检测报告(Test Report)

检测报告编号(Report No.)：SZC17061387971 日期(Date)：2017/6/30 页数(Page)：1 of 35

委托单位：
Applicant:
单位地址：
Address:

样品信息(Sample information)

样品名称(Sample Name)：	移动电源
样品描述(Sample Description)：	请参见后续页(Please refer to following page(s).)。
样品型号(Sample Model)：	P51(P51L/P51C/PBS-15003)/P50(P50L/P50C/PBS-10003)/ P49(P49L/P49C/PBS-5003)
样品编号(Sample No)：	QT1706138797101
委托日期(Sample Received Date)：	2017/6/14
检测日期(Testing Period)：	2017/6/14 - 2017/6/30

检测要求(Test Requested)： 请参见后续页(Please refer to following page(s).)。

结果摘要(Result Summary)： 根据客户要求，对送检样品进行检测，详细信息和样品描述栏所列一致。
(As requested by applicant, the submitted sample(s) was/were tested, which is listed as specimen description in the following page(s).)

******** 详情请参考后续页 ********
******** For Further Details, Please Refer from following page(s)********

审核人
Checked by
Angela
Angela

授权签字人
Signed for and on behalf of HCT
Michael
实验室经理
Laboratory Manager

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检测要求(Test Requested)：	结论(Conclusion)
1.参考欧盟 RoHS 指令 2011/65/EU 及其修订指令 EU 2015/863 关于在电子电气设备中限制使用某些有害物质。In accordance with Directive EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.	合格(PASS)
2.根据客户要求，参照德国 AfPS GS 2014:01PAK 第二类（其他类产品）的要求，检测其送检样品中 18 种多环芳香烃的含量(As specified by client, to determine the 18 polycyclic aromatic hydrocarbons (PAHs) content in the submitted sample with reference to the requirements of category 2 (Other products in the scope)according to AfPS GS 2014:01PAK.)。	合格(PASS)
3.根据客户要求，参照法规(EC) No 1907/2006 (REACH)，筛选 173 项高关注物质（SVHC），物质清单为欧盟化学品管理局(ECHA)于 2017 年 1 月 12 日公布的清单(As specified by client, refer to EU Regulation (EC) No 1907/2006 (REACH), to screen one hundred and seventy-three (173) Substances of Very High Concern (SVHC) in the submitted sample. The list is the one that is published by European Chemicals Administration (ECHA) on Jan. 12, 2017.)。	小于 0.1% (Less than 0.1%)

1.样品描述(Sample Description)：

序号(No.)	样品描述(Sample Description)	
1-1	黑色塑胶(外壳,边框)	Black plastic (shell,frame)
1-2	白印灰色金属外壳(外壳)	White printed gray metal shell(shell)
1-3	绿色干胶(内里)	Green dry glue(inside)
1-4	黑色金属螺丝(内里)	Black metal screw(inside)
1-5	黑色塑胶盖(内里)	Black plastic cover(inside)
1-6	黑色塑胶底座(内里)	Black plastic base(inside)
1-7	银色金属外壳(内里,PCB 板,大 USB 插槽)	Silvery metal shell(inside,PCB board,big USB slot)
1-8	黑色塑胶(内里,PCB 板,大 USB 插槽)	Black plastic (inside,PCB board,big USB slot)
1-9	银色金属插针(内里,PCB 板,大 USB 插槽)	Silvery metal pin(inside,PCB board,big USB slot)
1-10	银色金属外壳(内里,PCB 板,中 USB 插槽)	Silvery metal shell(inside,PCB board,medium USB slot)
1-11	黑色塑胶(内里,PCB 板,中 USB 插槽)	Black plastic (inside,PCB board,medium USB slot)
1-12	银色金属插针(内里,PCB 板,中 USB 插槽)	Silvery metal pin(inside,PCB board,medium USB slot)
1-13	银色金属外壳(内里,PCB 板,小 USB 插槽)	Silvery metal shell(inside,PCB board,small USB slot)
1-14	黑色塑胶(内里,PCB 板,小 USB 插槽)	Black plastic (inside,PCB board,small USB slot)
1-15	银色金属插针(内里,PCB 板,小 USB 插槽)	Silvery metal pin(inside,PCB board,small USB slot)
1-16	棕色贴片电容(内里,PCB 板)	Brown chip capacitor(inside,PCB board)
1-17	黑印白色贴片电阻(内里,PCB 板)	Black printed white chip resistor(inside,PCB board)
1-18	银色金属片(内里,PCB 板)	Silvery metal sheet(inside,PCB board)
1-19	黑色泡沫连粘胶(内里,PCB 板)	Black foam with adhesive(inside,PCB board)

