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**Client:** PYLON TECHNOLOGIES CO., LTD.

**Contact Information:** No. 73, Lane 887, Zu Chongzhi Road, Zhangjiang Hi-Tech Park,  
Pudong, Shanghai, P.R. China

**Identification/  
Model No(s):** FC0500-40S-V2, FC0500M-40S-V2

**Condition at delivery:** Test item complete and undamaged.

**Sample Receiving date:** 2023-06-13, 2023-06-20, 2023-09-08

**Testing Period:** 2023-06-13 to 2023-06-27, 2023-09-08 to 2023-09-13

**Place of testing:** Chemical laboratory Shanghai

**Test Specification:**

**Test result:**

Customer's requirement:

- |  |                                |
|--|--------------------------------|
| 1. Screening Test by XRF Spectroscopy<br>According to RoHS (recast): Restriction of the Use of Certain Hazardous<br>Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and<br>its amendment. | PASS                           |
| 2. Screening of substances of very high concern (SVHC) subject to the candidate<br>list by European Chemical Agency (ECHA) according to Regulation (EC) No<br>1907/2006 of REACH and its amendments              | Please refer to result<br>page |

For and on behalf of  
TÜV Rheinland (Shanghai) Co., Ltd.



2023-09-21

Ryan Chen / Section Manager

*Date*

*Name/Position*

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.  
This test report relates to the above mentioned 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.  
"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for  
test results are applicable throughout this test report.

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**Material List:**

Item: FC0500-40S-V2, FC0500M-40S-V2

Material No.	Material	Color	Location
M001	Plastic + printing	black+white	refer to photo
M002	Plastic	light cyan+red	refer to photo
M003	Paper + adhesive	white	refer to photo
M004	Plastic foam + ink	dark orange-brown+black	refer to photo
M005	Metal	silver	refer to photo
M006	Metal	grey	refer to photo
M007	Foam + adhesive	black	refer to photo
M008	Metal	silver	refer to photo
M009	Metal	white	refer to photo
M010	Metal	white	refer to photo
M011	Metal	dark cyan-blue	refer to photo
M012	Plastic + printing + adhesive	multicolour	refer to photo
M013	Plastic + printing + adhesive	white+black	refer to photo
M014	Glue	black	refer to photo
M015	Rubber	dark blue	refer to photo
M016	Rubber	black	refer to photo
M017	Plastic	black	refer to photo
M018	Plastic	black	refer to photo
M019	Metal	silver	refer to photo
M020	Plastic	black	refer to photo
M021	Solder	silver	refer to photo
M022	PCB board	green	refer to photo
M023	Plastic	black	refer to photo
M024	Metal	silver	refer to photo
M025	Plastic	black	refer to photo
M026	Plastic + printing	grey+black	refer to photo
M027-1	Metal	golden	refer to photo

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M028	Metal	silver	refer to photo
M029	Plastic	transparent	refer to photo
M030	Rubber	black	refer to photo
M031	Plastic	black	refer to photo
M032	Metal	silver	refer to photo
M033	Metal	red	refer to photo
M034-1	Metal	golden	refer to photo
M035	Plastic + printing	black+white	refer to photo
M036	Metal	silver	refer to photo
M037	Metal	copper	refer to photo
M038	Rubber	black	refer to photo
M039	Rubber	black	refer to photo
M040	Metal	silver	refer to photo
M041	Metal	silver	refer to photo
M042	Rubber	black	refer to photo
M043	Plastic	black	refer to photo
M044	Rubber	transparent	refer to photo
M045	Plastic	black	refer to photo
M046	Rubber	white	refer to photo
M047	Rubber	blue	refer to photo
M048	Rubber	black	refer to photo
M049	Metal	silver	refer to photo
M050	Rubber	pink-red	refer to photo
M051	Rubber	red	refer to photo
M052	Rubber	black	refer to photo
M053	Plastic + printing + adhesive	white+black	refer to photo
M054	Plastic	white	refer to photo
M055	Plastic	white	refer to photo
M056	Metal	silver	refer to photo
M057	Metal	copper	refer to photo
M058	Plastic	red	refer to photo
M059	Plastic	black	refer to photo

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M060	Rubber	black	refer to photo
M061	Metal	golden	refer to photo
M062	Plastic	green	refer to photo
M063	Metal	silver	refer to photo
M064	Rubber	black	refer to photo
M065	Rubber	pink-red	refer to photo
M066	Rubber	black	refer to photo
M067	Rubber	yellow	refer to photo
M068	Rubber	white	refer to photo
M069	Plastic + printing	black+white	refer to photo
M070	Plastic	black	refer to photo
M071	Metal	silver	refer to photo
M072	Metal	silver	refer to photo
M073	Metal	silver	refer to photo
M074	Metal	silver	refer to photo
M075	Glue	white	refer to photo
M076	Plastic	black	refer to photo
M077	Metal	golden	refer to photo
M078	PCB board	green-cyan	refer to photo
M079	Electronic components	black	refer to photo
M080	Electronic components	black	refer to photo
M081	Electronic components	golden	refer to photo
M082	Electronic components	black	refer to photo
M083	Electronic components	black	refer to photo
M084	Electronic components	black	refer to photo
M085	Solder	silver	refer to photo
M086	Metal	silver	refer to photo
M087	Rubber	pink-red	refer to photo
M088	Rubber	white	refer to photo
M089	Rubber	black	refer to photo
M090	Plastic	transparent	refer to photo
M091	Plastic + printing + adhesive	white+black	refer to photo

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M092	Metal	black	refer to photo
M093	Battery	silver	refer to photo
M094	PCB board	green	refer to photo
M095	Metal	silver	refer to photo
M096	Plastic	white	refer to photo
M097	Electronic components	golden	refer to photo
M098	Electronic components	black	refer to photo
M099	Electronic components	black	refer to photo
M100	Electronic components	orange-brown	refer to photo
M101	Plastic + printing + adhesive	white+black	refer to photo
M102	PCB board	black	refer to photo
M103	Electronic components	black	refer to photo
M104	Electronic components	yellow-green	refer to photo
M105	Textile	black	refer to photo
M106	Plastic	white	refer to photo
M107	Metal	silver	refer to photo
M108	Textile	white	refer to photo
M109	Plastic + printing + adhesive	white+black	refer to photo
M110	Plastic	black	refer to photo
M111	Rubber	black	refer to photo
M112	Rubber	red	refer to photo
M113	Plastic	black	refer to photo
M114	Rubber	white	refer to photo
M115	Rubber	yellow	refer to photo
M116	Rubber	red-orange	refer to photo
M117	Rubber	red-orange+white	refer to photo
M118	Rubber	green	refer to photo
M119	Rubber	green+white	refer to photo
M120	Rubber	blue	refer to photo
M121	Rubber	blue+white	refer to photo
M122	Rubber	brown	refer to photo

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M123	Rubber	brown+white	refer to photo
M124	Rubber	black	refer to photo
M125	Rubber	black	refer to photo
M126	Plastic	black	refer to photo
M127	Plastic	transparent	refer to photo
M128	Metal	golden	refer to photo
M129	PCB board	green	refer to photo
M130	Electronic components	black	refer to photo
M131	Electronic components	black	refer to photo
M132	Plastic	white	refer to photo
M133	Metal	copper	refer to photo
M134	Electronic components	black	refer to photo
M135	Plastic	black	refer to photo
M136	Metal	silver	refer to photo
M137	Solder	silver	refer to photo
M138	Metal	silver	refer to photo
M139	Electronic components	white	refer to photo
M140	Electronic components	black	refer to photo
M141	Plastic + printing + adhesive	white+black	refer to photo
M142	Plastic	white	refer to photo
M143	Electronic components	black	refer to photo
M144	PCB board	green	refer to photo
M145	Plastic	black	refer to photo
M146	Plastic	white	refer to photo
M147	Metal	silver	refer to photo
M148	Electronic components	black	refer to photo
M149	Electronic components	grey	refer to photo
M150	Electronic components	black	refer to photo
M151	Electronic components	black	refer to photo
M152	Electronic components	black	refer to photo
M153	Electronic components	black	refer to photo
M154	Electronic components	black	refer to photo

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M155	Electronic components	black	refer to photo
M156	Electronic components	dark blue	refer to photo
M157	Plastic	black	refer to photo
M158	Electronic components	black	refer to photo
M159	Plastic	white	refer to photo
M160	Plastic	black	refer to photo
M163	Electronic components	black	refer to photo
M164	Electronic components	orange-yellow	refer to photo
M165	Electronic components	black	refer to photo
M166	Electronic components	black	refer to photo
M168	Electronic components	black	refer to photo
M169	Electronic components	black	refer to photo
M170	Electronic components	white	refer to photo
M172	Electronic components	black	refer to photo
M173	Electronic components	dark grey	refer to photo
M174	Electronic components	black	refer to photo
M175	PCB board	green	refer to photo
M176	Metal	silver	refer to photo
M177	Metal	silver	refer to photo
M178	Metal	silver	refer to photo
M179	Electronic components	black	refer to photo
M180	Electronic components	orange-brown	refer to photo
M181	Electronic components	grey	refer to photo
M182	Electronic components	black	refer to photo
M183	Electronic components	cyan-blue	refer to photo
M184	Electronic components	white	refer to photo
M185	Electronic components	black	refer to photo
M186	Electronic components	black	refer to photo
M187	Metal	copper	refer to photo
M188	Electronic components	orange-yellow	refer to photo
M189	Electronic components	green	refer to photo
M190	Electronic components	black	refer to photo

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M191	Metal	silver	refer to photo
M192	Plastic	black	refer to photo
M193	Electronic components	grey	refer to photo
M194	Electronic components	black	refer to photo
M195	Electronic components	black	refer to photo
M196	Electronic components	white	refer to photo
M197	Plastic	black	refer to photo
M198	Metal	golden	refer to photo
M199	Glue	black	refer to photo
M200	Electronic components	black	refer to photo
M201	Metal	white	refer to photo
M202	Plastic + adhesive	light yellow-green	refer to photo
M203	Plastic	black	refer to photo
M204	Plastic	grey	refer to photo
M205	Metal	silver	refer to photo
M206	Plastic	black	refer to photo
M207	Rubber	black	refer to photo
M208	Rubber	black	refer to photo
M209	Metal	silver	refer to photo
M210	Metal	silver	refer to photo
M211	Metal	silver	refer to photo
M212	Metal	silver	refer to photo
M213	Rubber	black	refer to photo
M214	Metal	grey	refer to photo
M215	Plastic	black	refer to photo
M216	Plastic	black	refer to photo
M217	Plastic	white	refer to photo
M218	Rubber	red	refer to photo
M219	Metal	silver	refer to photo
M220	Metal	silver	refer to photo
M221	Plastic	black	refer to photo
M222	Metal	silver	refer to photo

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M223	Electronic components	white	refer to photo
M224	Plastic	white	refer to photo
M225	Plastic	black	refer to photo
M226	Plastic + printing + adhesive	silver+black	refer to photo
M227	Plastic	red	refer to photo
M228	Metal	copper	refer to photo
M229	Metal	silver	refer to photo
M230	Metal	silver	refer to photo
M231	Metal	silver	refer to photo
M232	Plastic	white	refer to photo
M233	Plastic	grey	refer to photo
M234	Plastic	yellow	refer to photo
M235	Plastic	white	refer to photo
M236	Metal	silver	refer to photo
M237	Metal	silver	refer to photo
M238	Metal	silver	refer to photo
M239	Metal	silver	refer to photo
M240	Metal	copper	refer to photo
M241	Metal	silver	refer to photo
M242	Metal	copper	refer to photo
M243	Metal	silver	refer to photo
M244	Metal	golden	refer to photo
M245	Plastic	white	refer to photo
M246	Metal	silver	refer to photo
M247	Metal	silver	refer to photo
M248	Metal	silver	refer to photo
M249	Metal	copper	refer to photo
M250	Metal	copper	refer to photo
M251	Metal	silver	refer to photo
M252	Metal	silver	refer to photo
M253	Plastic	white	refer to photo
M254	Metal	silver	refer to photo

