

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 1 页 共 22 页
Page 1 of 22

申请单位 深圳市源磊科技有限公司
Applicant SHENZHEN RUNLITE TECHNOLOGY CO.,LTD
地 址 广东深圳市宝安区松岗街道潭头社区第四工业区 A15 栋
Address BUILDING A15, TANTOU THE 4TH INDUSTRIAL ESTATE, SONGGANG TOWN,
BAOAN DISTRICT, SHENZHEN, CHINA

以下测试之样品及样品信息由申请者提供并确认

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

样品名称 闪光灯 LED
Sample Name Flash Light LED
样品型号 PCT2016
Part No. PCT2016
客户 深圳市源磊科技有限公司
Buyer Shenzhen Runlite Technology Co.,Ltd
供应商 深圳市源磊科技有限公司
Supplier Shenzhen Runlite Technology Co.,Ltd
样品接收日期 2018.02.09
Sample Received Date Feb. 9, 2018
样品检测日期 2018.02.09-2018.02.24
Testing Period Feb. 9, 2018 to Feb. 24, 2018

检测要求 根据客户要求, 参照法规(EC) No 1907/2006(REACH), 对所提交样品中 181 种高关注物质(SVHC)进行筛选测试。

Test Requested As specified by client, to screen the 181 substances of very high concern (SVHC) under Regulation(EC) No 1907/2006 of REACH in the submitted sample(s).

检测依据/检测结果 请参见下页。

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

摘要 根据分析结果, 所提交样品中 181 种 SVHC 浓度均小于 0.1%(w/w)。

Summary According to the analytical results, concentrations of 181 SVHC substances are all less than 0.1%(w/w) in the submitted sample(s).

主 检
Tested by

唐振山

审 核
Reviewed by

方理松

批准
Approved by

郑晴涛

日 期
Date

2018.02.24

郑晴涛

技术经理 Technical Manager

No. R169569272

深圳市宝安区新安街道留仙三路 4 号华测检测大楼

报告专用章
Centre Testing International Group Co.,Ltd.

CTI Building, No.4, Liuxian 3rd road, Xin'an Street, Bao'an District, Shenzhen, P. R. China

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 2 页 共 22 页
Page 2 of 22

检测结果 Test Result(s)