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序号(No.)	样品描述(Sample Description)	
1-20	白色泡沫连粘胶(内里,PCB 板)	White foam with adhesive(inside,PCB board)
1-21	白色塑胶(内里,PCB 板,按键开关)	White plastic (inside,PCB board,button switch)
1-22	黑色塑胶(内里,PCB 板,按键开关)	Black plastic (inside,PCB board,button switch)
1-23	银色金属盖(内里,PCB 板,按键开关)	Silvery metal cover(inside,PCB board,button switch)
1-24	银色金属弹片(内里,PCB 板,按键开关)	Silvery metal shrapnel(inside,PCB board,button switch)
1-25	黑印灰色磁芯(内里,PCB 板,电感)	Black printed gray magnetic core (inside,PCB board,inductor)
1-26	半透明贴片 LED(内里,PCB 板)	Translucent chip LED(inside,PCB board)
1-27	黑色贴片三极管(内里,PCB 板)	Black chip triode(inside,PCB board)
1-28	八脚黑色本体(内里,PCB 板)	Eight pins black body(inside,PCB board)
1-29	银色金属焊锡(内里,PCB 板)	Silvery metal solder(inside,PCB board)
1-30	蓝印米色 PCB 板(内里,PCB 板)	Blue printed cream PCB board(inside,PCB board)
1-31	黑色软胶外壳(连接线,插头)	Black soft plastic shell(cable,plug)
1-32	银色金属外壳(连接线,大插头)	Silvery metal shell(cable,big plug)
1-33	白色塑胶(连接线,大插头)	White plastic (cable,big plug)
1-34	半透明软胶(连接线,大插头)	Translucent soft plastic (cable,big plug)
1-35	铜色/银色金属插针(连接线,大插头)	Copper/silvery metal pin(cable,big plug)
1-36	银色金属焊锡(连接线,插头)	Silvery metal solder(cable,plug)
1-37	银色金属外壳(连接线,小插头)	Silvery metal shell(cable,small plug)
1-38	黑色塑胶(连接线,小插头)	Black plastic (cable,small plug)
1-39	银色金属插片(连接线,小插头)	Silvery metal illustration(cable,small plug)
1-40	铜色/银色金属插针(连接线,小插头)	Copper/silvery metal pin(cable,small plug)
1-41	黑色软胶外线皮(连接线)	Black soft plastic outer wire jacket(cable)
1-42	黑色软胶线皮(连接线)	Black soft plastic wire jacket(cable)
1-43	白色软胶线皮(连接线)	White soft plastic wire jacket(cable)
1-44	红色软胶线皮(连接线)	Red soft plastic wire jacket(cable)
1-45	绿色软胶线皮(连接线)	Green soft plastic wire jacket(cable)
1-46	银色金属(连接线)	Silvery metal (cable)

备注(Note)：

The specimen(s) 1-19, 1-27 was(were) resubmitted on June 23, 2017.

样品 1-19, 1-27 于 2017 年 6 月 23 日重新送检。

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检测结果(Test Results)：

1） 参考 IEC 62321-3-1:2013，用 ED-XRF 光谱仪进行筛选检测
Refer to IEC 62321-3-1:2013, screening by ED-XRF Spectroscopy.

2） 化学方法 Chemical Method：
参考 IEC62321-5:2013，用 ICP/AAS 测铅，镉；
Refer to IEC62321-5:2013, determination of Lead & Cadmium by ICP/ AAS;
参考 IEC62321-4:2013，用 ICP/CV-AAS 测汞；
Refer to IEC62321-4:2013, determination of Mercury by ICP/ CV-AAS;
参考 IEC 62321-7-1:2015，用分光光度法检测六价铬的含量（金属材质）；
Refer to IEC 62321-7-1:2015, determination of Hexavalent Chromium by Spectrophotometry(metal material)
参考 IEC 62321:2008，用分光光度法检测六价铬的含量（非金属材质）；
Refer to IEC 62321:2008, determination of Hexavalent Chromium by Spectrophotometry(non-metal material)
参考 IEC 62321-6:2015，用 GC/MS 测 PBB 和 PBDE。
Refer to IEC 62321-6:2015, determination of PBB and PBDE by GC/MS.