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M255	Metal	black	refer to photo
M256	Metal	golden	refer to photo
M257	Metal	silver	refer to photo
M258	Metal	silver	refer to photo
M259	Metal	silver	refer to photo
M260	Metal	silver	refer to photo
M261	Metal	silver	refer to photo
M262	Metal	silver	refer to photo
M263	Metal	silver	refer to photo
M264	Metal	silver	refer to photo
M265	Metal	silver	refer to photo

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**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	BL	BL	BL	BL	BL
M002	BL	BL	BL	BL	BL
M003	BL	BL	BL	BL	BL
M004	BL	BL	BL	BL	BL
M005	BL	d*1	BL	BL	n.a.
M006	BL	d*1	BL	BL	n.a.
M007	BL	BL	BL	BL	BL
M008	BL	BL	BL	BL	n.a.
M009	BL	d*1	BL	BL	n.a.
M010	BL	d*1	BL	BL	n.a.
M011	BL	BL	BL	BL	n.a.
M012	BL	BL	BL	BL	BL
M013	BL	BL	BL	BL	BL
M014	BL	BL	BL	BL	BL
M015	BL	BL	BL	BL	BL
M016	BL	BL	BL	BL	BL
M017	BL	BL	BL	BL	d*1
M018	BL	BL	BL	BL	d*1
M019	BL	d*1	BL	BL	n.a.
M020	BL	BL	BL	BL	d*1
M021	BL	BL	BL	BL	n.a.
M022	BL	BL	BL	BL	d*1
M023	BL	BL	BL	BL	d*1
M024	BL	BL	BL	BL	n.a.
M025	BL	BL	BL	BL	d*1
M026	BL	BL	BL	BL	BL
M027-1	BL	BL	BL	BL	n.a.
M028	BL	BL	BL	BL	n.a.
M029	BL	BL	BL	BL	BL
M030	BL	BL	BL	BL	BL
M031	BL	BL	BL	BL	d*1
M032	BL	d*1	BL	BL	n.a.
M033	BL	BL	BL	BL	BL
M034-1	d*1	BL	d*1	BL	n.a.
M035	BL	BL	BL	BL	d*1
M036	BL	d*1	BL	BL	n.a.
M037	BL	BL	BL	BL	n.a.

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M038	BL	BL	BL	BL	BL
M039	BL	BL	BL	BL	BL
M040	BL	BL	BL	BL	n.a.
M041	BL	BL	d*1	BL	n.a.
M042	BL	BL	BL	BL	BL
M043	BL	BL	BL	BL	BL
M044	BL	BL	BL	BL	BL
M045	BL	BL	BL	BL	BL
M046	BL	BL	BL	BL	BL
M047	BL	BL	BL	BL	BL
M048	BL	BL	BL	BL	BL
M049	BL	BL	BL	BL	n.a.
M050	BL	BL	BL	BL	BL
M051	BL	BL	BL	BL	BL
M052	BL	BL	BL	BL	BL
M053	BL	BL	BL	BL	BL
M054	BL	BL	BL	BL	BL
M055	BL	BL	BL	BL	BL
M056	BL	BL	BL	BL	n.a.
M057	BL	BL	BL	BL	n.a.
M058	BL	BL	BL	BL	BL
M059	BL	BL	BL	BL	BL
M060	BL	BL	BL	BL	BL
M061	BL	BL	d*1	BL	n.a.
M062	BL	BL	BL	BL	BL
M063	BL	BL	BL	BL	n.a.
M064	BL	BL	BL	BL	BL
M065	BL	BL	BL	BL	BL
M066	BL	BL	BL	BL	BL
M067	BL	BL	BL	BL	BL
M068	BL	BL	BL	BL	BL
M069	BL	BL	BL	BL	BL
M070	BL	BL	BL	BL	d*1
M071	BL	d*1	BL	BL	n.a.
M072	BL	d*1	BL	BL	n.a.
M073	BL	d*1	BL	BL	n.a.
M074	BL	BL	BL	BL	n.a.
M075	BL	BL	BL	BL	BL
M076	BL	BL	BL	BL	d*1
M077	BL	BL	d*1	BL	n.a.
M078	BL	BL	BL	BL	d*1
M079	BL	BL	BL	BL	BL
M080	BL	BL	BL	BL	n.a.

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M081	BL	BL	BL	BL	BL
M082	BL	BL	BL	BL	BL
M083	BL	BL	BL	BL	BL
M084	BL	BL	BL	BL	BL
M085	BL	BL	BL	BL	n.a.
M086	BL	BL	BL	BL	n.a.
M087	BL	BL	BL	BL	BL
M088	BL	BL	BL	BL	BL
M089	BL	BL	BL	BL	BL
M090	BL	BL	BL	BL	BL
M091	BL	BL	BL	BL	BL
M092	BL	BL	BL	BL	d*1
M094	BL	BL	BL	BL	d*1
M095	BL	BL	BL	BL	n.a.
M096	BL	BL	BL	BL	BL
M097	BL	BL	BL	BL	BL
M098	BL	BL	BL	BL	BL
M099	BL	BL	BL	BL	BL
M100	BL	BL	BL	BL	BL
M101	BL	BL	BL	BL	BL
M102	BL	BL	BL	BL	BL
M103	BL	BL	BL	BL	BL
M104	BL	BL	BL	BL	BL
M105	BL	BL	BL	BL	BL
M106	BL	BL	BL	BL	BL
M107	BL	BL	BL	BL	n.a.
M108	BL	BL	BL	BL	BL
M109	BL	BL	BL	BL	BL
M110	BL	BL	BL	BL	BL
M111	BL	BL	BL	BL	BL
M112	BL	BL	BL	BL	BL
M113	BL	BL	BL	BL	BL
M114	BL	BL	BL	BL	BL
M115	BL	BL	BL	BL	BL
M116	BL	BL	BL	BL	BL
M117	BL	BL	BL	BL	BL
M118	BL	BL	BL	BL	BL
M119	BL	BL	BL	BL	BL
M120	BL	BL	BL	BL	BL
M121	BL	BL	BL	BL	BL
M122	BL	BL	BL	BL	BL
M123	BL	BL	BL	BL	BL
M124	BL	BL	BL	BL	BL

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M125	BL	BL	BL	BL	BL
M126	BL	BL	BL	BL	BL
M127	BL	BL	BL	BL	BL
M128	BL	BL	BL	BL	n.a.
M129	BL	BL	BL	BL	d*1
M130	BL	BL	BL	BL	BL
M131	BL	BL	BL	BL	BL
M132	BL	BL	BL	BL	BL
M133	BL	BL	BL	BL	n.a.
M134	BL	d*1	d*1	BL	n.a.
M135	BL	BL	BL	BL	BL
M136	BL	BL	BL	BL	n.a.
M137	BL	BL	BL	BL	n.a.
M138	BL	BL	BL	BL	n.a.
M139	BL	BL	BL	BL	BL
M140	BL	BL	BL	BL	d*1
M141	BL	BL	BL	BL	BL
M142	BL	BL	BL	BL	BL
M143	BL	BL	BL	BL	d*1
M144	BL	BL	BL	BL	d*1
M145	BL	BL	BL	BL	d*1
M146	BL	BL	BL	BL	BL
M147	BL	BL	BL	BL	n.a.
M148	BL	BL	BL	BL	d*1
M149	BL	BL	BL	BL	BL
M150	BL	BL	BL	BL	BL
M151	BL	BL	BL	BL	BL
M152	BL	BL	BL	BL	BL
M153	BL	BL	BL	BL	BL
M154	BL	BL	BL	BL	BL
M155	BL	BL	BL	BL	BL
M156	BL	BL	BL	BL	BL
M157	BL	BL	BL	BL	BL
M158	BL	BL	BL	BL	BL
M159	BL	BL	BL	BL	BL
M160	BL	BL	BL	BL	BL
M163	BL	BL	BL	BL	BL
M164	BL	BL	BL	BL	BL
M165	BL	BL	BL	BL	BL
M166	BL	BL	BL	BL	BL
M168	BL	BL	BL	BL	BL
M169	BL	BL	BL	BL	BL
M170	BL	BL	BL	BL	BL

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M172	BL	BL	BL	BL	BL
M173	BL	BL	BL	BL	BL
M174	BL	BL	BL	BL	d*1
M175	BL	BL	BL	BL	d*1
M176	BL	BL	BL	BL	n.a.
M177	BL	BL	BL	BL	n.a.
M178	BL	BL	BL	BL	n.a.
M179	BL	BL	BL	BL	BL
M180	BL	BL	BL	BL	BL
M181	BL	BL	BL	BL	BL
M182	BL	BL	BL	BL	BL
M183	BL	BL	BL	BL	BL
M184	BL	BL	BL	BL	BL
M185	BL	BL	BL	BL	BL
M186	BL	BL	BL	BL	BL
M187	BL	BL	BL	BL	n.a.
M188	BL	BL	BL	BL	d*1
M189	BL	BL	BL	BL	BL
M190	BL	BL	BL	BL	BL
M191	BL	BL	BL	BL	n.a.
M192	BL	BL	BL	BL	BL
M193	BL	BL	BL	BL	d*1
M194	BL	BL	BL	BL	d*1
M195	BL	BL	d*1	BL	n.a.
M196	BL	BL	BL	BL	BL
M197	BL	BL	BL	BL	BL
M198	BL	BL	d*1	BL	n.a.
M199	BL	BL	BL	BL	BL
M200	BL	BL	BL	BL	BL
M201	BL	BL	BL	BL	n.a.
M202	BL	BL	BL	BL	d*1
M203	BL	BL	BL	BL	BL
M204	BL	BL	BL	BL	BL
M205	BL	BL	BL	BL	n.a.
M206	BL	BL	BL	BL	BL
M207	BL	BL	BL	BL	BL
M208	BL	BL	BL	BL	BL
M209	BL	d*1	BL	BL	n.a.
M210	BL	d*1	BL	BL	n.a.
M211	BL	BL	BL	BL	n.a.
M212	BL	BL	d*1	BL	n.a.
M213	BL	BL	BL	BL	BL
M214	BL	BL	BL	BL	n.a.