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
I	1	蒽 Anthracene	120-12-7	204-371-1	N.D.	0.005%
I	2	4,4'-二氨基二苯基甲烷 4,4'- Diaminodiphenylmethane	101-77-9	202-974-4	N.D.	0.005%
I	3	邻苯二甲酸二丁酯 Dibutyl phthalate(DBP)	84-74-2	201-557-4	N.D.	0.005%
I	4	二氯化钴 Cobalt dichloride*	7646-79-9	231-589-4	N.D.	0.01%
I	5	五氧化二砷 Diarsenic pentaoxide*	1303-28-2	215-116-9	N.D.	0.01%
I	6	三氧化二砷 Diarsenic trioxide*	1327-53-3	215-481-4	N.D.	0.01%
I	7	重铬酸钠 Sodium dichromate*	7789-12-0 / 10588-01-9	234-190-3	N.D.	0.01%
I	8	二甲苯麝香 Musk xylene	81-15-2	201-329-4	N.D.	0.005%
I	9	邻苯二甲酸二(2-乙基己基)酯 Bis(2-ethyl(hexyl)phthalate) (DEHP)	117-81-7	204-211-0	N.D.	0.005%
I	10	六溴环十二烷 Hexabromocyclododecane (HBCDD)	25637-99-4/ 3194-55-6	247-148-4/ 221-695-9	N.D.	0.005%
I	11	短链氯化石蜡 Short Chain Chlorinated Paraffins(SCCPs)	85535-84-8	287-476-5	N.D.	0.01%
I	12	三丁基氧化锡 Bis(tributyltin)oxide (TBTO)*	56-35-9	200-268-0	N.D.	0.005%
I	13	砷酸氢铅 Lead hydrogen arsenate*	7784-40-9	232-064-2	N.D.	0.01%
I	14	邻苯二甲酸丁基苄酯 Benzyl butyl phthalate(BBP)	85-68-7	201-622-7	N.D.	0.005%
I	15	三乙基砷酸酯 Triethyl arsenate*	15606-95-8	427-700-2	N.D.	0.01%
II	16	①蒽油 Anthracene oil	90640-80-5	292-602-7	N.D.	0.05%
II	17	①蒽油,蒽糊,轻油 Anthracene oil, anthracene paste, distn. Lights *****	91995-17-4	295-278-5	N.D.	0.05%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 3 页 共 22 页
Page 3 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
II	18	①蒽油,蒽糊,蒽馏分 Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9	N.D.	0.05%
II	19	①蒽油,含蒽量少 Anthracene oil, anthracene-low	90640-82-7	292-604-8	N.D.	0.05%
II	20	①蒽油,蒽糊 Anthracene oil, anthracene paste	90640-81-6	292-603-2	N.D.	0.05%
II	21	①煤焦油沥青,高温 Coal tar pitch, high temperature	65996-93-2	266-028-2	N.D.	0.05%
II	22	丙烯酰胺 Acrylamide	79-06-1	201-173-7	N.D.	0.01%
II	23	2,4-二硝基甲苯 2,4-Dinitrotoluene	121-14-2	204-450-0	N.D.	0.01%
II	24	邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP)	84-69-5	201-553-2	N.D.	0.005%
II	25	②铬酸铅 Lead chromate	7758-97-6	231-846-0	N.D.	0.05%
II	26	②钼铬红(C.I.颜料红 104) Lead chromate molybdate sulphate red (C.I. Pigment Red 104)***	12656-85-8	235-759-9	N.D.	0.05%
II	27	②铅铬黄(C.I.颜料黄 34) Lead sulfochromate yellow(C.I. Pigment Yellow 34)***	1344-37-2	215-693-7	N.D.	0.05%
II	28	磷酸三(2-氯乙基)酯 Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	204-118-5	N.D.	0.01%
III	29	三氯乙烯 Trichloroethylene	79-01-6	201-167-4	N.D.	0.005%
III	30	硼酸 Boric acid*	10043-35-3 11113-50-1	233-139-2 234-343-4	N.D.	0.01%
III	31	②四硼酸钠, 无水 Disodium tetraborate, anhydrous*****	1330-43-4 12179-04-3 1303-96-4	215-540-4	N.D.	0.01%
III	32	②四硼酸钠, 水合物 Tetraboron disodium heptaoxide, hydrate*****	12267-73-1	235-541-3	N.D.	0.01%
III	33	铬酸钠 Sodium chromate*	7775-11-3	231-889-5	N.D.	0.01%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 4 页 共 22 页
Page 4 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
III	34	铬酸钾 Potassium chromate*	7789-00-6	232-140-5	N.D.	0.01%
III	35	重铬酸铵 Ammonium dichromate*	7789-09-5	232-143-1	N.D.	0.01%
III	36	重铬酸钾 Potassium dichromate*	7778-50-9	231-906-6	N.D.	0.01%
IV	37	硫酸钴 Cobalt(II) sulphate*	10124-43-3	233-334-2	N.D.	0.01%
IV	38	硝酸钴 Cobalt(II) dinitrate*	10141-05-6	233-402-1	N.D.	0.01%
IV	39	碳酸钴 Cobalt(II) carbonate*	513-79-1	208-169-4	N.D.	0.01%
IV	40	醋酸钴 Cobalt(II) diacetate*	71-48-7	200-755-8	N.D.	0.01%
IV	41	乙二醇单甲醚 2-Methoxyethanol	109-86-4	203-713-7	N.D.	0.005%
IV	42	乙二醇单乙醚 2-Ethoxyethanol	110-80-5	203-804-1	N.D.	0.005%
IV	43	三氧化铬 Chromium trioxide*	1333-82-0	215-607-8	N.D.	0.01%
IV	44	①从三氧化铬产生的酸类以及它们的齐聚物：铬酸、重铬酸、铬酸和重铬酸的齐聚物 Acids generated from chromium trioxide and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid*	7738-94-5 13530-68-2	231-801-5 236-881-5	N.D.	0.01%
V	45	乙二醇乙醚乙酸酯 2-ethoxyethyl acetate	111-15-9	203-839-2	N.D.	0.01%