ED-XRF 扫描结果(Test Results by ED-XRF)：

序号 (No.)	结果(Results)				
	铅 (Pb)	镉 (Cd)	铬 (Cr)	汞 (Hg)	溴 (Br)
1-1	BL	BL	BL	BL	BL
1-2	BL	BL	BL	BL	NC
1-3	BL	BL	BL	BL	BL
1-4	BL	BL	IN	BL	NC
1-5	BL	BL	IN	BL	BL
1-6	BL	BL	BL	BL	BL
1-7	BL	BL	BL	BL	NC
1-8	BL	BL	BL	BL	BL
1-9	BL	BL	BL	BL	NC
1-10	BL	BL	IN	BL	NC
1-11	BL	BL	BL	BL	BL
1-12	BL	BL	IN	BL	NC
1-13	BL	BL	BL	BL	NC
1-14	BL	BL	BL	BL	BL
1-15	BL	BL	BL	BL	NC
1-16	BL	BL	BL	BL	BL
1-17	BL	BL	BL	BL	BL
1-18	BL	BL	BL	BL	NC
1-19	BL	BL	BL	BL	BL

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序号 (No.)	结果(Results)				
	铅 (Pb)	镉 (Cd)	铬 (Cr)	汞 (Hg)	溴 (Br)
1-20	BL	BL	BL	BL	BL
1-21	BL	BL	BL	BL	BL
1-22	BL	BL	BL	BL	BL
1-23	BL	BL	BL	BL	NC
1-24	BL	BL	IN	BL	NC
1-25	BL	BL	IN	BL	NC
1-26	BL	BL	BL	BL	BL
1-27	BL	BL	BL	BL	IN
1-28	BL	BL	BL	BL	BL
1-29	BL	BL	BL	BL	NC
1-30	BL	BL	BL	BL	IN
1-31	BL	BL	BL	BL	BL
1-32	BL	BL	BL	BL	NC
1-33	BL	BL	BL	BL	IN
1-34	BL	BL	BL	BL	BL
1-35	BL	BL	BL	BL	NC
1-36	BL	BL	BL	BL	NC
1-37	BL	BL	IN	BL	NC
1-38	BL	BL	BL	BL	BL
1-39	BL	BL	IN	BL	NC
1-40	BL	BL	BL	BL	NC
1-41	BL	BL	BL	BL	BL
1-42	BL	BL	BL	BL	BL
1-43	BL	BL	BL	BL	BL
1-44	BL	BL	BL	BL	BL
1-45	BL	BL	BL	BL	BL
1-46	BL	BL	BL	BL	NC

备注(Note)：

BL=Below Limit by ED-XRF analysis, 低于 ED-XRF 分析限值

IN= Inconclusive (questionable, need further chemical analysis)非结论性的（有疑问，需要进行化学分析）

NC=Not Conducted, 勿需检测

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说明(Remark)：

1） 根据 IEC 62321-3-1:2013，样品先用 ED-XRF 进行筛选检测，如果筛选检测的结果超过下表中所列的警戒值，则需进行化学检测。

Results were obtained by ED-XRF for primary screening, and further chemical testing by ICP/AAS (for Cd, Pb, Hg), UV-VIS (for CrVI) are recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1:2013.

单位(Unit)：mg/kg

检测元素 Element	非金属材料 Non-metal	金属材料 Metal	混合材料 Composite Material
铅 Pb	BL ≤ 100 < X < 1200 ≤ OL	BL ≤ 100 < X < 1200 ≤ OL	BL ≤ 80< X < 1300 ≤ OL
镉 Cd	BL ≤ 30 < X < 120≤ OL	BL ≤ 30 < X < 120≤ OL	BL ≤ 30 < X < 120≤ OL
汞 Hg	BL ≤ 100 < X < 1200 ≤ OL	BL ≤ 100 < X < 1200 ≤ OL	BL ≤ 80< X < 1300 ≤ OL
铬 Cr	BL ≤ 200< X	BL ≤ 200 < X	BL ≤ 150< X
溴 Br	BL ≤ 200 < X	--	BL ≤ 200 < X

BL=Below Limit by ED-XRF analysis，低于 ED-XRF 分析限值

OL=Over Limit by ED-XRF analysis，高于 ED-XRF 分析限值

X= Inconclusive，非结论性的

2） 用 ED-XRF 筛选检测限制元素，读数可能不同于具有不均匀结构的样品中的实际含量。

The ED-XRF screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition.

3) 最大的允许限值是引自欧盟 RoHS 指令 2011/65/EU 及其修订指令 EU 2015/863

The maximum permissible limit is quoted from Directive EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863:

RoHS 限制的物质 RoHS Restricted Substances	最大浓度值 Maximum Concentration Value（均一材质）(by weight in homogenous materials)
铅 Lead (Pb)	1000 mg/kg
镉 Cadmium (Cd)	100 mg/kg
汞 Mercury (Hg)	1000 mg/kg
六价铬 Hexavalent Chromium (Cr VI)	1000 mg/kg
多溴联苯 Polybrominated biphenyls (PBBs)	1000 mg/kg
多溴二苯醚 Polybrominated diphenylethers (PBDEs)	1000 mg/kg

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化学检测结果(Test Results by Chemical method)：

六价铬（非金属）的检测结果(Hexavalent Chromium(Cr(VI)) (non-metal)test result)： 单位(Unit)：mg/kg

检测项目(Test Item(s))	**六价铬 Hexavalent Chromium(Cr(VI)**
RoHS 限值(RoHS Limit)	1000
方法检出限(MDL)	2
序号(No.)	**检测结果(Test Result(s))**
1-25	N.D.