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M215	BL	BL	BL	BL	BL
M216	BL	BL	BL	BL	BL
M217	BL	BL	BL	BL	BL
M218	BL	BL	BL	BL	BL
M219	BL	BL	d*1	BL	n.a.
M220	BL	BL	d*1	BL	n.a.
M221	BL	BL	BL	BL	BL
M222	BL	BL	BL	BL	n.a.
M223	BL	BL	BL	BL	BL
M224	BL	BL	BL	BL	BL
M225	BL	BL	BL	BL	BL
M226	BL	BL	BL	BL	BL
M227	BL	BL	BL	BL	BL
M228	BL	BL	BL	BL	n.a.
M229	BL	d*1	BL	BL	n.a.
M230	BL	d*1	BL	BL	n.a.
M231	BL	BL	BL	BL	n.a.
M232	BL	BL	BL	BL	BL
M233	BL	BL	BL	BL	BL
M234	BL	BL	BL	BL	d*1
M235	BL	BL	BL	BL	d*1
M236	BL	d*1	BL	BL	n.a.
M237	BL	d*1	BL	BL	n.a.
M238	BL	d*1	BL	BL	n.a.
M239	BL	BL	BL	BL	n.a.
M240	BL	d*1	BL	BL	n.a.
M241	BL	BL	BL	BL	n.a.
M242	BL	BL	BL	BL	n.a.
M243	BL	d*1	BL	BL	n.a.
M244	BL	BL	BL	BL	n.a.
M245	BL	BL	BL	BL	d*1
M246	BL	d*1	BL	BL	n.a.
M247	BL	BL	BL	BL	n.a.
M248	BL	d*1	BL	BL	n.a.
M249	BL	BL	BL	BL	n.a.
M250	BL	BL	BL	BL	n.a.
M251	BL	BL	BL	BL	n.a.
M252	BL	d*1	BL	BL	n.a.
M253	BL	BL	BL	BL	BL
M254	BL	BL	BL	BL	n.a.
M255	BL	BL	BL	BL	n.a.
M256	BL	BL	BL	BL	n.a.
M257	BL	d*1	BL	BL	n.a.

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M258	BL	d*1	BL	BL	n.a.
M259	BL	d*1	BL	BL	n.a.
M260	BL	d*1	BL	BL	n.a.
M261	BL	d*1	BL	BL	n.a.
M262	BL	d*1	BL	BL	n.a.
M263	BL	d*1	BL	BL	n.a.
M264	BL	d*1	BL	BL	n.a.
M265	BL	d*1	BL	BL	n.a.

**Abbreviation:**

Pb	=	Lead
Cd	=	Cadmium
Hg	=	Mercury
Cr	=	Chromium
Br	=	Bromine
n.a.	=	Not applicable
BL	=	Below limit
OL	=	Over limit
d.	=	Detected

**Remark:**

- (\*1) The screening result was detected in the inconclusive region or over limits, thus the further wet chemistry tests are suggested.
- (\*2) Component(s)/ materials(s) with an area of less than 2 mm x 2 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.
- (\*3) 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
<b>Polymeric</b>	BL≤0.006<X<0.014≤ OL	BL≤0.064<X	BL≤0.067<X<0.133≤ OL	BL≤0.066<X< 0.134≤OL	BL≤0.029<X
<b>Metallic</b>	BL≤0.006<X<0.014≤ OL	BL≤0.064<X	BL≤0.067<X<0.133≤ OL	BL≤0.066<X< 0.134≤OL	n.a.
<b>Composite materials</b>	BL≤0.004<X<0.016≤ OL	BL≤0.044<X	BL≤0.047<X<0.153≤ OL	BL≤0.046<X< 0.154≤OL	BL≤0.024<X

Remark: The symbol "X" marks the region where further investigation is necessary.

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**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 Polymer, Electronic material or others materials – Ref. to IEC 62321-7-2:2017

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

**Test Result:**

	<b>Cd</b>	<b>Cr(VI)</b>	<b>Pb</b>	<b>Hg</b>	<b>PBBs</b>	<b>PBDEs</b>
<b>Maximum Permissible Limit (%)</b>	0.01	0.1	0.1	0.1	0.1	0.1

<b>Material No.</b>	<b>(%)</b>					
	<b>Cd</b>	<b>Cr<sup>VI</sup></b>	<b>Pb</b>	<b>Hg</b>	<b>PBBs</b>	<b>PBDEs</b>
	<b>RL (%)</b>					
	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.01</b>	<b>0.01</b>
M017	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M018	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M020	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M022	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M023	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M025	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M031	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M034-1	n.a.	n.a.	3.84*6(c)	n.a.	n.a.	n.a.
M035	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M041	n.a.	n.a.	2.72	n.a.	n.a.	n.a.
M061	n.a.	n.a.	3.24*6(c)	n.a.	n.a.	n.a.
M070	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M076	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M077	n.a.	n.a.	3.32*6(c)	n.a.	n.a.	n.a.
M078	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M092	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M094	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M129	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M134	n.a.	n.a.	0.125*7(c)-I	n.a.	n.a.	n.a.
M140	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M143	n.a.	n.a.	n.a.	n.a.	< RL	< RL

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M144	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M145	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M148	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M174	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M175	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M188	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M193	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M194	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M195	n.a.	n.a.	0.333*7(c)-I	n.a.	n.a.	n.a.
M198	n.a.	n.a.	2.29*6(c)	n.a.	n.a.	n.a.
M202	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M212	n.a.	n.a.	2.20*6(c)	n.a.	n.a.	n.a.
M219	n.a.	n.a.	3.70*6(c)	n.a.	n.a.	n.a.
M220	n.a.	n.a.	3.70*6(c)	n.a.	n.a.	n.a.
M234	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M235	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M245	n.a.	n.a.	n.a.	n.a.	< RL	< RL

Material No.	Chromium VI content for metal materials ( $\mu\text{g}/\text{cm}^2$ ) (*1) RL: 0.10 $\mu\text{g}/\text{cm}^2$
	M005
M006	Negative
M009	Negative
M010	Negative
M019	Negative
M032	Negative
M036	Negative
M071	Negative
M072	Negative
M073	Negative
M209	Negative
M210	Negative
M229	Negative
M230	Negative
M236	Negative
M237	Negative
M238	Negative
M240	Negative
M243	Negative

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M246	Negative
M248	Negative
M252	Negative
M257	Negative
M258	Negative
M259	Negative
M260	Negative
M261	Negative
M262	Negative
M263	Negative
M264	Negative
M265	Negative

Material No.	Chromium VI content for other materials (%) RL: 0.01%
M134	< RL

**Abbreviation:**

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

**Remark:**

(\*1) The Chromium (VI) content of metal sample in surface layer have been confirmed with reference to IEC 62321-7-1:2015 Annex.

	Chromium (VI) concentration	Qualitative result
Negative	<0.1µg/cm <sup>2</sup>	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/cm <sup>2</sup> and ≤0.13 µg/cm <sup>2</sup>	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/cm <sup>2</sup>	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).

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- (\*2) The Chromium (VI) content of plastic sample or electronic sample have been confirmed with reference to IEC 62321-7-2:2017
- 6(c) Copper alloy containing up to 4 % lead by weight.
- 7(c)-I Denotes exemption applications 7(c)-I 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.

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**BBP, DBP, DEHP, DIBP content**

Test Method: ref. to 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.	RL (%)			
		0.005			
		BBP	DBP	DEHP	DIBP
		0.005			
T001	M004 + M007	< RL	< RL	< RL	< RL
T002	M014 + M075 + M199	< RL	< RL	< RL	< RL
T003	M015 + M016 + M030 + M038 + M039	< RL	< RL	< RL	< RL
T004	M042 + M044 + M046 + M047 + M048	< RL	< RL	< RL	< RL
T005	M050 + M051 + M052 + M060 + M064	< RL	< RL	< RL	< RL
T006	M065 + M066 + M067 + M068 + M087	< RL	< RL	< RL	< RL
T007	M088 + M089 + M111 + M112 + M114	< RL	< RL	< RL	< RL
T008	M115 + M116 + M117 + M118 + M119	< RL	< RL	< RL	< RL
T009	M120 + M121 + M122 + M123 + M124	< RL	< RL	< RL	< RL
T010	M125 + M207 + M208 + M213 + M218	< RL	< RL	< RL	< RL

**Abbreviation:** BBP= Benzylbutyl phthalate  
 DBP= Dibutyl phthalate  
 DEHP= Bis(2-ethylhexyl) phthalate  
 DIBP= Diisobutyl phthalate  
 < = less than  
 RL = Reporting Limit  
 %= percentage

**Remark:**

- \* The maximum permissible limit is required from the amendment (EU) 2015/863 of RoHS Directive 2011/65/EU.

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**2. Screening of Substances of Very High Concern (SVHC) subject to the Candidate List by European Chemical Agency (ECHA) according to Regulation (EC) No 1907/2006 of REACH and its amendments.**

Obligation of Importer is necessary if the detected SVHC concentration in article level is >0.1%:  
To communicate information down the supply chain according to article. 33 of Regulation(EC) No 1907/2006. OR

1. Notification to ECHA, if the quantities of SVHC in the produced/imported articles are above 1 ton in total per year per company.
2. Provide sufficient information to ensure safe use of the article and, as a minimum, include the name of the substance, to their customers and on request to consumers within 45 days of the receipt of this request.

Test Method: 1) SVOC: organic solvent extraction, determination by GC-MS/ECD  
2) VOC: organic solvent extraction, determination by GC-MS  
3) VVOC: headspace-GC/MS analysis  
4) non-VOC: organic solvent extraction, determination by LC-MS/MS.  
5) inorganics: acid digestion, determination by ICP-OES

**Test Result:**

Test No.	Material No.	Result (%)
T001	M001 + M002 + M012 + M013 + M017 + M018 + M020 + M023 + M025 + M026	<RL
T002	M003	<RL
T003	M004 + M007	<RL
T004	M005 + M006 + M008 + M009 + M010 + M011 + M019 + M021 + M024 + M028	<RL
T005	M014 + M075 + M199	<RL
T006	M015 + M016 + M030 + M038 + M039	<RL
T007	M022 + M078 + M094 + M102 + M129 + M144 + M175	<RL
T008	M027-1	<RL
T009	M029 + M031 + M035 + M043 + M045 + M053 + M054 + M055 + M058 + M059	<RL
T010	M032 + M033 + M036 + M037 + M040 + M049 + M056 + M057 + M063 + M071	<RL
T011	M034-1	Lead: 3.84%
T012	M041	Lead: 2.72%
T013	M042 + M044 + M046 + M047 + M048	<RL
T014	M050 + M051 + M052 + M060 + M064	<RL
T015	M061	Lead: 3.24%
T016	M062 + M069 + M070 + M076 + M090 + M091 + M096 + M101 + M106 + M109	<RL
T017	M065 + M066 + M067 + M068 + M087	<RL
T018	M072 + M073 + M074 + M085 + M086 + M092 + M095 + M107 + M128 + M133	<RL
T019	M077	Lead: 3.32%
T020	M088 + M089 + M111 + M112 + M114	<RL
T021	M093	<RL

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T022	M105 + M108	<RL
T023	M110 + M113 + M126 + M127 + M132 + M135 + M141 + M142 + M145 + M146	<RL
T024	M115 + M116 + M117 + M118 + M119	<RL
T025	M120 + M121 + M122 + M123 + M124	<RL
T026	M125 + M207 + M208 + M213 + M218	<RL
T027	M134	Lead: 0.125%
T028	M136 + M137 + M138 + M147 + M176 + M177 + M178 + M187 + M191 + M201	<RL
T029	M157 + M159 + M160 + M192 + M197 + M202 + M203 + M204 + M206 + M215	<RL
T030	M195	Lead: 0.333%
T031	M198	Lead: 2.29%
T032	M205 + M209 + M210 + M211 + M214 + M222 + M228 + M229 + M230 + M231	<RL
T033	M212	Lead: 2.20%
T034	M216 + M217 + M221 + M224 + M225 + M226 + M227 + M232 + M233 + M234	<RL
T035	M219	Lead: 3.70%
T036	M220	Lead: 3.70%
T037	M235 + M245 + M253	<RL
T038	M236 + M237 + M238 + M239 + M240 + M241 + M242 + M243 + M244 + M246	<RL
T039	M247 + M248 + M249 + M250 + M251 + M252 + M254 + M255 + M256 + M257	<RL
T040	M258 + M259 + M260 + M261 + M262 + M263 + M264 + M265	<RL