V	46	铬酸锶 Strontium chromate*	7789-06-2	232-142-6	N.D.	0.01%
V	47	①1,2-苯二酸-二(C7-11 支链与直链)烷基(醇)酯 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	271-084-6	N.D.	0.01%
V	48	肼 Hydrazine	7803-57-8 302-01-2	206-114-9	N.D.	0.01%
V	49	N-甲基吡咯烷酮 1-methyl-2-pyrrolidone	872-50-4	212-828-1	N.D.	0.01%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 5 页 共 22 页
Page 5 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
V	50	1, 2, 3-三氯丙烷 1,2,3-trichloropropane	96-18-4	202-486-1	N.D.	0.01%
V	51	^① 邻苯二甲酸二C6-8支链烷基 酯 (C7富集) 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	276-158-1	N.D.	0.01%
VI	52	铬酸铬 Dichromium tris(chromate)*	24613-89-6	246-356-2	N.D.	0.01%
VI	53	氢氧化铬酸锌钾 Potassium hydroxyoctaoxodizincatedichro mate*	11103-86-9	234-329-8	N.D.	0.01%
VI	54	氢氧化铬酸锌 Pentazinc chromate octahydroxide*	49663-84-5	256-418-0	N.D.	0.01%
VI	55	^② 硅酸铝耐火陶瓷纤维 Aluminosilicate Refractory Ceramic Fibres (RCF) **	-	-	N.D.	0.05%
VI	56	^② 氧化锆硅酸铝耐火陶瓷纤维 Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) **	-	-	N.D.	0.05%
VI	57	^① 甲醛苯胺共聚物 Formaldehyde, oligomeric reaction products with aniline (technical MDA) [▲]	25214-70-4	500-036-1	N.D.	0.01%
VI	58	邻苯二甲酸二甲氧基乙酯 Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6	N.D.	0.005%
VI	59	2-甲氧基苯胺(邻甲氧基苯胺) 2-Methoxyaniline (o-Anisidine)	90-04-0	201-963-1	N.D.	0.005%
VI	60	4-(1,1,3,3-四甲基丁基)苯酚 (别名: 对特辛基苯酚) 4-(1,1,3,3-tetramethylbutyl) phenol (4-tert-Octylphenol)	140-66-9	205-426-2	N.D.	0.005%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 6 页 共 22 页
Page 6 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
VI	61	1,2-二氯乙烷 1,2-Dichloroethane	107-06-2	203-458-1	N.D.	0.005%
VI	62	双(2-甲氧基乙基)醚 (别名: 二乙二醇二甲醚) Bis(2-methoxyethyl) ether	111-96-6	203-924-4	N.D.	0.005%
VI	63	砷酸 Arsenic acid*	7778-39-4	231-901-9	N.D.	0.01%
VI	64	砷酸钙 Calcium arsenate*	7778-44-1	231-904-5	N.D.	0.01%
VI	65	砷酸铅 Trilead diarsenate*	3687-31-8	222-979-5	N.D.	0.01%
VI	66	N,N-二甲基乙酰胺 N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4	N.D.	0.005%
VI	67	4,4'-亚甲基双(2-氯苯胺) 2,2'-dichloro-4,4'-methylenediani line (MOCA)	101-14-4	202-918-9	N.D.	0.005%
VI	68	酚酞 Phenolphthalein	77-09-8	201-004-7	N.D.	0.005%
VI	69	叠氮化铅 Lead diazide*	13424-46-9	236-542-1	N.D.	0.01%
VI	70	2,4,6-三硝基间苯二酚铅 (别名: 收敛酸铅) Lead 2,4,6-trinitro-m- phenylene dioxide (Lead styphnate)*	15245-44-0	239-290-0	N.D.	0.01%
VI	71	苦味酸铅 Lead dipicrate*	6477-64-1	229-335-2	N.D.	0.01%
VII	72	1,2-二(2-甲氧基乙氧基)乙烷 1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme)	112-49-2	203-977-3	N.D.	0.01%
VII	73	乙二醇二甲醚 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9	N.D.	0.01%
VII	74	三氧化二硼 Diboron trioxide*	1303-86-2	215-125-8	N.D.	0.01%
VII	75	甲酰胺 Formamide	75-12-7	200-842-0	N.D.	0.01%
VII	76	甲基磺酸铅 Lead(II) bis methanesulfonate*	17570-76-2	401-750-5	N.D.	0.01%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 7 页 共 22 页
Page 7 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
VII	77	异氰尿酸三缩水甘油酯 TGIC(1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	219-514-3	N.D.	0.01%
VII	78	异氰脲酸 β-三缩水甘油酯 β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	59653-74-6	423-400-0	N.D.	0.01%
VII	79	4,4'-二(N,N-二甲氨基)二苯甲酮(米氏酮) 4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	202-027-5	N.D.	0.01%
VII	80	4,4'-(对二甲氨基)二苯基甲烷(米氏碱) N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	202-959-2	N.D.	0.01%
VII	81	C.I.碱性紫 3 [4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride(C.I. Basic Violet 3)***	548-62-9	208-953-6	N.D.	0.01%
VII	82	C.I.碱性蓝 26 [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride(C.I. Basic Blue 26)***	2580-56-5	219-943-6	N.D.	0.01%
VII	83	C.I.溶剂蓝 4 α,α-Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)***	6786-83-0	229-851-8	N.D.	0.01%