备注(Note)：

mg/kg=ppm= parts per million

MDL = Method Detection Limit 方法检出限

N.D.=Not Detected (less than method detection limit)，未检出（小于方法检出限）

六价铬（金属）的检测结果(Hexavalent Chromium(Cr(VI)) (metal)test result)： 单位(Unit)：μg/cm^2

检测项目(Test Item(s))	**六价铬 Hexavalent Chromium(Cr(VI)♦**	
RoHS 限值(RoHS Limit)	—	
方法检出限(MDL)	0.05	
序号(No.)	**检测结果(Test Result(s))**	**定性结果(Qualitative Result(s))**
1-4	N.D.	阴性(Negative)
1-5	N.D.	阴性(Negative)
1-10	N.D.	阴性(Negative)
1-12	N.D.	阴性(Negative)
1-24	N.D.	阴性(Negative)
1-37	N.D.	阴性(Negative)
1-39	N.D.	阴性(Negative)

备注(Note)：

"—"=Not regulated, 无规定

MDL=Method Detection Limit 方法检出限

N.D.=Not Detected (less than method detection limit)，未检出（小于方法检出限）

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♦ = a. 当六价铬的浓度高于 0.13μg/cm^2 时，样品为阳性，即含有六价铬；

b. 当六价铬的浓度为 ND(低于 0.10μg/cm^2)时，样品为阴性，即未检测到六价铬；

c. 当六价铬的浓度介于 0.10μg/cm^2 与 0.13μg/cm^2 之间时，无法直接判定是否检测到六价铬，因不同个体的样品表面差异可能会影响测定结果；

由于未获知样品的存储条件和生产日期，样品的六价铬检测结果仅能代表检测时样品含六价铬的状态。

a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13μg/cm^2. The sample coating is considered to contain Cr(VI);

b. The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10μg/cm^2). The coating is considered a non-Cr(VI) based coating;

c. The result between 0.10μg/cm^2 and 0.13μg/cm^2 is considered to be inconclusive -unavoidable coating variations may influence the determination;

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

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多溴联苯(PBBs)和多溴二苯醚(PBDEs)检测结果 (PBBs and PBDEs test results)： 单位 Unit：mg/kg

检测项目 (Test Items)	含量(Content)			方法检出限 (MDL)	RoHS 限值 (RoHS Limit)
	1-27	1-30	1-33		
多溴联苯(PBBs) Sum of PBBs	**N.D.**	**N.D.**	**N.D.**	—	**1000**
一溴联苯 Monobromobiphenyl	N.D.	N.D.	N.D.	5	—
二溴联苯 Dibromobiphenyl	N.D.	N.D.	N.D.	5	
三溴联苯 Tribromobiphenyl	N.D.	N.D.	N.D.	5	
四溴联苯 Tetrabromobiphenyl	N.D.	N.D.	N.D.	5	
五溴联苯 Pentabromobiphenyl	N.D.	N.D.	N.D.	5	
六溴联苯 Hexabromobiphenyl	N.D.	N.D.	N.D.	5	
七溴联苯 Heptabromobiphenyl	N.D.	N.D.	N.D.	5	
八溴联苯 Octabromobiphenyl	N.D.	N.D.	N.D.	5	
九溴联苯 Nonabromobiphenyl	N.D.	N.D.	N.D.	5	
十溴联苯 Decabromobiphenyl	N.D.	N.D.	N.D.	5	
多溴二苯醚(PBDEs) Sum of PBDEs	**N.D.**	**N.D.**	**N.D.**	—	**1000**
一溴二苯醚 Monobromodiphenyl ether	N.D.	N.D.	N.D.	5	—
二溴二苯醚 Dibromodiphenyl ether	N.D.	N.D.	N.D.	5	
三溴二苯醚 Tribromodiphenyl ether	N.D.	N.D.	N.D.	5	
四溴二苯醚 Tetrabromodiphenyl ether	N.D.	N.D.	N.D.	5	
五溴二苯醚 Pentabromodiphenyl ether	N.D.	N.D.	N.D.	5	
六溴二苯醚 Hexabromodiphenyl ether	N.D.	N.D.	N.D.	5	
七溴二苯醚 Heptabromodiphenyl ether	N.D.	N.D.	N.D.	5	
八溴二苯醚 Octabromodiphenyl ether	N.D.	N.D.	N.D.	5	
九溴二苯醚 Nonabromodiphenyl ether	N.D.	N.D.	N.D.	5	
十溴二苯醚 Decabromodiphenyl ether	N.D.	N.D.	N.D.	5	