Abbreviation: < = Less than  
 RL =Reporting Limit  
 % =Percentage

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## Remark:

(\*1) The reporting limit for each individual SVHC in Candidate List by ECHA:

	Substance	CAS No.	Reporting Limit
1	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	0.01%
2	Benzyl butyl phthalate (BBP)	85-68-7	0.01%
3	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	0.01%
4	Dibutyl phthalate (DBP)	84-74-2	0.01%
5	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-hexabromocyclododecane Beta-hexabromocyclododecane Gamma-hexabromocyclododecane	25637-99-4 / 3194-55-6 / 134237-50-6 / 134237-51-7 / 134237-52-8	0.01%
6	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	0.01%
7	2,4-Dinitrotoluene (2,4-DNT)	121-14-2	0.01%
8	Diisobutyl phthalate (DIBP)	84-69-5	0.01%
9	Tris(2-chloroethyl)phosphate	115-96-8	0.01%
10	Diarsenic pentaoxide (*2)	1303-28-2	0.01%
11	Diarsenic trioxide (*2)	1327-53-3	0.01%
12	Lead chromate (*2)(*3)	7758-97-6	0.01%
13	Lead chromate molybdate sulphate red (C.I. Pigment Red 104) (*2)(*3)	12656-85-8	0.01%
14	Lead sulfochromate yellow (C.I. Pigment Yellow 34) (*2)	1344-37-2	0.01%
15	Trichloroethylene	79-01-6	0.01%
16	Chromium trioxide (*2)	1333-82-0	0.01%
17	Acids generated from chromium trioxide and their oligomers: Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid. (*2)	7738-94-5 / 13530-68-2	0.01%
18	Sodium dichromate (*2)(*3)	7789-12-0 / 10588-01-9	0.01%
19	Potassium dichromate *2)(*3)	7778-50-9	0.01%
20	Ammonium dichromate (*2)(*3)	7789-09-5	0.01%
21	Potassium chromate (*2)(*3)	7789-00-6	0.01%
22	Sodium chromate (*2)(*3)	7775-11-3	0.01%
23	Formaldehyde, oligomeric reaction products with aniline (technical MDA) (*10)	25214-70-4	0.01%
24	1,2-Dichloroethane	107-06-2	0.01%
25	Bis(2-methoxyethyl) ether	111-96-6	0.01%
26	Arsenic acid (*2)	7778-39-4	0.01%
27	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	0.01%
28	Dichromium tris(chromate) (*2)(*3)	24613-89-6	0.01%
29	Strontium chromate (*2)(*3)	7789-06-2	0.01%
30	Potassium hydroxyoctaoxodizincatedichromate (*2)(*3)	11103-86-9	0.01%
31	Pentazinc chromate octahydroxide (*2)(*3)	49663-84-5	0.01%
32	1-bromopropane (n-propyl bromide)	106-94-5	0.01%
33	Diisopentylphthalate	605-50-5	0.01%
34	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	0.01%
35	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUF)	68515-42-4	0.01%
36	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	0.01%

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37	Bis(2-methoxyethyl) phthalate	117-82-8	0.01%
38	Dipentyl phthalate (DPP)	131-18-0	0.01%
39	N-pentyl-isopentylphthalate	776297-69-9	0.01%
40	Anthracene oil (*6)	90640-80-5	0.01%(*7)
41	Pitch, coal tar, high temperature (*6)	65996-93-2	0.01%(*7)
42	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated (OPEO) [covering well-defined substances and UVCB substances, polymers and homologues]	-	0.01%
43	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	0.01%
44	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	0.01%
45	Dihexyl phthalate	84-75-3	0.01%
46	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 / 68648-93-1	0.01%
47	Trixylyl phosphate	25155-23-1	0.01%
48	Sodium perborate,perboric acid, sodium salt (*2) (*5)	-	0.01%
49	Sodium peroxometaborate (*2) (*5)	7632-04-4	0.01%
50	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	-	0.01%
51	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	0.01%
52	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	0.01%
53	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	0.01%
54	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	0.01%
55	Anthracene	120-12-7	0.01%
56	Bis(tributyltin) oxide (TBTO) (*4)	56-35-9	0.01%
57	Triethyl arsenate (*2)	15606-95-8	0.01%
58	Lead hydrogen arsenate (*2)	7784-40-9	0.01%
59	Cobalt dichloride (*2)	7646-79-9	0.01%
60	Acrylamide	79-06-1	0.01%
61	Anthracene oil, anthracene paste, distr. lights (*6)	91995-17-4	0.01% (*7)
62	Anthracene oil, anthracene paste, anthracene fraction (*6)	91995-15-2	
63	Anthracene oil, anthracene-low (*6)	90640-82-7	
64	Anthracene oil, anthracene paste (*6)	90640-81-6	
65	Boric acid (*2) (*5)	10043-35-3 / 11113-50-1	0.01%
66	Disodium tetraborate, anhydrous (*2) (*5)	1303-96-4 / 1330-43-4 / 12179-04-3	0.01%
67	Tetraboron disodium heptaoxide, hydrate (*2) (*5)	12267-73-1	0.01%
68	2-Methoxyethanol	109-86-4	0.01%

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69	2-Ethoxyethanol	110-80-5	0.01%
70	Cobalt(II) sulphate (*2)	10124-43-3	0.01%
71	Cobalt(II) dinitrate (*2)	10141-05-6	0.01%
72	Cobalt(II) carbonate (*2)	513-79-1	0.01%
73	Cobalt(II) diacetate (*2)	71-48-7	0.01%
74	Alkanes C10-C13, chloro (Short Chain Chlorinated Paraffins) (SCCP)	85535-84-8	0.01%
75	2-Ethoxyethyl acetate	111-15-9	0.01%
76	Hydrazine	302-01-2 / 7803-57-8	0.01%
77	1-Methyl-2-pyrrolidone (NMP)	872-50-4	0.01%
78	1,2,3-Trichloropropane	96-18-4	0.01%
79	Aluminosilicate Refractory Ceramic Fibres (RCF) (*8)	-	0.01%
80	Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) (*8)	-	0.01%
81	2-Methoxyaniline,o-Anisidine	90-04-0	0.01%
82	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	0.01%
83	Calcium arsenate (*2)	7778-44-1	0.01%
84	Trilead diarsenate (*2)	3687-31-8	0.01%
85	N,N-dimethylacetamide (DMAC)	127-19-5	0.01%
86	Phenolphthalein	77-09-8	0.01%
87	Lead dipicrate (*2)	6477-64-1	0.01%
88	Lead diazide, Lead azide (*2)	13424-46-9	0.01%
89	Lead styphnate (*2)	15245-44-0	0.01%
90	1,2-bis(2-methoxyethoxy)ethane (TEGDME,triglyme)	112-49-2	0.01%
91	1,2-dimethoxyethane,ethylene glycol dimethyl ether (EGDME)	110-71-4	0.01%
92	Diboron trioxide (*2) (*5)	1303-86-2	0.01%
93	Formamide	75-12-7	0.01%
94	Lead(II) bis(methanesulfonate) (*2)	17570-76-2	0.01%
95	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	0.01%
96	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	0.01%
97	4,4'-bis(dimethylamino)benzophenone (Michler's ketone), MK	90-94-8	0.01%
98	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base), RMK	101-61-1	0.01%
99	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*2)	2580-56-5	0.01%
100	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*9)	548-62-9	
101	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*9)	561-41-1	
102	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (*9)	6786-83-0	
103	Bis(pentabromophenyl) ether (decabromodiphenyl ether) (DecaBDE)	1163-19-5	0.01%
104	Pentacosfluorotridecanoic acid	72629-94-8	0.01%

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105	Tricosafuorododecanoic acid	307-55-1	0.01%
106	Henicosafuoroundecanoic acid	2058-94-8	0.01%
107	Heptacosafuorotetradecanoic acid	376-06-7	0.01%
108	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) (ADCA) (*11)	123-77-3	0.05%
109	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	85-42-7 / 13149-00-3 / 14166-21-3	0.01%
110	Hexahydromethylphthalic anhydride (MHHPA) [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	25550-51-0 / 19438-60-9 / 48122-14-1 / 57110-29-9	0.01%
111	N,N-dimethylformamide	68-12-2	0.01%
112	1,2-Diethoxyethane	629-14-1	0.01%
113	Diethyl sulphate	64-67-5	0.01%
114	Methoxyacetic acid (MAA)	625-45-6	0.01%
115	Dimethyl sulphate	77-78-1	0.01%
116	N-methylacetamide	79-16-3	0.01%
117	Furan	110-00-9	0.01%
118	Methyloxirane (Propylene oxide)	75-56-9	0.01%
119	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	0.01%
120	Dibutyltin dichloride (DBTC) (*15)	683-18-1	0.01%
121	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	0.01%
122	4,4'-methylenedi-o-toluidine	838-88-0	0.01%
123	4,4'-oxydianiline and its salts	101-80-4	0.01%
124	4-Aminoazobenzene	60-09-3	0.01%
125	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	0.01%
126	6-methoxy-m-toluidine (p-cresidine)	120-71-8	0.01%
127	Biphenyl-4-ylamine	92-67-1	0.01%
128	o-aminoazotoluene	97-56-3	0.01%
129	o-Toluidine	95-53-4	0.01%
130	Acetic acid, lead salt, basic (*2)	51404-69-4	0.01%
131	Trilead bis(carbonate) dihydroxide (*2)	1319-46-6	0.01%
132	Lead oxide sulfate (*2)	12036-76-9	0.01%
133	[Phthalato(2-)]dioxotrilead (*2)	69011-06-9	0.01%
134	Dioxobis(stearato)trilead (*2)	12578-12-0	0.01%
135	Fatty acids, C16-18, lead salts (*2)	91031-62-8	0.01%
136	Lead bis(tetrafluoroborate) (*2)	13814-96-5	0.01%
137	Lead cyanamidate (*2)	20837-86-9	0.01%
138	Lead dinitrate (*2)	10099-74-8	0.01%
139	Lead monoxide (lead oxide) (*2)	1317-36-8	0.01%
140	Orange lead (lead tetroxide) (*2)	1314-41-6	0.01%
141	Lead titanium trioxide (*2)	12060-00-3	0.01%
142	Lead titanium zirconium oxide (*2)	12626-81-2	0.01%