检测报告

Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 8 页 共 22 页
Page 8 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
VII	84	α, α -二[(二甲氨基)苯基]-4-甲 氨基苯甲醇 4,4'-bis(dimethylamino)- 4''-(methylamino)trityl alcohol	561-41-1	209-218-2	N.D.	0.01%
VIII	85	十溴二苯醚 Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	214-604-9	N.D.	0.05%
VIII	86	①4-壬基酚, 分支或线性的壬基 酚, 包括含有 9 个碳烷基链的 所有独立的同分异构体和所有 含有线性或分支 9 个碳烷基链 的 UVCB 物质 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]	-	-	N.D.	0.05%
VIII	87	偶氮二甲酰胺 Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8	N.D.	0.05%
VIII	88	对特辛基苯酚乙氧基醚 4-(1,1,3,3-tetramethylbutyl)phen ol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	-	N.D.	0.05%
VIII	89	全氟十一烷酸 Henicosafuoroundecanoic acid	2058-94-8	218-165-4	N.D.	0.05%
VIII	90	全氟十三酸 Pentacosafuorotridecanoic acid	72629-94-8	276-745-2	N.D.	0.05%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 9 页 共 22 页
Page 9 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
VIII	91	六氢邻苯二甲酸酐, 顺式-六氢邻苯二甲酸酐, 反式-六氢邻苯二甲酸酐 Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxy lic anhydride	85-42-7, 13149-00-3, 14166-21-3	201-604-9, 236-086-3, 238-009-9	N.D.	0.05%
VIII	92	甲基六氢苯酐, 4-甲基六氢苯酐, 1-甲基六氢化邻苯二甲酸酐, 3-甲基六氢苯二甲酯酐 Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	247-094-1, 243-072-0, 256-356-4, 260-566-1	N.D.	0.05%
VIII	93	全氟十四酸 Heptacosafuorotetradecanoic acid	376-06-7	206-803-4	N.D.	0.05%
VIII	94	邻苯二甲酸二异戊酯 Diisopentylphthalate(DIPP)	605-50-5	210-088-4	N.D.	0.05%
VIII	95	①支链和直链 1,2-苯二羧二戊 酯 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	284-032-2	N.D.	0.05%
VIII	96	邻苯二甲酸正戊基异戊基酯 N-pentyl-isopentylphthalate	776297-69-9	-	N.D.	0.05%
VIII	97	甲氧基乙酸 Methoxyacetic acid	625-45-6	210-894-6	N.D.	0.05%
VIII	98	全氟十二烷酸 Tricosafuorododecanoic acid	307-55-1	206-203-2	N.D.	0.05%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 10 页 共 22 页
Page 10 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
VIII	99	乙二醇二乙醚 1,2-Diethoxyethane	629-14-1	211-076-1	N.D.	0.05%
VIII	100	3-乙基-2-甲基-2-(3-甲基丁基) 噁唑烷 3-ethyl-2-methyl-2- (3-methylbutyl)-1, 3-oxazolidine	143860-04-2	421-150-7	N.D.	0.05%
VIII	101	2,4-二氨基甲苯 4-methyl-m-phenylenediamine (toluene-2,4-diamine)	95-80-7	202-453-1	N.D.	0.05%
VIII	102	N-甲基乙酰胺 N-methylacetamide	79-16-3	201-182-6	N.D.	0.05%
VIII	103	氧化铅与硫酸铅的复合物 Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	N.D.	0.01%
VIII	104	4-氨基联苯 Biphenyl-4-ylamine	92-67-1	202-177-1	N.D.	0.05%
VIII	105	地乐酚 Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	201-861-7	N.D.	0.05%
VIII	106	双(十八烷基)二氧化三铅 Dioxobis(stearato)trilead*	12578-12-0	235-702-8	N.D.	0.01%
VIII	107	硝酸铅 Lead dinitrate*	10099-74-8	233-245-9	N.D.	0.01%
VIII	108	三碱式硫酸铅 Tetralead trioxide sulphate*	12202-17-4	235-380-9	N.D.	0.01%
VIII	109	氧化铅 Lead monoxide (lead oxide)*	1317-36-8	215-267-0	N.D.	0.01%
VIII	110	钛酸铅 Lead titanium trioxide*	12060-00-3	235-038-9	N.D.	0.01%
VIII	111	4,4'-二氨基-3,3'-二甲基二苯甲 烷 4,4'-methylenedi-o-toluidine	838-88-0	212-658-8	N.D.	0.05%
VIII	112	碱式乙酸铅 Acetic acid, lead salt, basic*	51404-69-4	257-175-3	N.D.	0.01%
VIII	113	硫酸二甲酯 Dimethyl sulphate	77-78-1	201-058-1	N.D.	0.05%
VIII	114	呋喃 Furan	110-00-9	203-727-3	N.D.	0.05%
VIII	115	颜料黄 41 Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1	N.D.	0.01%
VIII	116	四乙基铅 Tetraethyllead*	78-00-2	201-075-4	N.D.	0.01%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 11 页 共 22 页
Page 11 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
VIII	117	二盐基邻苯二甲酸铅 [Phthalato(2-)]dioxotrilead*	69011-06-9	273-688-5	N.D.	0.01%
VIII	118	硫酸二乙酯 Diethyl sulphate	64-67-5	200-589-6	N.D.	0.05%
VIII	119	氨基氰铅盐 Lead cyanamidate*	20837-86-9	244-073-9	N.D.	0.01%
VIII	120	掺杂铅的硅酸钡 Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped*	68784-75-8	272-271-5	N.D.	0.01%
VIII	121	磷酸氧化铅 Trilead dioxide phosphonate*	12141-20-7	235-252-2	N.D.	0.01%
VIII	122	邻甲基苯胺 o-Toluidine	95-53-4	202-429-0	N.D.	0.05%
VIII	123	邻氨基偶氮甲苯 o-aminoazotoluene	97-56-3	202-591-2	N.D.	0.05%
VIII	124	4-对氨基偶氮苯 4-aminoazobenzene	60-09-3	200-453-6	N.D.	0.05%
VIII	125	6-甲氧基-间甲苯胺 6-methoxy- <i>m</i> -toluidine (<i>p</i> -cresidine)	120-71-8	204-419-1	N.D.	0.05%
VIII	126	二丁基二氯化锡 Dibutyltin dichloride (DBTC)*	683-18-1	211-670-0	N.D.	0.05%
VIII	127	钛酸铅锆 Lead titanium zirconium oxide*	12626-81-2	235-727-4	N.D.	0.01%
VIII	128	环氧丙烷 Methyloxirane (Propylene oxide)	75-56-9	200-879-2	N.D.	0.05%
VIII	129	1-溴代正丙烷 1-bromopropane (<i>n</i> -propyl bromide)	106-94-5	203-445-0	N.D.	0.05%
VIII	130	碱式碳酸铅 Trilead bis(carbonate)dihydroxide*	1319-46-6	215-290-6	N.D.	0.01%
VIII	131	C16-18-脂肪酸铅盐 Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7	N.D.	0.01%
VIII	132	四氧化三铅 Orange lead (lead tetroxide)*	1314-41-6	215-235-6	N.D.	0.01%
VIII	133	二碱式亚硫酸铅(II) Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	N.D.	0.01%