备注(Note)：

"—"=Not regulated 无规定

mg/kg=ppm= parts per million

MDL = Method Detection Limit 方法检出限

N.D.=Not Detected (less than method detection limit)，未检出（小于方法检出限）

Results shown as N.D. are ignored in the sum calculation. 结果显示为 N.D.不计入总和的计算。

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2.样品描述(Sample Description)：

序号(No.)	样品描述(Sample Description)	
2-1	黑色塑胶(侧边)	Black plastic(side)
2-2	黑色塑胶(大 USB 插槽)	Black plastic(big USB slot)
2-3	黑色软胶外壳(连接线插头)	Black soft plastic shell(cable plug)
2-4	白色塑胶(连接线,大插头)	White plastic(cable, big plug)
2-5	黑色塑胶(连接线,小插头)	Black plastic(cable, small plug)
2-6	黑色软胶外线皮(连接线)	Black soft plastic outer wire jacket(cable)

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18 种多环芳香烃的含量(PAHs content) 单位(Unit)：mg/kg

检测项目 (Test Items)	检测方法/仪器 (Test Method/Equipment)	方法检出限(MDL)
苯并(a)芘 Benzo[a]pyrene (BaP)	参考(Refer to) AfPS GS 2014:01PAK, GC-MS	0.2
苯并[e]芘(BeP) Benzo[e]pyrene		0.2
苯并(a)蒽 Benzo[a]anthracene (BaA)		0.2
苯并(b)荧蒽 Benzo[b]fluoranthene (BbF)		0.2
苯并[j]荧蒽(BjFA) Benzo[j]fluoranthene		0.2
苯并(k)荧蒽 Benzo[k]fluoranthene (BkF)		0.2
䓛Chrysene (CHR)		0.2
二苯并(a,h)蒽 Dibenzo[a,h]anthracene (DBAh)		0.2
苯并(ghi)苝 Benzo[g,h,i]perylene (BghiP)		0.2
茚苯(1,2,3-cd)芘 Indeno[1,2,3-cd]pyrene (IND)		0.2
苊烯 Acenaphthylene (AcPy)		0.2
苊 Acenaphthene (Acp)		0.2
芴 Fluorene (Flu)		0.2
菲 Phenanthrene (PA)		0.2
蒽 Anthracene (Ant)		0.2
荧蒽 Fluoranthene (FL)		0.2
芘 Pyrene (Pyr)		0.2
（苊烯，苊，芴，菲，芘，蒽，荧蒽）总量 Sum of (AcPy, Acp, Flu, PA, Ant, FL, Pyr)		—
萘 Naphthalene (Nap)		0.2
18 种 PAHs 总量 Sum of 18 PAHs		—

检测报告(Test Report)

检测项目 (Test Items)	含 量(Content)					
	2-1	2-2	2-3	2-4	2-5	2-6
苯并(a)芘 Benzo[a]pyrene (BaP)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
苯并[e]芘(BeP) Benzo[e]pyrene	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
苯并(a)蒽 Benzo[a]anthracene (BaA)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
苯并(b)荧蒽 Benzo[b]fluoranthene (BbF)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
苯并[j]荧蒽(BjFA) Benzo[j]fluoranthene	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
苯并(k)荧蒽 Benzo[k]fluoranthene (BkF)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
䓛Chrysene (CHR)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
二苯并(a,h)蒽 Dibenzo[a,h]anthracene (DBAh)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
苯并(ghi)苝 Benzo[g,h,i]perylene (BghiP)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
茚苯(1,2,3-cd)芘 Indeno[1,2,3-cd]pyrene (IND)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
苊烯 Acenaphthylene (AcPy)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
苊 Acenaphthene (Acp)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
芴 Fluorene (Flu)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
菲 Phenanthrene (PA)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
蒽 Anthracene (Ant)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
荧蒽 Fluoranthene (FL)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
芘 Pyrene (Pyr)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
（苊烯，苊，芴，菲，芘，蒽，荧蒽）总量 Sum of (AcPy, Acp, Flu, PA, Ant, FL, Pyr)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
萘 Naphthalene (Nap)	N.D.	N.D.	0.3*	N.D.	N.D.	0.9*
18 种 PAHs 总量 Sum of 18 PAHs	N.D.	N.D.	0.3	N.D.	N.D.	0.9

备注(Note):

"—"=Not regulated 无规定

mg/kg = ppm=parts per million

MDL=Method Detection Limit 方法检出限

N.D.=Not Detected(less than method detection limit)，未检出 (小于方法检出限)

