation purposes required by laws, regulations and the requirements of working procedures of TÜV Rheinland.

10.7 From the start of the contract and for a period of three years after termination or expiry of the contract, the receiving party shall maintain strict secrecy of all confidential information and shall not disclose this information to any third parties or use it for itself.

11. Copyrights and rights of use, publications

11.1 TÜV Rheinland shall retain all exclusive copyrights in the reports, expert reports/opinions, test reports/results, results, calculations, presentations etc. prepared by TÜV Rheinland, unless otherwise agreed by the parties in a separate agreement. As the owner of the copyrights, TÜV Rheinland is free to grant others the right to use the work results for individual or all types of use ("right of use")

11.2 The client receives a simple, unlimited, non-transferable, non-sublicensable right of use to the contents of the work results produced within the scope of the contract, unless otherwise agreed by the parties in a separate agreement.The client may only use such reports, expert reports/opinions, test reports/results, results calculations, presentations etc. prepared within the scope of the contract for the contractually agreed purpose.

11.3 The transfer of right of use of the generated work results regulated in clause 11.2. of the GTCB is subject to full payment of the remuneration agreed in favour of TÜV Rheinland.

11.4 The client may use work results only complete and unshortened. The client may only pass on the work results in full unless TÜV Rheinland has given its prior written consent to the partial passing on of work results.

11.5 Any publication or duplication of the work results for advertising purposes or any further use of the work results beyond the scope regulaed in clause 11.2 needs the prior written approval of TÜV Rheinland in each individual case.

11.6 TÜV Rheinland may revoke a once given approval according to clause 11.5 at any time without stating reasons. In this case, the client is obliged to stop the transfer of the work results immediately at his own expense and, as far as possible, to withdraw publications.

11.7 The consent of TÜV Rheinland to publication or duplication of the work results does not entitle the client to use the corporate logo, corporate design or test/certification mark of TÜV Rheinland.

12. Liability of TÜV Rheinland

12.1 Irrespective of the legal basis, to the fullest extent permitted by applicable law, in the event of a breach of contractual obligations or tort, the liability of TÜV Rheinland for all damages, losses and reimbursement of expenses caused by TÜV Rheinland, its legal representatives and/or employees shall be limited to: (i) in the case of a contract with a fixed overall fee, three times the overall fee for the entire contract; (ii) in the case of a contract for annually recurring services, the agreed annual fee; (iii) in the case of a contract expressly charged on a time and material basis, a maximum of 20,000 Euro or equivalent amount in local currency; and (iv) in the case of a framework agreement that provides for the possibility of placing individual orders, three times of the fee for the individual order under which the damages or losses have occurred. Notwithstanding the above, in the event that the total and accumulated liability calculated according to the foregoing provisions exceeds 2.5 Million Euro or equivalent amount in local currency, the total and accumulated liability of TÜV Rheinland shall be only limited to and shall not exceed the said 2.5 Million Euro or equivalent amount in local currency.

12.2 The limitation of liability according to article 12.1 above shall not apply to damages and/or losses caused by malice, intent or gross negligence on the part of TÜV Rheinland or its vicarious agents. Such limitation shall not apply to damages for a person's death, physical injury or illness.

12.3 In cases involving a fundamental breach of contract, TÜV Rheinland will be liable even where minor negligence is involved. For this purpose, a "fundamental breach" is breach of a material contractual obligation, the performance of which permits the due performance of the contract. Any claim for damages for a fundamental breach of contract shall be limited to the amount of damages reasonably foreseen as a possible consequence of such breach of contract at the time of the breach (reasonably foreseeable damages), unless any of the circumstances described in article 12.2 applies.

12.4 TÜV Rheinland shall not be liable for the acts of the personnel made available by the client to support TÜV Rheinland in the performance of its services under the contract, unless such personnel made available is regarded as vicarious agent of TÜV Rheinland. If TÜV Rheinland is not liable for the acts of the personnel made available by the client under the foregoing provision, the client shall indemnify TÜV Rheinland against any claims made by third parties arising from or in connection with such personnel's acts.

12.5 Unless otherwise contractually agreed in writing, TÜV Rheinland shall only be liable under the contract to the client.

12.6 The limitation periods for claims for damages shall be based on statutory provisions.

12.7 None of the provisions of this article 12 changes the burden of proof to the disadvantage of the client.

13. Export control

13.1When passing on the services provided by TÜV Rheinland or parts thereof to third parties in Greater China or other regions, the client must comply with the respectively applicable regulations of national and international export control law.

13.2The performance of a contract with the client is subject to the proviso that there are no obstacles to performance due to national or international foreign trade legislations or embargos and/or sanctions. In the event of a violation, TÜV Rheinland shall be entitled to terminate the contract with immediate effect and the client shall compensate for the losses incured thereof by TÜV Rheinland.