检测报告

Test Report

 报告编号 A2180016885101012E
 Report No. A2180016885101012E

 第 12 页 共 22 页
 Page 12 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
VIII	134	4,4'-二氨基二苯醚 4,4'-oxydianiline and its salts	101-80-4	202-977-0	N.D.	0.05%
VIII	135	碱式硫酸铅 Lead oxide sulfate*	12036-76-9	234-853-7	N.D.	0.01%
VIII	136	四氟硼酸铅 Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0	N.D.	0.01%
VIII	137	硅酸铅 Silicic acid, lead salt*	11120-22-2	234-363-3	N.D.	0.01%
VIII	138	N,N-二甲基甲酰胺 N,N-dimethylformamide	68-12-2	200-679-5	0.062	0.05%
IX	139	镉 Cadmium	7440-43-9	231-152-8	N.D.	0.01%
IX	140	氧化镉 Cadmium oxide*	1306-19-0	215-146-2	N.D.	0.01%
IX	141	邻苯二甲酸二戊酯 Dipentyl phthalate (DPP)	131-18-0	205-017-9	N.D.	0.01%
IX	142	①乙氧基化的支链和直链的 4-壬基酚（直链和/或支链的具有 9 个碳原子的烷基链共价键合在 4 位的乙氧基酚，囊括了 UVCB 和定义明确的物质，聚合物及同系物，其中包括任何单独的异构体和/或它们的组合）4-Nonylphenol, branched and linear, ethoxylated [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]	-	-	N.D.	0.05%
IX	143	全氟辛酸铵 Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4	N.D.	0.01%
IX	144	全氟辛酸酸 Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-397-9	N.D.	0.01%
X	145	①磷酸三(二甲苯)酯 Trixylyl phosphate	25155-23-1	246-677-8	N.D.	0.01%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 13 页 共 22 页
Page 13 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
X	146	C.I.直接黑 38 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	217-710-3	N.D.	0.01%
X	147	邻苯二甲酸二己酯 Dihexyl phthalate	84-75-3	201-559-5	N.D.	0.01%
X	148	硫化镉 Cadmium sulphide*	1306-23-6	215-147-8	N.D.	0.01%
X	149	C.I.直接红 28 Disodium 3,3'-[[1,1'-biphenyl]- 4,4'-diylbis(azo)]bis(4- aminonaphthalene- 1-sulphonate) (C.I. Direct Red 28)***	573-58-0	209-358-4	N.D.	0.01%
X	150	醋酸铅 (II) Lead di(acetate)*	301-04-2	206-104-4	N.D.	0.01%
X	151	1,2-亚乙基硫脲 Imidazolidine-2-thione; 2-imidazoline-2-thiol	96-45-7	202-506-9	N.D.	0.01%
XI	152	①邻苯二甲酸二己酯, 直链和支 链 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5	N.D.	0.01%
XI	153	氯化镉 Cadmium chloride *	10108-64-2	233-296-7	N.D.	0.01%
XI	154	②过硼酸钠, 水合物; 过硼酸钠盐 Sodium perborate; perboric acid, sodium salt *****	-	239-172-9, 234-390-0	N.D.	0.01%
XI	155	②过硼酸钠, 无水 Sodium peroxometaborate *****	7632-04-4	231-556-4	N.D.	0.01%
XII	156	2-(2H-苯并三唑-2-基)-4,6-二叔 戊基苯酚 2-(2H-Benzotriazol-2-yl)- 4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8	N.D.	0.01%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 14 页 共 22 页
Page 14 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
XII	157	2-(2'-羟基-3',5'-二叔丁基苯基)- 苯并三唑 2-Benzotriazol-2-yl-4,6- di-tert-butylphenol (UV-320)	3846-71-7	223-346-6	N.D.	0.01%
XII	158	二正辛基-双(巯乙酸2-乙基己 酯)锡 2-ethylhexyl 10-ethyl-4,4-dioctyl-7- oxo-8-oxa-3,5-dithia-4- stannatetradecanoate (DOTE)*	15571-58-1	239-622-4	N.D.	0.05%
XII	159	氟化镉 Cadmium fluoride*	7790-79-6	232-222-0	N.D.	0.01%
XII	160	硫酸镉 Cadmium sulphate*	10124-36-4; 31119-53-6	233-331-6	N.D.	0.01%
XII	161	①二正辛基-双(巯乙酸2-乙基己 酯)锡(DOTE)和三(2-乙基己基 巯基乙酸)辛锡(MOTE)的反应 物料 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)*	-	-	N.D.	0.05%
XIII	162	①1,2-苯二羧酸, 二-C6-10-烷基 酯; (癸基, 己基, 辛基) 酯 与1,2-苯二甲酸的复合物, 其邻 苯二甲酸二己酯含量≥0.3% (EC No. 201-559-5) 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2- benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201- 559-5)	68515-51-5, 68648-93-1	271-094-0, 272-013-1	N.D.	0.05%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 15 页 共 22 页
Page 15 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
XIII	163	①5-仲丁基-2-(2,4-二甲基环己-3-烯-1-基)-5-甲基-1,3-二恶烷 [1], 5-二级丁基-2-(4,6-二甲基环己-3-烯-1-基)-5-甲基-1,3-二恶烷 [2] [任何 [1] 和 [2] 或者其任意组合的单独异构体或其任何组合] (卡拉花醛及其异构体以及它们的混合物) 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]	-	-	N.D.	0.05%
XIV	164	硝基苯 Nitrobenzene	98-95-3	202-716-0	N.D.	0.01%
XIV	165	2,4-二-叔丁基-6-(5-氯-2H-苯并三唑-2-基)苯酚 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8	N.D.	0.01%
XIV	166	2-(2'-羟基-3'-异丁基-5'-叔丁基苯基)苯并三唑 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1	N.D.	0.01%
XIV	167	1,3-丙烷磺内酯 1,3-propanesultone	1120-71-4	214-317-9	N.D.	0.01%
XIV	168	全氟壬酸及其钠和铵盐 Perfluorononan-1-oic-acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	206-801-3	N.D.	0.01%
XV	169	苯并(a)芘 Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5	N.D.	0.01%