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143	Pyrochlore, antimony lead yellow (*2)	8012-00-8	0.01%
144	Pentalead tetraoxide sulphate (*2)	12065-90-6	0.01%
145	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD), the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008] (*2)	68784-75-8	0.01%
146	Silicic acid, lead salt (*2)	11120-22-2	0.01%
147	Sulfurous acid, lead salt, dibasic (*2)	62229-08-7	0.01%
148	Tetraethyllead (*2)	78-00-2	0.01%
149	Tetralead trioxide sulphate (*2)	12202-17-4	0.01%
150	Trilead dioxide phosphonate (*2)	12141-20-7	0.01%
151	Ammonium pentadecafluorooctanoate (APFO) (*12)	3825-26-1	0.01%
152	Pentadecafluorooctanoic acid (PFOA)	335-67-1	0.01%
153	Cadmium (*2)	7440-43-9	0.01%
154	Cadmium oxide (*2)	1306-19-0	0.01%
155	4-Nonylphenol, branched and linear, ethoxylated (NPEO) [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-	0.01%
156	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	0.01%
157	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	0.01%
158	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	0.01%
159	Lead di(acetate) (*2)	301-04-2	0.01%
160	Cadmium sulphide (*2)	1306-23-6	0.01%
161	Cadmium chloride (*2)	10108-64-2	0.01%
162	Cadmium fluoride (*2)	7790-79-6	0.01%
163	Cadmium sulphate (*2)	10124-36-4 / 31119-53-6	0.01%
164	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) (*13)	15571-58-1	0.01%
165	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE) (*14)	-	0.01%
166	1,3-propanesultone	1120-71-4	0.01%
167	Nitrobenzene	98-95-3	0.01%
168	Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	0.01%
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	0.01%
170	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	0.01%
171	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2 3830-45-3 3108-42-7	0.01%
172	4-heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	0.01%
173	p-(1,1-dimethylpropyl)phenol	80-46-6	0.01%
174	Perfluorohexane-1-sulfonic acid and its salts (PFHxS)	-	0.01%

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175	Chrysene	218-01-9	0.01%
176	Benzo[a]anthracene	56-55-3	0.01%
177	Cadmium nitrate(*2)	10325-94-7	0.01%
178	Cadmium hydroxide(*2)	21041-95-2	0.01%
179	Cadmium carbonate(*2)	513-78-0	0.01%
180	1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo [12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	0.01%
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear]	-	0.01%
182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride, TMA)	552-30-7	0.01%
183	Dicyclohexyl phthalate (DCHP)	84-61-7	0.01%
184	Terphenyl, hydrogenated	61788-32-7	0.01%
185	Octamethylcyclotetrasiloxane (D4)	556-67-2	0.01%
186	Decamethylcyclopentasiloxane (D5)	541-02-6	0.01%
187	Dodecamethylcyclohexasiloxane (D6)	540-97-6	0.01%
188	Ethylenediamine (EDA)	107-15-3	0.01%
189	Lead	7439-92-1	0.01%
190	Disodium octaborate (*2)(*5)	12008-41-2	0.01%
191	Benzo[ghi]perylene	191-24-2	0.01%
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	0.01%
193	Benzo[k]fluoranthene	207-08-9	0.01%
194	Fluoranthene	206-44-0	0.01%
195	Phenanthrene	85-01-8	0.01%
196	Pyrene	129-00-0	0.01%
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan- 2-one	15087-24-8	0.01%
198	2-methoxyethyl acetate	110-49-6	0.01%
199	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	0.01%
200	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (covering any of their individual isomers and combinations thereof)	-	0.01%
201	4-tert-butylphenol	98-54-4	0.01%
202	Diisohexyl phthalate (DiHexP)	71850-09-4	0.01%
203	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1	0.01%
204	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5	0.01%
205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	0.01%
206	1-vinylimidazole	1072-63-5	0.01%
207	2-methylimidazole	693-98-1	0.01%
208	Butyl 4-hydroxybenzoate	94-26-8	0.01%
209	Dibutylbis(pentane-2,4-dionato-O,O')tin(*15)	22673-19-4	0.01%
210	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8	0.01%
211	Diocetyl tin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety (*13)	-	0.01%
212	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	-	0.01%
213	Orthoboric acid, sodium salt (*2) (*5)	13840-56-7	0.01%

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214	2,2-bis(bromomethyl)propane-1,3-diol (BMP) 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA) 2,3-dibromo-1-propanol (2,3-DBPA)	3296-90-0 / 36483-57-5 / 1522-92-5 / 96-13-9	0.01%
215	Glutaral	111-30-8	0.01%
216	Medium-chain chlorinated paraffins (MCCP) [UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17]	-	0.01%
217	Phenol, alkylation products (mainly in para position) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/or combinations thereof (PDDP)	-	0.01%
218	1,4-dioxane	123-91-1	0.01%
219	4,4'-(1-methylpropylidene)bisphenol	77-40-7	0.01%
220	tris(2-methoxyethoxy)vinylsilane	1067-53-4	0.01%
221	S-(tricyclo(5.2.1.0 <sup>2,6</sup> )deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8	0.01%
222	6,6'-di-tert-butyl-2,2'-methylene-di-p-cresol	119-47-1	0.01%
223	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)  (3E)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one (1R,3E,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one (1S,3Z,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one (±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one (1R,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one (1S,3E,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one (1R,3Z,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one	- 1782069-81-1 95342-41-9 852541-25-4 36861-47-9 741687-98-9 852541-30-1 852541-21-0	0.01%
224	N-(hydroxymethyl)acrylamide	924-42-5	0.01%
225	1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]	37853-59-1	0.01%
226	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	79-94-7	0.01%
227	4,4'-sulphonyldiphenol	80-09-1	0.01%
228	Barium diboron tetraoxide	13701-59-2	0.01%
229	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	-	0.01%
230	Isobutyl 4-hydroxybenzoate	4247-02-3	0.01%
231	Melamine	108-78-1	0.01%
232	Perfluoroheptanoic acid and its salts	-	0.01%
233	reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	-	0.01%
234	bis(4-chlorophenyl) sulphone	80-07-9	0.01%
235	Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	75980-60-8	0.01%

## Remark:

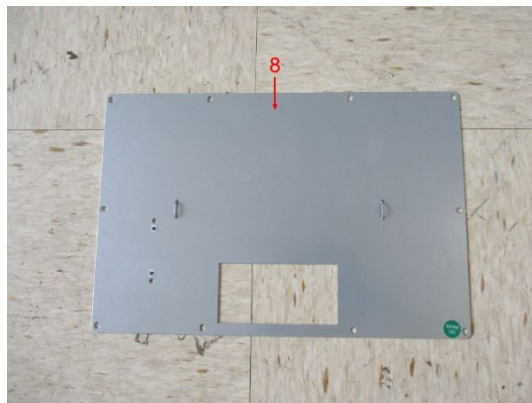
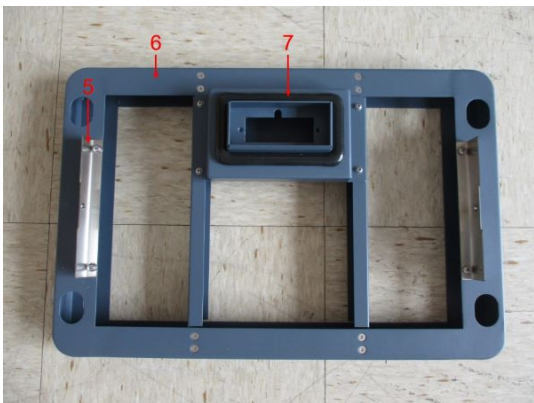
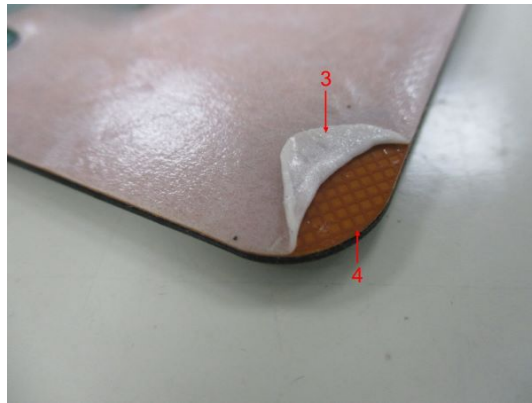
- (\*2) The substances are tested and calculated in terms of its respective elements and to the worst-case scenario. The report states the theoretical value of SVHC substances without consideration of the actual occurrence in the article.
- (\*3) The substances are tested and calculated in terms of Cr (VI).
- (\*4) The substance is tested and calculated in terms of Tributyl tin.
- (\*5) The substances are confirmed and tested in terms of borate and the borate may come from the compounds other than SVHCs.
- (\*6) The substances are UVCB (substance of unknown or variable composition, complex reaction products or biological materials), which are identified by its main constituents.
- (\*7) Individual concentrations to the constituent of UVCB with an amount of < 0.01% were not considered by the calculation of the sum.
- (\*8) The test results are based on microscopic and chemical evaluation.
- (\*9) The substances are quantified in terms of Michler's ketone and Michler's base by LC-MS, as Michler's ketone or Michler's base was found exceeds 0.01%.
- (\*10) The content oligomer is determined by Py-GC/MS.
- (\*11) The content of diazene-1,2-dicarboxamide is analyzed in terms of its breakdown product.

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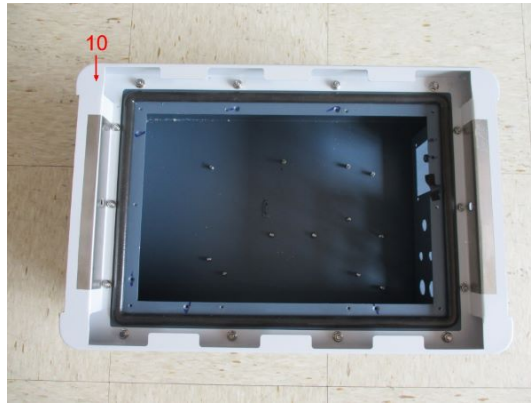
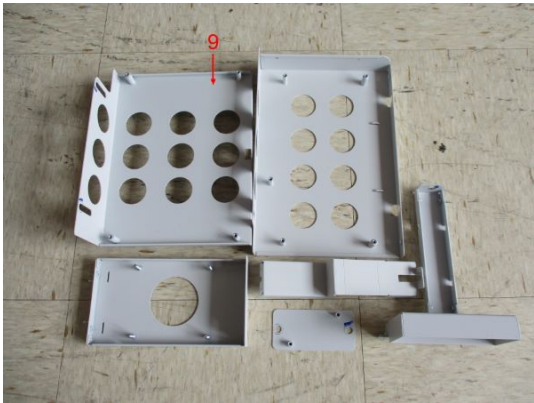
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- (\*12) The substance is tested in terms of pentadecafluorooctanoate.
- (\*13) The substance is tested and calculated in terms of Dioctyl tin.
- (\*14) The substance is tested and calculated in terms of Monoctyl tin and Dioctyl tin.
- (\*15) The substance is tested and calculated in terms of Dibutyl tin
- (\*16) The tested material(s) was screened only for selected SVHCs. Selection of tests refers to the material type and application and the possibility of contamination during production & material specific contamination of the product.
- (\*17) The other SVHCs which are not mentioned in test result were either not subject to testing according to remark \*16 or less than report limit.
- (\*18) The theoretical content of SVHC substances is calculated in terms of its respective elements. This material may contain the mentioned SVHCs, it is suggested to check the respective recipe if the theoretical content of the respective substance >0.1% in each article