14. Data protection notice

TÜV Rheinland processes personal data of the client for the purpose of fulfilling this contract. In addition, TÜV Rheinland also processes the data for other legal purposes in accordance with the relevant legal basis. The personal data of the client will only be disclosed to other natural or legal persons if the legal requirements are met. This also applies to transfers to third countries. The personal data will be deleted immediately as soon as a corresponding reason for deletion arises. Data subjects may exercise the following rights: right of information, right of rectification, right of deletion, right of processing limitation, right of objection, right of data transferability. In addition, persons concerned by the data processing have the right to revoke their consent at any time with effect for the future, as well as the right to file a complaint with the competent data protection supervisory authority. For further details on the processing of personal data by TÜV Rheinland as the person responsible or contract processor, please refer to the respective data protection information. You can contact the Group Data Protection Officer of TÜV Rheinland by e-mail at datenschutz@de.tuv.com or by post at the following address: TÜV Rheinland AG, c/o Group Data Protection Officer, Am Grauen Stein, 51105 Cologne, Germany.

15. Test material: transport risk and storage

15.1The risk and costs for freight and transport of documents or test material to and from TÜV Rheinland as well as the costs of necessary disposal measures shall be borne by the client.

15.2Any destroyed and otherwise worthless test material will be disposed of by TÜV Rheinland for the client at the expense of the client, unless otherwise agreed.

15.3Undamaged test material shall be stored by TÜV Rheinland for four (4) weeks after completion of the test. If a longer storage period is desired, TÜV Rheinland charges an appropriate storage fee.

15.4After the expiry of the 4 weeks or any longer period agreed upon, the test material will be disposed of by TÜV Rheinland for the client for a fee in accordance with clause 15.2.

16. Termination of the contract

16.1Notwithstanding clause 3.3 of the GTCB, TÜV Rheinland and the client are entitled to terminate the contract in its entirety or, in the case of services combined in one contract, each of the combined parts of the contract individually and independently of the continuation of the remaining services with six (6) months' notice to the end of the contractually agreed term.

16.2For good causes, TÜV Rheinland may consider giving a written notice to the client to terminate the contract which includes but not limited to the following:

a) the client does not immediately notify TÜV Rheinland of changes in the conditions within the company which are relevant for certification or signs of such changes;

b) the client misuses the certificate or certification mark or uses it in violation of the contract;

c) in the event of several consecutive delays in payment (at least three times);

d) a substantial deterioration of the financial circumstances of the client occurs and as a result the payment claims of TÜV Rheinland under the contract are considerably endangered and TÜV Rheinland cannot reasonably be expected to continue the contractual relationship.

16.3In the event of termination with written notice by TÜV Rheinland for good cause, TÜVRheinland shall be entitled to a lump-sum claim for damages against the client if the conditions of a claim for damages exist. In this case, the client shall owe 15% of the remuneration to be paid until the end of the fixed contract term as lump-sum compensation. The client reserves the right to prove that there is no damage or a considerably lower damage, TÜV Rheinland reserves the right to prove a considerably higher damage in individual cases.

16.4TÜV Rheinland is also entitled to terminate the contract with written notice if the client has not been able to make use of the time windows for auditing /service provision provided by TÜV Rheinland within the scope of a certification procedure and the certificate therefore has to be withdrawn (for example during the performance of monitoring audits). Clause 16.3 applies accordingly.

17. Partial invalidity, written form, place of jurisdiction and dispute resolution

17.1 All amendments and supplements must be in writing in order to be effective. This also applies to amendments and supplements to this clause 17.1.

17.2 Should one or several of the provisions under the contract and/or these terms and conditions be or become ineffective, the contracting parties shall replace the invalid provision with a legally valid provision that comes closest to the content of the invalid provision in legal and commercial terms.

17.3 Unless otherwise stipulated in the contract, the governing law of the contract and these terms and conditions shall be chosen following the rules as below:

a)if TÜV Rheinland in question is legally registered and existing in the People's Republic of China, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of the People's Republic of China.

b)if TÜV Rheinland in question is legally registered and existing in Taiwan, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Taiwan.

c)if TÜV Rheinland in question is legally registered and existing in Hong Kong, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Hong Kong.

17.4 Any dispute in connection with the contract and these terms and conditions or the execution thereof shall be settled friendly through negotiations.

Unless otherwise stipulated in the contract, if no settlement or no agreement in respect of the extension of the negotiation period can be reached within two months of the arising of the dispute, the dispute shall be submitted:

a)in the case of TÜV Rheinland in question being legally registered and existing in the People's Republic of China, to China International Economic and Trade Arbitration Commission (CIETAC) to be settled by arbitration under the Arbitration Rules of CIETAC in force when the arbitration is submitted. The arbitration shall take place in Beijing, Shanghai, Shenzhen or Chongqing as appropriately chosen by the claiming party.

b)in the case of TÜV Rheinland in question being legally registered and existing in Taiwan, to Chinese Arbitration Association Taipei Branch to be arbitrated in accordance with its then current Rules of Arbitration. The arbitration shall take place in Taipei.

c)in the case of TÜV Rheinland being legally registered and existing in Hong Kong, to Hong Kong International Arbitration Centre (HKIAC) to be settled by arbitration under the HKIAC Administered Arbitration Rules in force when the Notice of Arbitration is submitted in accordance with these rules. The arbitration shall take place in Hong Kong.

The decision of the relevant arbitration tribunal shall be final and binding on both parties. The arbitration fee shall be borne by the losing party.