检测报告

Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 16 页 共 22 页
Page 16 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
XVI	170	双酚 A (BPA) 4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7	201-245-8	N.D.	0.01%
XVI	171	全氟癸酸(PFDA)及其钠盐和 铵盐 Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3108-42-7 335-76-2 3830-45-3	221-470-5 206-400-3 --	N.D.	0.01%
XVI	172	4-(1,1-二甲基丙基)苯酚 (别名: 对叔戊基苯酚) <i>p</i> -(1,1-dimethylpropyl)phenol	80-46-6	201-280-9	N.D.	0.01%
XVI	173	^① 支链与直链的 4-庚基酚(直链 和/或支链的具有 7 个碳原子的 烷基链共价键在 4 位的苯酚, 囊括了 UVCB 和定义明确的物 质, 其中包括任何单独异构体 和/或它们的组合) 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]	--	--	N.D.	0.05%
XVII	174	全氟己基磺酸及其盐 Perfluorohexane-1-sulphonic acid and its salts	355-46-4	206-587-1	N.D.	0.0005%
XVIII	175	得克隆(包括其所有反式和顺式 异构体及其组合) Dechlorane plus (including any of its individual anti- and syn-isomers or any combination thereof)	13560-89-9; 135821-74-8; 135821-03-3	236-948-9 - -	N.D.	0.01%

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 17 页 共 22 页
Page 17 of 22

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	浓度 Concentration (%)	报告 检出限 Report Limit
XVIII	176	苯并[a]蒽Benzo[a]anthracene	56-55-3	200-280-6	N.D.	0.01%
XVIII	177	硝酸镉Cadmium nitrate*	10325-94-7	233-710-6	N.D.	0.01%
XVIII	178	碳酸镉Cadmium carbonate*	513-78-0	208-168-9	N.D.	0.01%
XVIII	179	氢氧化镉Cadmium hydroxide*	21041-95-2	244-168-5	N.D.	0.01%
XVIII	180	屈Chrysene	218-01-9	205-923-4	N.D.	0.01%
XVIII	181	③1,3,4-噻二唑烷-2,5-二硫酮, 甲醛和4-庚基苯酚的支链和直链 (RP-HP)的反应产物[4-庚基苯酚, 支链和直链含量≥0.1% w/w] 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 (4-HPbl)]	-	-	N.D.	0.05%

检测依据 Test Method:

参考 US EPA 3052:1996, US EPA 3050B:1996, US EPA 3060A:1996, US EPA 3550C:2007, US EPA 3540C:1996, ISO 17353:2004(E), EN 14582:2016 进行样品预处理。

Refer to US EPA3052:1996, US EPA 3050B:1996, US EPA3060A:1996, US EPA 3550C:2007, US EPA 3540C:1996, ISO 17353:2004(E), EN 14582:2016 for sample pretreatment.

采用 ICP-OES, UV-Vis, IC, HPLC, GC-MS, GC-MS(NCI), Headspace-GCMS 及 LC-MS-MS 分析。

Analyzed by ICP-OES, UV-Vis, IC, HPLC, GC-MS, GC-MS(NCI), Headspace-GCMS and LC-MS-MS.