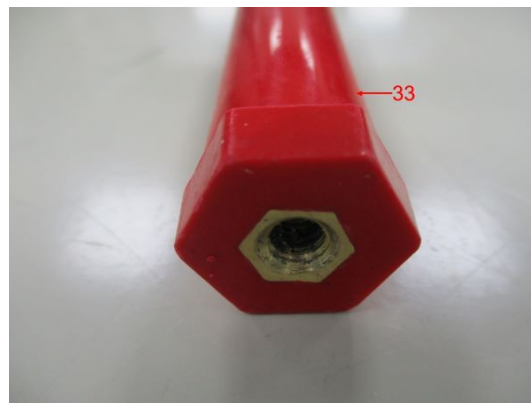
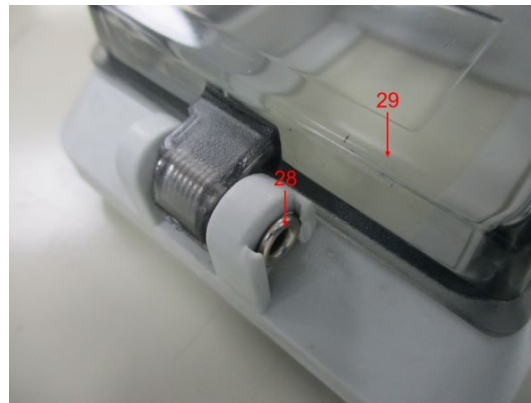
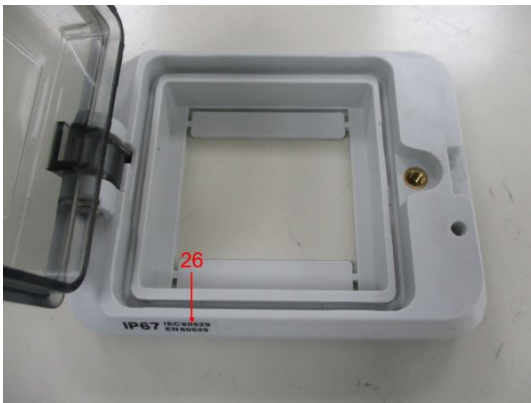
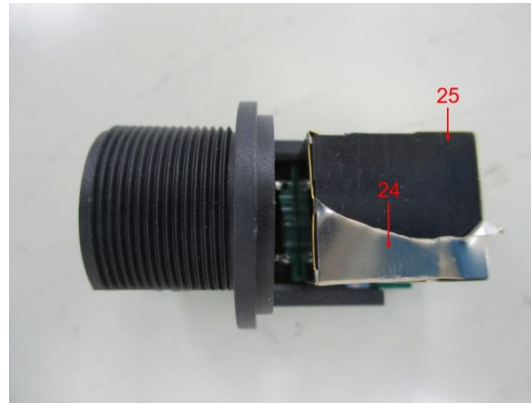
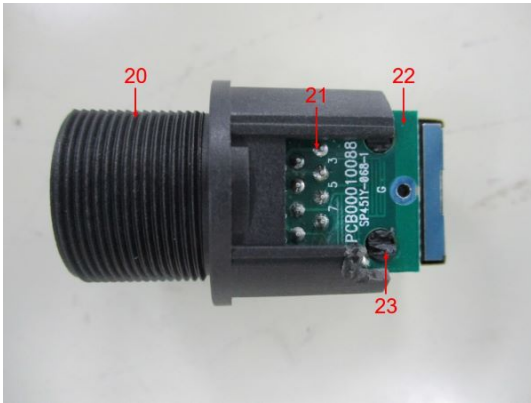
Sample Photos



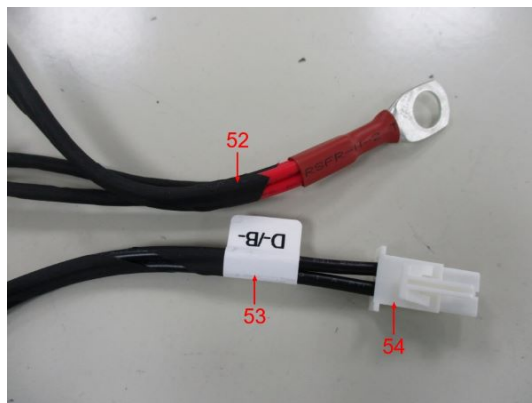
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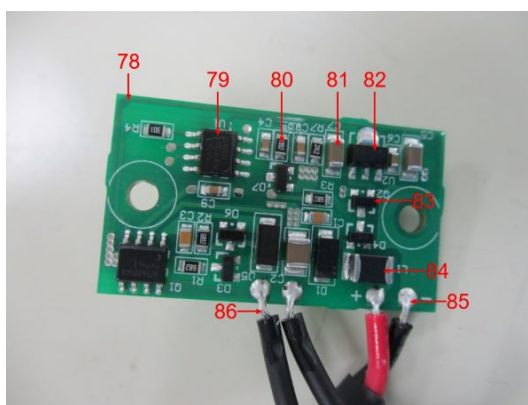
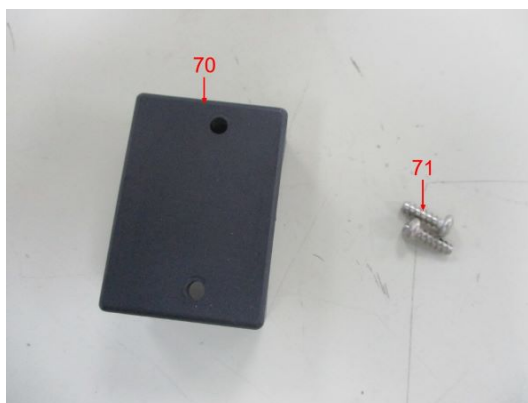
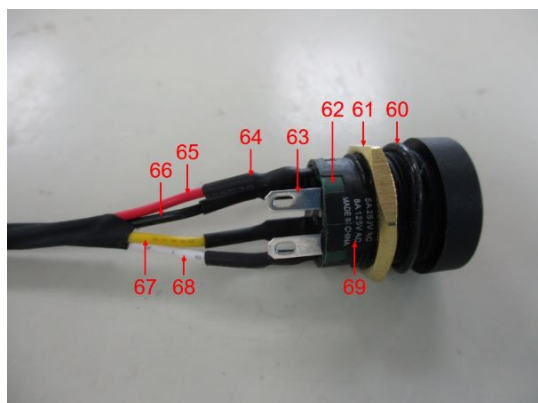
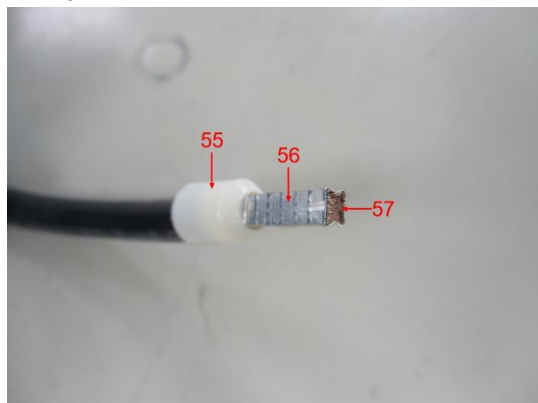
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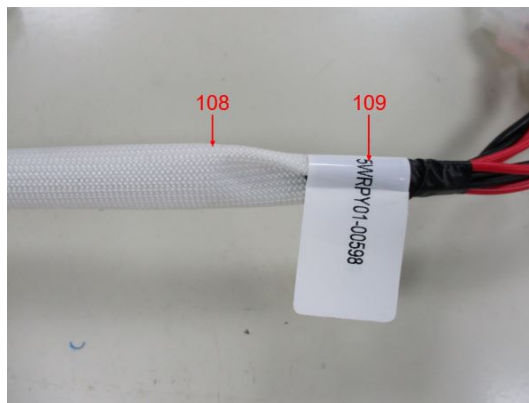
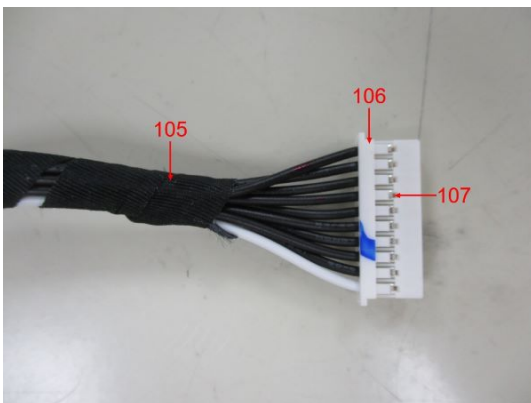
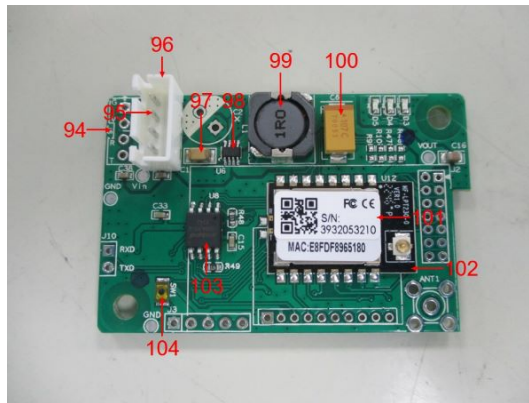
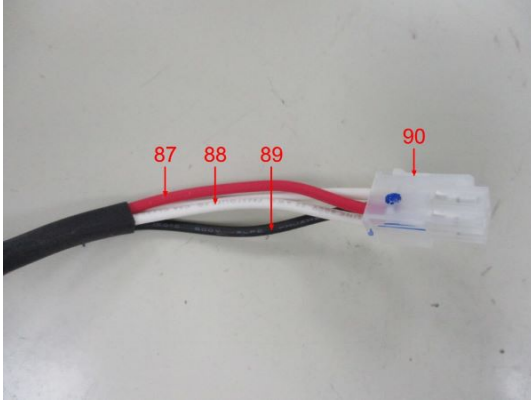
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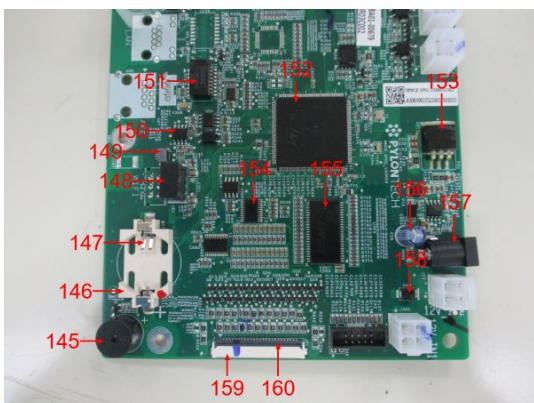
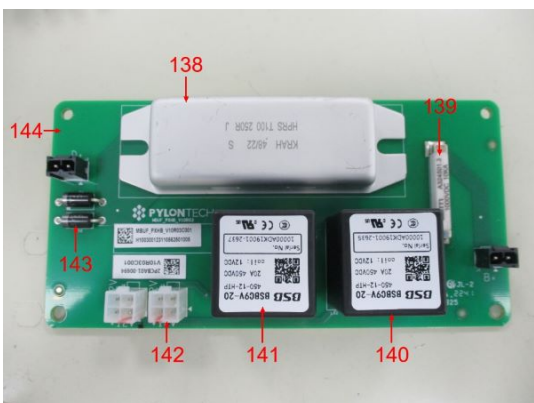
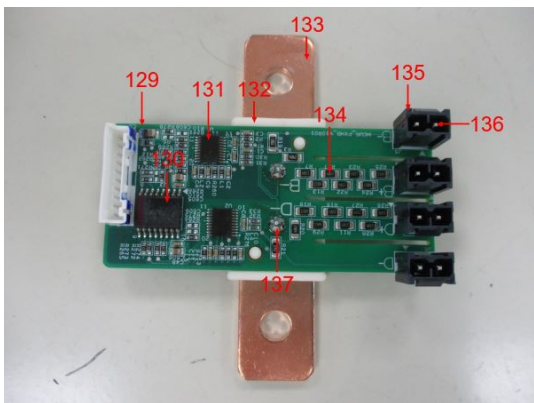
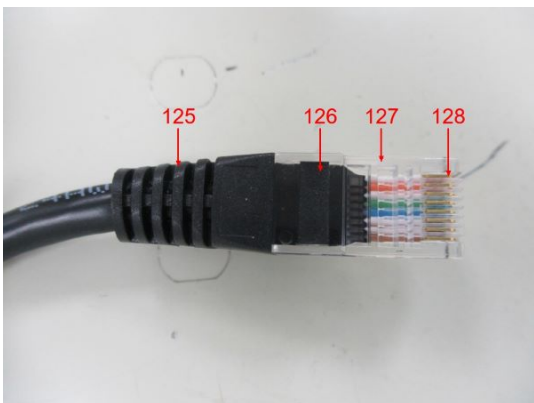
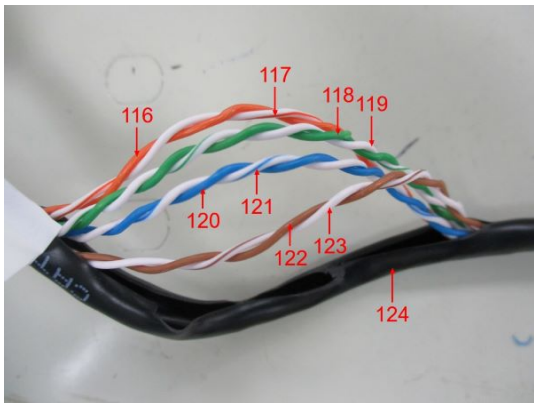
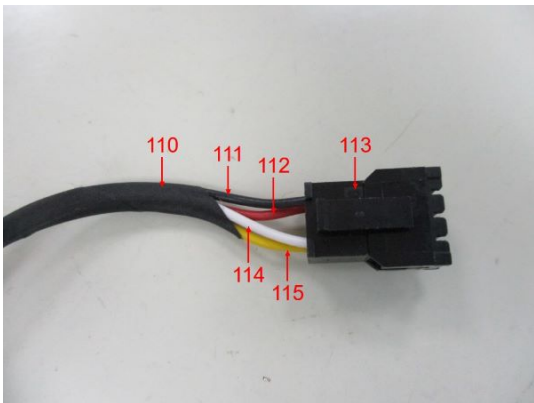