Results shown as N.D. are ignored in the sum calculation. 结果显示为 N.D.不计入总和的计算。

*The developed naphthalene result will always only show the momentary situation of the test sample at the time of measurement. 萘的检测结果只反应检测样品在测定时的一个短暂的状态。

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检测报告编号(Report No.)：SZC17061387971 日期(Date)：2017/6/30

依据 GS-Mark 的要求产品中最大限值如下(According to GS Mark: Restraining maximum values for products)：

单位(Unit)：mg/kg

参数 Parameter	类别 1 Category1	类别 2 Category2		类别 3 Category3	
	放入口中的材料，或和皮肤长时间接触的玩具材料（超过 30 秒）Materials intended to be put in the mouth, or materials of toy with intended to long-term skin contact(longer than 30 seconds)	未包含在类别 1 中和皮肤会长时间接触（超过 30 秒），或者和皮肤反复短时间接触*的材料 Materials not covered by Category 1, with foreseeable skin contact for longer than 30 seconds (long-term skin contact) or repeated short-term skin contact*		未包含在类别 1 和 2 中，和皮肤短期接触（不超过 30 秒）的材料 Materials not covered by category 1 or 2 with foreseeable skin contact up to 30 second(short term skin contact)	
		2009/48/EC 范围内的玩具 Toys in the scope of 2009/48/EC	其他类产品 Other products in the scope	2009/48/EC 范围内的玩具 Toys in the scope of 2009/48/EC	其他类产品 Other products in the scope
苯并(a)芘 Benzo(a)pyrene(BaP)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
苯并(e)芘 Benzo(e)pyrene(BeP)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
苯并(a)蒽 Benzo(a)anthracene(BaA)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
苯并(b)荧蒽 Benzo(b)fluoranthene(BbF)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
苯并(j)荧蒽 Benzo(j)fluoranthene(BjFA)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
苯并(k)荧蒽 Benzo(k)fluoranthene(BkF)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
䓛Chrysene (CHR)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
二苯并(a,h)蒽 Dibenzo(a,h)anthracene(DBAh)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
苯并(g,h,i)苝 Benzo(g,h,i)perylene(BghiP)	< 0.2	< 0.2	< 0.5	< 0.5	< 1
茚苯(1,2,3-cd)芘 Indeno(l,2,3-cd)pyrene(IND)	< 0.2	< 0.2	< 0.5	< 0.5	< 1

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单位(Unit)：mg/kg

参数 Parameter	类别 1 Category1	类别 2 Category2		类别 3 Category3	
	放入口中的材料，或和皮肤长时间接触的玩具材料（超过 30 秒）Materials intended to be put in the mouth, or materials of toy with intended to long-term skin contact(longer than 30 seconds)	未包含在类别 1 中和皮肤会长时间接触（超过 30 秒），或者和皮肤反复短时间接触*的材料 Materials not covered by Category 1, with foreseeable skin contact for longer than 30 seconds (long-term skin contact) or repeated short-term skin contact*		未包含在类别 1 和 2 中，和皮肤短期接触（不超过 30 秒）的材料 Materials not covered by category 1 or 2 with foreseeable skin contact up to 30 second(short term skin contact)	
		2009/48/EC 范围内的玩具 Toys in the scope of 2009/48/EC	其他类产品 Other products in the scope	2009/48/EC 范围内的玩具 Toys in the scope of 2009/48/EC	其他类产品 Other products in the scope
苊烯 Acenaphthylene(AcPy)，苊 Acenaphthene(Acp)，芴 Fluorene(Flu)，菲 Phenanthrene(PA)，芘 Pyrene(Pyr)，蒽 Anthracene(Ant)，荧蒽 Fluoranthene(FL)	< 1 总量(Sum)	< 5 总量(Sum)	< 10 总量(Sum)	< 20 总量(Sum)	< 50 总量(Sum)
萘 Naphthalene(Nap)	< 1	< 2		< 10	
18 种 PAH 总量 Sum of 18 PAH	< 1	< 5	< 10	< 20	< 50

"*"：与皮肤反复短时间接触的定义出自"REACH 附件 17 第 50 条修订条款（欧盟法规(EU) No 1272/2013）。"repeated short-term skin contact" from REACH Annex XVII Nr. 50 amendment (COMMISSION REGULATION (EU) No 1272/2013).

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3.(SVHC)

检测样品(Tested Sample)：

检测样品描述(Tested sample description)：

样品编号(Sample No.)	样品描述(Sample Description)
QT1706138797101	3-1.金属(Metal)
	3-2.非金属(Non-metal)

检测方法(Test Method)：

HCT 内部方法 HCT/SZ-SOP-YJ-PI022，采用 ICP-OES/GC-MS(HS)/HPLC-DAD-MS/IC/AAS/UV-VIS 分析。
(HCT In-house method HCT/SZ-SOP-YJ-PI022, Analysis was performed by ICP-OES/GC-MS (HS)/HPLC-DAD-MS/IC/AAS/UV-VIS.)