测试样品/部位描述

SMD LED (整体测试)

Tested Sample/Part Description

SMD LED (Tested as a whole)

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 18 页 共 22 页
Page 18 of 22

注释 Note:

1. w/w % = 重量百分比 weight by weight; 0.1% = 1000mg/kg = 1000ppm
2. N.D. = 未检出 Not Detected (小于报告检出限<report limit)
3. *: 该物质的浓度值是由物质中的特征元素测试结果换算而来。Concentration value of the substance by the conversion from the test results of certain elements.
三丁基氧化锡(TBTO)、二丁基二氯化锡(DBTC)、二正辛基-双(巯乙酸 2-乙基己酯)锡(DOTE)、二正辛基-双(巯乙酸 2-乙基己酯)锡(DOTE) 和三(2-乙基己基巯基乙酸)辛锡(MOTE)的反应物料的浓度值是由其特定化合物(三丁基锡(TBT)、二丁基锡(DBT)、二辛基锡(DOT)、单辛基锡(MOT))的结果换算而来。
Concentration value of Bis(tributyltin)oxide(TBTO), Dibutyltin dichloride (DBTC), 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE), 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) by the conversion from the test results of certain compounds(Tributyl Tins(TBT), Dibutyl Tins(DBT), Dioctyl Tins(DOT), Monoctyl Tins(MOT)).
4. **: 在化学物质及其混合物的分类, 标记与包装法规, 即 CLP 法规(法规(EC)No 1272/2008)的附录 VI 中, 索引号 650-017-00-8 适用于所有的耐火陶瓷纤维材料。All refractory ceramic fibres are covered by index number 650-017-00-8 in Annex VI of the Regulation on Classification, Labeling and Packaging of chemical substances and mixtures, the so called CLP Regulation(Regulation (EC) No 1272/2008).
5. ***: C.I.: 颜料索引号 Colour Index
6. ****: 蒸馏所分离出来的轻油部分 Light fractions from distillation
7. *****: 四硼酸钠, 无水和四硼酸钠, 水合物的浓度均由四硼酸钠浓度表示, 没有考虑结晶水。过硼酸钠, 水合物; 过硼酸钠盐和过硼酸钠, 无水的浓度均由过硼酸钠浓度表示, 没有考虑结晶水。
Concentration value of Disodium tetraborate, anhydrous and Tetraboron disodium heptaoxide, hydrate is evaluated by Disodium tetraborate, with no consider of the hydrate. Concentration value of Sodium perborate; perboric acid, sodium salt; Sodium peroxometaborate is evaluated by Sodium perborate, with no consider of the hydrate.
8. ▲: 甲醛苯胺共聚物的浓度值是由其特定化合物(2,4-二氨基二苯甲烷、4,4'-二氨基二苯基甲烷、2,6-二氨基二苯基甲烷)的结果换算而来。Concentration value of Formaldehyde, oligomeric reaction products with aniline (technical MDA) by the conversion from the test results of certain compounds (2,4-Diaminodiphenylmethane, 4,4'- Diaminodiphenylmethane, 2,6-Diaminodiphenylmethane).
9. ①: 由于这些物质是 UVCB 物质(未知成分或可变成成分的, 复杂反应物或生物材料的物质), 由各种不同的成分组成, 所以这些物质的测试结果是由选定的具有代表性的物质的主要组成成分的测试结果换算而来的。In view of the substances are established as UVCB substances(substances of unknown or variable composition, complex reaction products or biological materials) consisting of different and variable constituents, the test results are calculated based on the main constituents of the representative compounds for substances.

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 19 页 共 22 页
Page 19 of 22

10. ^②:由于此物质含有多种物质, 测试结果是基于此物质中最具有代表性的主要组成化合物的含量, 其主要组成化合物的测试结果是基于特征元素的浓度换算而来。In view of the substance contain variable substances, the test results are calculated based on main constituents of the representative compounds for the substances, and the test results of the representative compounds are calculated based on the result of specified heavy metal elements.
11. ^③:该物质是 UVCB 物质(未知成分或可变成分的, 复杂反应物或生物材料的物质), 由各种不同的成分组成, 其测试结果以 4-庚基苯酚, 支链和直链测试结果体现, 当 4-庚基苯酚, 支链和直链含量 $\geq 0.1\%$ w/w 时, 对于该物质是否存在于样品中需核查相应物料的 MSDS 或向供应商进行确认。
The substance is established as UVCB substance (substances of unknown or variable composition, complex reaction products or biological materials) consisting of different and variable constituents, the test result is calculated based on 4-heptylphenol, branched and linear. When the content of 4-heptylphenol, branched and linear is equal to or higher than 0.1% (w/w), the presence of the substance in the sample need to be further confirmed by checking MSDS or requesting from suppliers.