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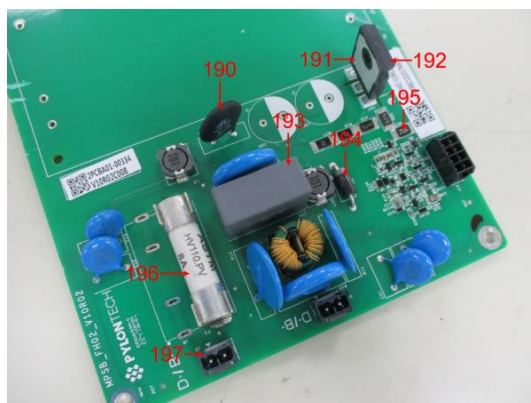
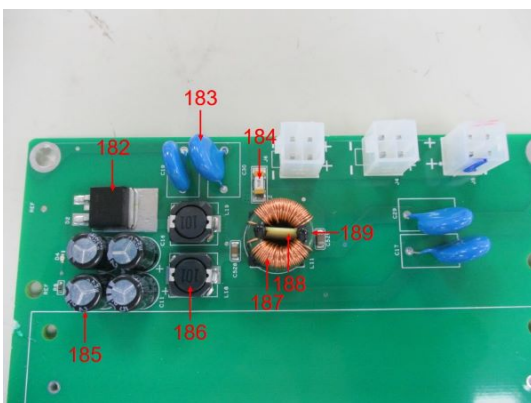
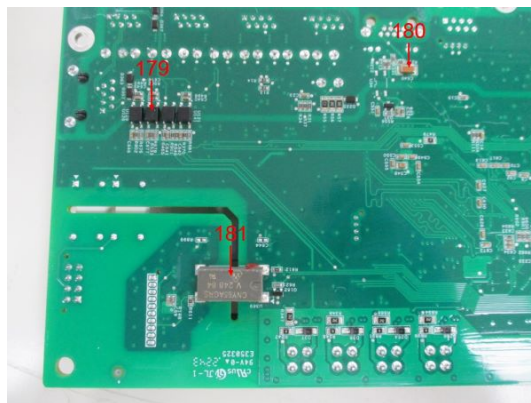
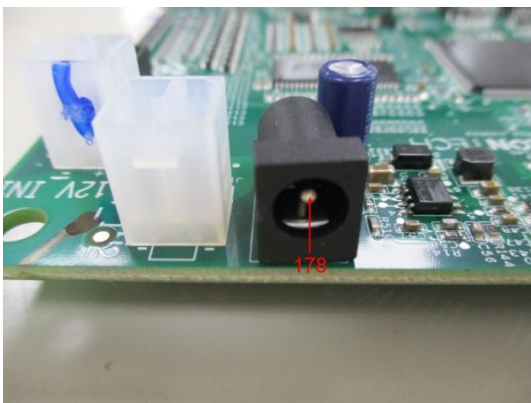
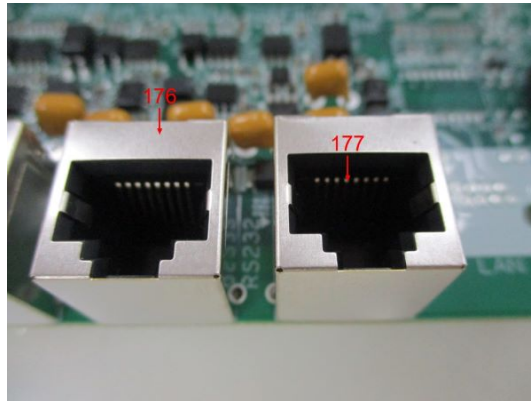
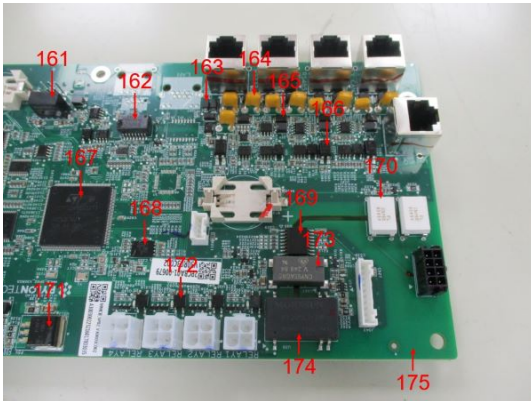


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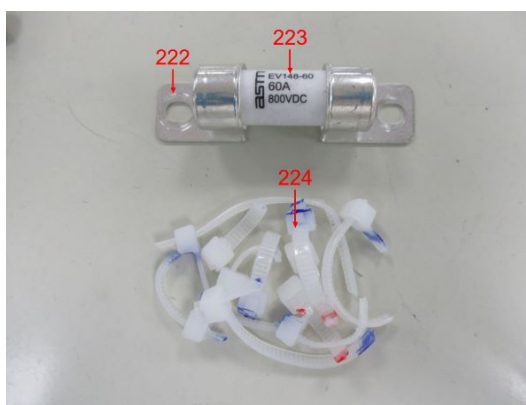
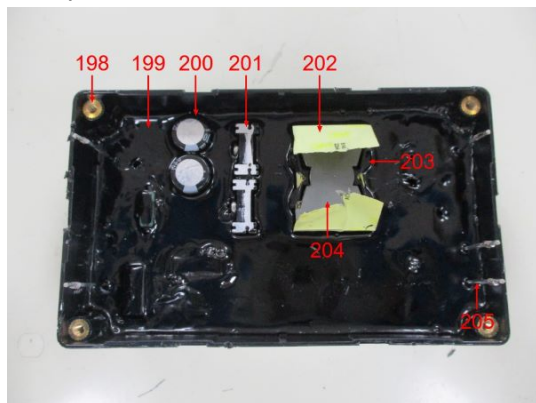
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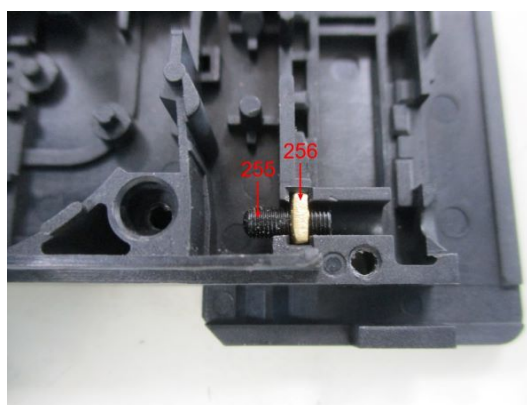
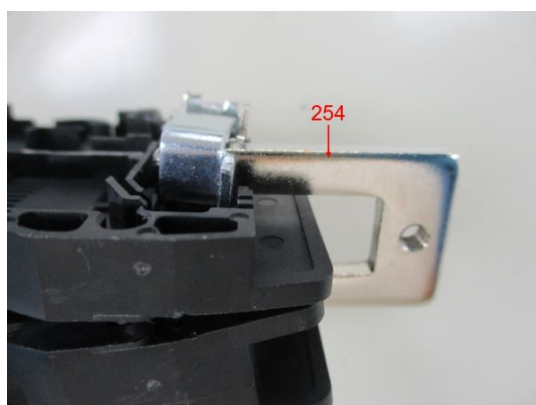
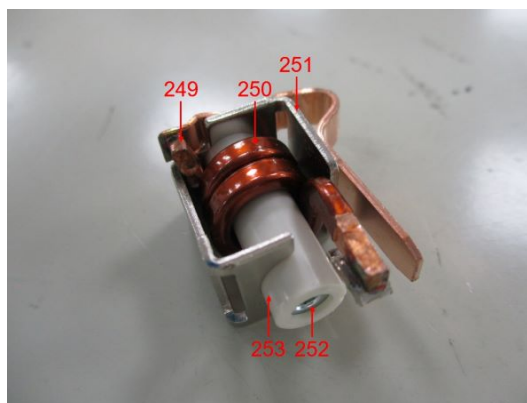
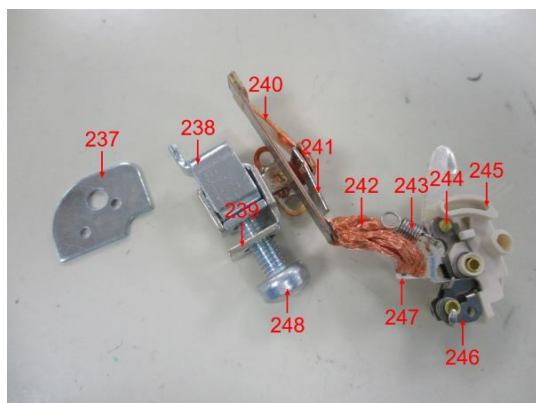
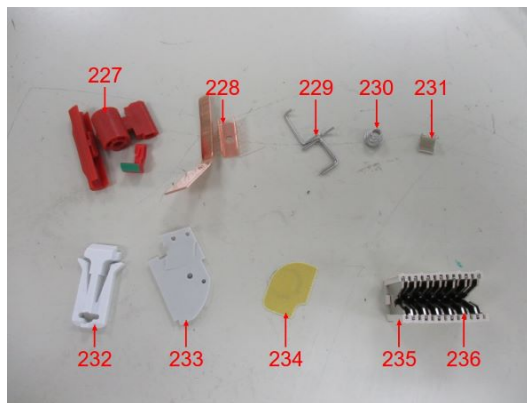