检测结果(Test Result(s))： 单位(Unit)：%

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit	结果 Result(s) 3-1
/	/	SVHC 物质清单中的所有物质 (All tested SVHC in candidate list)	/	/	/	N.D.

批次 Batch	序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit	结果 Result(s) 3-2
二 Second(2^{nd})	21	邻苯二甲酸二异丁酯 Diisobutyl phthalate（DIBP）	84-69-5	201-553-2	0.0050	0.0099
/	/	其余 SVHC 物质清单中的物质 Other SVHC in candidate list	/	/	/	N.D.

注释(Note)：

-N.D.= Not Detected (<report limit), 未检出（小于报告限）

-0.1%=1000mg/kg

-mg/kg=ppm=parts per million

-SVHC 中的物质清单见后续页(Substances in candidate list of SVHC please refer to following page(s).)。

-三氧化二硼、硼酸、无水四硼酸钠、水合硼酸钠、四氟硼酸铅、过硼酸钠、水合高硼酸钠盐类的结果由 ICP-OES 检测的水提取的硼元素结果换算得出。The test results of Diboron trioxide, Boric acid, Disodium tetraborate, anhydrous, Tetraboron disodium heptaoxide, hydrate,Lead bis(tetrafluoroborate), Sodium peroxometaborate and Sodium perborate; perboric acid, sodium salt were based on the water extraction content of Boron.

-根据客户声明，该样品不含有 SVHC 物质清单中的钴化合物（见后续页所有检测的 SVHC 清单）。As specified by client's declaration, the submitted sample(s) do not contain cobalt compounds in SVHC in candidate list(See following full list of tested SVHC).

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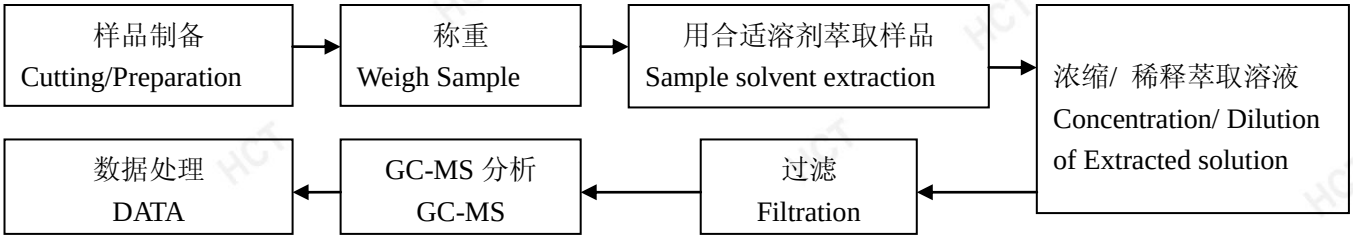
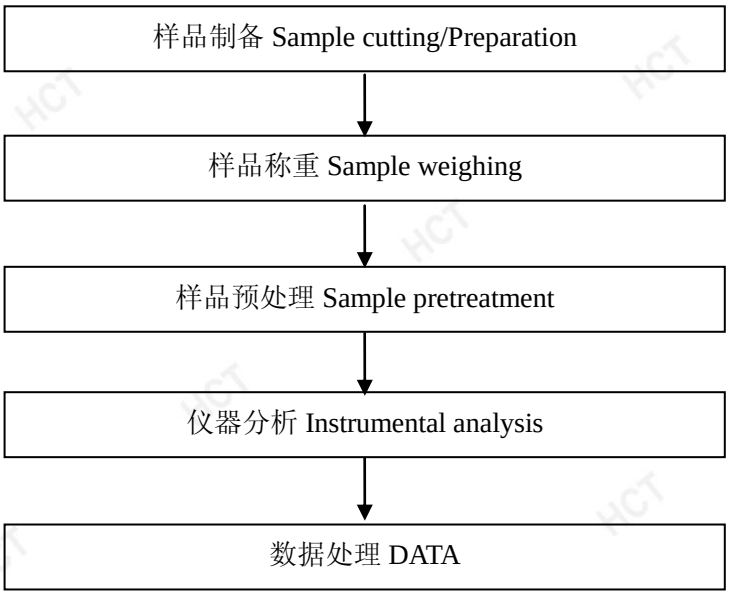
备注(Remarks)：

1. 以上物质的结果值是基于最坏的情况鉴定，建议做进一步的调查确定样品中是否含有相关物质。As the Result of above substance that identified is based on the worst case scenario. Further investigation is required for confirmation of the presence of the substance in the sample.
2. 其报告限是针对其代表性物质之评估。
   The report limit is evaluated based on the representative substances.