备注 Remark:

1. 按照目前手段, 样品无法进一步拆分, 样品整体测试, 测试结果不代表整体测试样品中任何一种单一材质的含量。
The sample(s) was tested as a whole, because it's impossible to disassemble or separate it by current equipment and technology. The result(s) shown on this report may be different from the content of any homogeneous material.
2. 本报告中的数据结果供科研、教学、企业内部质量控制、企业产品研发等目的用。
The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 20 页 共 22 页
Page 20 of 22

附加信息 Appendix:

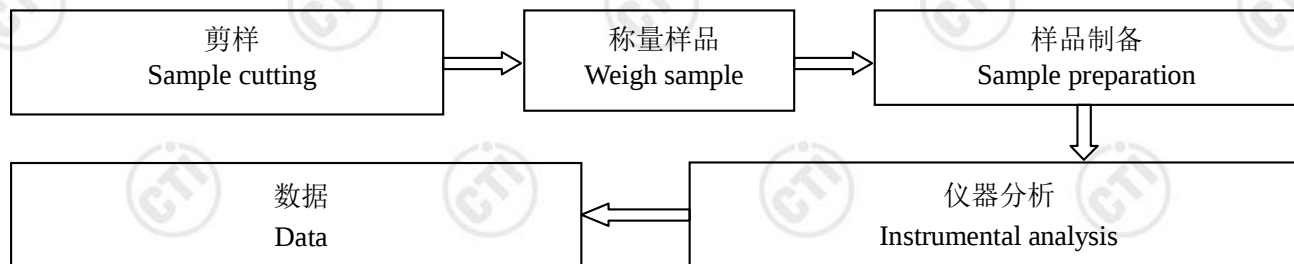
1. 根据欧盟 REACH 法规（编号 1907/2006）第 33 条款之规定，物品类产品如果含有候选列表上的高度关注物质且在物品中的质量百分比超过 0.1% 时，物品供应方需履行相关信息传递义务：
Any supplier of an article containing a substance that is included in the Candidate List in a concentration above 0.1 % weight by weight (w/w) has the duty to communicate information in accordance with Article 33 of European Union regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
 - 1) 物品供应方应提供给接收方关于产品的足够信息以确保物品的安全使用，至少需提供所含高度关注物质的名称。Any supplier shall provide the recipient of the article with sufficient information to allow safe use of the article including, as a minimum, the name of that substance.
 - 2) 应消费者请求，物品供应方应在 45 天内免费提供关于产品的足够信息以确保物品的安全使用，至少需提供所含高度关注物质的名称。On request by a consumer any supplier shall provide the consumer with sufficient information to allow safe use of the article including, as a minimum, the name of that substance within 45 days of receipt of the request, free of charge.
2. 根据欧盟 REACH 法规（编号 1907/2006）第 31 条款及附件 2 之规定，提供高度关注物质的物质类产品供应方，应免费提供接收方该物质的安全数据表。The supplier of a substance that is included in the Candidate List on their own shall provide the recipient of the substance with a safety data sheet for free compiled in accordance with Article 3 and Annex II of REACH.
3. 根据欧盟 REACH 法规（编号 1907/2006）第 31、32 条款及附件 2 之规定，提供含有高度关注物质的混合物产品供应方需传递相关信息：
The supplier of a mixture that containing a substance that is included in the Candidate List shall exchange information in accordance with Article 31, Article 32, and Annex II of REACH.
 - 1) 如果混合物产品按照 1999/45/EC 被判定为危险品时，供应方应免费提供产品的安全数据表。Any supplier shall provide the recipient of the mixture with a safety data sheet for free where a preparation meets the criteria for classification as dangerous in accordance with Directives 1999/45/EC.
 - 2) 如果混合物产品按照 1999/45/EC 判定并非危险品，但是任一高度关注物质在非气体混合物中质量分数超过 0.1% 或在气体混合物中体积分数超过 0.2%，供应方也应免费提供产品的安全数据表。Any supplier shall provide the recipient of the mixture with a safety data sheet for free where a preparation does not meet the criteria for classification as dangerous in accordance with Directive 1999/45/EC, but contains any substance that is included in the Candidate List in an individual concentration of ≥ 0.1 % by weight for non-gaseous mixtures or ≥ 0.2 % by volume for gaseous mixtures.

检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 21 页 共 22 页
Page 21 of 22

检测流程 Test Process



检测报告 Test Report

报告编号 A2180016885101012E
Report No. A2180016885101012E

第 22 页 共 22 页
Page 22 of 22

样品图片

Photo(s) of the sample(s)



*** 报告结束 ***

*** End of Report ***

声明 Statement:

1. 检测报告无批准人签字、“专用章”及报告骑缝章无效;
This report is considered invalidated without approval signature, special seal and the seal on the perforation;
2. 样品及样品信息由申请者提供, 申请者应对其真实性负责, CTI 未核实其真实性;
The sample(s) and sample information was/were provided by the client who should be responsible for the authenticity which CTI hasn't verified;
3. 本报告检测结果仅对送测样品负责;
The result(s) shown in this report refer(s) only to the sample(s) tested;
4. 未经 CTI 书面同意, 不得部分复制本报告;
Without written approval of CTI, this report can't be reproduced except in full;
5. 如检测报告中的英文内容与中文内容有差异, 以中文为准。
In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.