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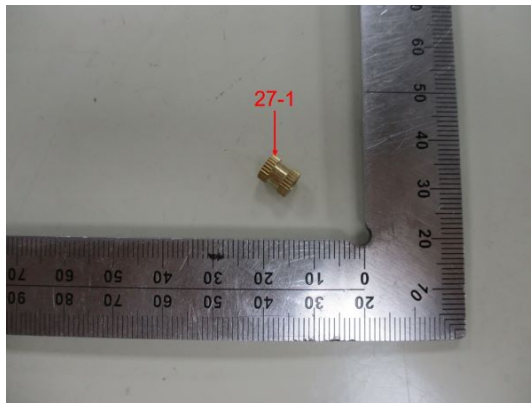


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## General Terms and Conditions of Business of TÜV Rheinland in Greater China

1. **Scope**
    - 1.1 These General Terms and Conditions of Business of TÜV Rheinland in Greater China ("GTBC") 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 here refers to Mainland China, Hong Kong and Taiwan. The client hereof includes:
      - (a) a natural person engaged in legal trading contracts under the applicable laws who concludes the contract not for the purpose of a daily use;
      - (b) 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 other 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 event of an ongoing business relationship with the client, this GTBC shall also apply to future contracts with the client without TÜV Rheinland having to refer to them separately in each individual case.
  2. **Quotations**
    - 2.1 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 request by the client being carried out by TÜV Rheinland. If the client instructs TÜV Rheinland without receiving a quotation from TÜV Rheinland to carry out the work, it is at 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 a fixed term contract, the contract term will be extended by the term provided for in the contract unless terminated in writing by either party with a three-month 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 contract or order by TÜV Rheinland shall be decisive for the service to be provided. Unless otherwise agreed, services beyond the scope of the service description (e.g. checking the correctness and functionality of parts, process, process, and installations, organizations not listed in the service description, as well as the intended use and application of such) are not covered. In particular, no responsibility is assumed for the design, selection of materials, construction and use of an examined part, process, process or plant, unless this is expressly stated in the order.
    - 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 (regarding quality and working order) of either tested or examined parts nor of the installation as a whole and its upstream and/or downstream processes, organizations, 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 regulations and/or safety requirements for the agreed service scope unless otherwise expressly agreed in writing.
    - 4.6 If mandatory legal regulations and standards or official requirements for the agreed service scope affect construction, TÜV Rheinland shall be responsible 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.
    - 4.7 The services to be provided by TÜV Rheinland under the contract are agreed exclusively with the client. A contracting of third parties with the services of TÜV Rheinland, as well as making available of a justifying confidence in the work results (test reports, test results, expert reports, etc.) is not part of the agreed services under the contract and work results are not to be used in full or in extracts - to third parties in accordance with clause 11.4.
    - 4.8 The client understands and agrees that in order to perform the contract with TÜV Rheinland, the client may need to sign or enter into contracts or agreements with a third party(ies) and establish legal relationships with that/those third party(ies) according to such contractual agreements. TÜV Rheinland shall not be responsible for the construction, selection of materials to this contract and the direct services actually to be provided by our company in the service process. If the relevant services are not directly provided by TÜV Rheinland (including but not limited to any testing and/or testing and/or certification bodies, agencies, inspection bodies, etc.), TÜV Rheinland will provide the client as agent for such relevant services. In order to achieve the purpose of the contract, the client hereby agrees that TÜV Rheinland can also subcontract to a third party(ies) and/or subcontract to a third party(ies) and/or subcontract to a third party(ies) and/or risk for any services to be provided by any third parties (including but not limited to the testing and/or certification services to be entrusted and/or applied for by our company or behalf of the client for third testing and/or certification bodies, agencies, inspection bodies or any other third party(ies)). Besides, the client shall be liable in accordance with the relevant laws and regulations actually in force for the construction, selection of materials to this contract and the direct services actually to be provided by our company in the service process and pay additional fees in accordance with the relevant laws and regulations or the testing and certification rules, such as not in the case of the contract price, the client shall be responsible for the obligation of such annual review/surveillance and pay the corresponding fees. If the client fails to perform such obligations of the annual review/surveillance or fees payment, it may lead to adverse consequences such as suspension/revocation of the certificate, the client shall be responsible for such consequences and shall not be liable to TÜV Rheinland.
    - 4.9 For the service contract, if the client requires TÜV Rheinland to deliver relevant test samples, data, etc. to any overseas laboratory or other places or sites to be designated by the client, TÜV Rheinland shall not bear any responsibilities or risks for any problems during such delivery and the transportation, including but not limited to any loss or damages of the samples and/or the materials, etc.). Besides, the relevant freight fees shall be borne by the client.
  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 agreement by the client, to all extensions of agreed periods of performance of TÜV Rheinland.
    - 5.4 TÜV Rheinland is not responsible for a delay in performance, in particular if the client has not fulfilled his duties to cooperate in accordance with the contract. If the client has not provided the necessary documents and information required for the performance of the service as specified in the contract.
    - 5.5 If 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.
    - 5.6 If the client is obliged to comply with legal, officially prescribed and/or by the accreditor prescribed deadlines, it is the client's responsibility to agree on performance dates with TÜV Rheinland, which enables the client to comply with the legal and/or officially prescribed deadlines. TÜV Rheinland assumes no responsibility in this respect unless TÜV Rheinland has been explicitly asked to writing specifically stating that ensuring the deadlines is the contractual obligation of TÜV Rheinland.
  6. **The client's obligation to cooperate**
    - 6.1 The client shall guarantee that all cooperation required on his 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 behaviors 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 without prior notice, and ii) withdraw the issued testing/recertification 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 the client or lack of 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 plus margin. In the case of a written, invoicing shall be made in accordance with the price list of TÜV Rheinland valid at the time of performance.
    - 7.2 If the execution of the work is subject to fluctuations in the price of raw materials, the contract or the agreed fixed price exceeds €2,500.00 or equivalent value in local currency, TÜV Rheinland shall be entitled to demand appropriate advance payments.
  8. **Payment terms**
    - 8.1 All invoice amounts shall be due for payment within 30 days of the invoice date 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 returned claim, damages for non-performance and refuse to provide any further services.
    - 8.5 The provisions set forth in article 8.4 shall also apply in cases involving certificate, claims, cessation of payment, commencement of insolvency proceedings against the client's assets or cases in which the commencement of insolvency proceedings has been declared due to the client.
    - 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, the client 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 - changes in fees). If the rise in fees remains under 5% per contractual year, the client shall not have the right to object. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract by the end of the contractual year. The client shall be liable for the increase in fees. The agreed fixed 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. TÜV Rheinland shall have the right at all times to setoff any amount due or payable by the client, together with the interest thereon, against any claim or other claims, agreement and/or orders/quotations received with 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 of the work, unless the client releases acceptance within this period stating at least one fundamental 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 During the Follow-Audit stage, 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), or if the client cancels or postpones a confirmed audit date within two (2) weeks before the agreed date, TÜV Rheinland is entitled to immediately charge a lump-sum compensation of 10% of the order amount for the client's preparation for expenses. The client is obliged to pay this amount. If the client has incurred no damage whatsoever or a considerably lower damage than the above lump sum, then the client understands and agrees that the client shall be liable for the difference between the agreed 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 incurred no damage whatsoever or only a considerably lower damage than the above mentioned lump sum.
  10. **Confidentiality**
    - 10.1 For the purpose of these terms and conditions, "confidential information" means all know-how, trade secrets, technical data, drawings, designs, specifications, test reports, test results, expert reports, samples, project documents, pricing and financial information, customer and supplier information, and marketing techniques and materials, tangible or intangible, that are supplied, transferred or otherwise disclosed by one party (the "disclosing party") to the other party (the "receiving party") in writing or orally, in printed or electronic form. Confidential information is expressly not the data and know-how collected, compiled or otherwise obtained by TÜV Rheinland (non-personal and not proprietary to the client) 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 for the provision of services.
    - 10.2 The disclosing party shall mark all confidential information disclosed in written form as confidential and shall take appropriate measures to ensure that confidential information is not disclosed or 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 after disclosure. Where the disclosing party fails to do so within the stipulated period, the receiving party shall not take any confidentiality obligations towards such information. The client shall avoid using any third party platform and/or services for the transmission of confidential information. The client shall ensure that all employees of TÜV Rheinland, including, but not limited to, subcontractors, are informed of the confidentiality obligations due to any theft or leakages to be caused by the adoption of any unauthorized confidential information sharing methods mentioned above. TÜV Rheinland shall be waived for any confidentiality obligations.
    - 10.3 All confidential information which the disclosing party transmits or otherwise discloses to the receiving party and is created during performance of work by TÜV Rheinland, or which may be used by the receiving party for the purposes of performing the contract, unless expressly otherwise agreed in writing by the disclosing party, shall be confidential information.
    - 10.4 In order to fulfill the purpose of the contract or TÜV Rheinland is required to pass on confidential information, inspection reports or documentation to the government authorities, judicial authorities or accreditation bodies, TÜV Rheinland is not limited in the relevant direct and/or indirect proposed purchasers, vehicle manufacturers/wholesale equipment manufacturers, test standards or test equipment providers of the client's test products and/or certified products, etc. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party.
    - 10.5 The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party.
    - 10.6 All confidential information shall remain the property of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party. The receiving party shall be responsible for ensuring that the relevant confidential information is not disclosed to third parties without the prior written consent of the disclosing party.
  - 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 client. However, the client is permitted to make copies of TÜV Rheinland is free to grant others the right to use the work results for individual or all types 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 client in a separate agreement. The client is permitted to make copies of the work results, test reports/results, results calculations, presentations etc. prepared within the scope of the contract to the contractually agreed purpose.
  - 11.3 The client is permitted to publish or disseminate the work results for individual or all types of use, subject to full payment of the remuneration agreed in favour of TÜV Rheinland.
  - 11.4 Any publication or duplication of the work results for advertising purposes or any further use of the work results beyond the scope approved in clause 11.2 and any quotation of the introduction of TÜV Rheinland need the prior written approval of TÜV Rheinland in each individual case. Besides, the client ensures that the aforesaid use shall comply with relevant applicable laws, regulations and relevant rules (including but not limited to specific applicable testing and certification rules, etc.).
  - 11.5 TÜV Rheinland may revoke a 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.
  - 11.6 In the event of a breach of the publication or dissemination of the work results does not entitle the client to use the corporate logo, corporate design or trademark/copyright mark of TÜV Rheinland.
12. **Liability of TÜV Rheinland**
  - 12.1 In respect 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 an annually recurring services, the agreed annual fee; (iii) in the case of a contract expressly charged for 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 the fee for the individual order. The maximum amount of liability shall be limited to the amount of damages actually incurred. 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 the amount of damages actually incurred 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 employees. 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 for minor negligent acts or omissions for the purpose of a "fundamental breach": a 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 foreseeably 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 have been made available in violation of the contract. 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 itself against any claims made by third parties arising from, in or 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**
  - 13.1 When passing on the services provided by TÜV Rheinland to third parties in Greater China or other regions, the client must comply with the applicable regulations of national and international export control law.
- 13.2 The performance of a contract with the client is subject to the proviso that there are no obstacles to the performance due to national or international export trade legislation or embargoes 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 incurred thereof by TÜV Rheinland.