PAHS 的检测流程图(Test Flow Chart for PAHS)



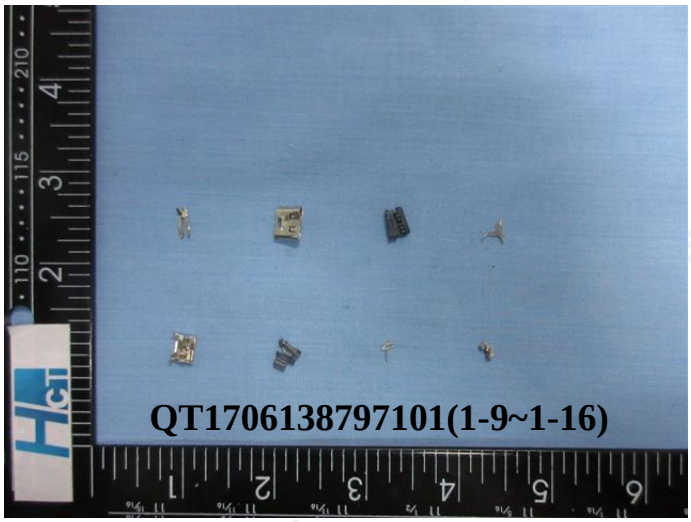
SVHC 的检测流程图(Test Flow Chart for SVHC)

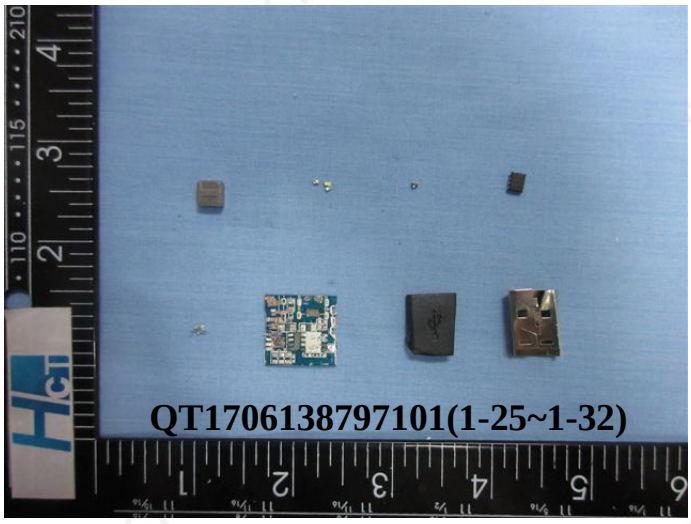


检测报告(Test Report)

样 品 附 图(The photo of the sample)

检测报告(Test Report)





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检测报告(Test Report)

所有检测的 SVHC 清单(Full list of tested SVHC):

第一批 15 种 SVHC（2008 年 10 月公布）(The first 15 SVHC(Announced in October, 2008)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
1	蒽 Anthracene	120-12-7	204-371-1	0.0050
2	4，4’-二氨基二苯甲烷 4,4’-Diaminodiphenylmethane	101-77-9	202-974-4	0.0050
3	邻苯二甲酸二丁酯 Dibutyl phthalate（DBP）	84-74-2	201-557-4	0.0050
4	邻苯二甲酸二（2-乙基己基）酯 Di-(2-ethylhexyl) Phthalate（DEHP）	117-81-7	204-211-0	0.0050
5	邻苯二甲酸丁苄酯 Benzyl butyl phthalate（BBP)	85-68-7	201-622-7	0.0050
6	三丁基氧化锡 Bis(tributyltin)oxide（TBTO）	56-35-9	200-268-0	0.0050
7	2,4,6-三硝基-3,3-二甲基-5-叔丁基苯（二甲苯麝香） 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4	0.0050
8	六溴环十二烷 Hexabromocyclododecane and all major diastereoisomers identified:(α -HBCDD, β -HBCDD,γ -HBCDD)（HBCDD）	25637-99-4, 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8)	247-148-4/ 221-695-9	0.0050
9	短链氯化石蜡 Short Chain Chlorinated Paraffins（SCCPs）	85535-84-8	287-476-5	0.0100
10	砷酸氢铅* Lead hydrogen arsenate*	7784-40-9	232-064-2	0.0500
11	三乙基砷酸酯* Triethyl arsenate*	15606-95-8	427-700-2	0.0500
12	五氧化二砷* Diarsenic pentaoxide*	1303-28-2	215-116-9	0.0500
13	三氧化二砷* Diarsenic trioxide*	1327-53-3	215-481-4	0.0500
14	二氯化钴* Cobalt dichloride*	7646-79-9	231-589-4	0.0500
15	重铬酸钠* Sodium dichromate*	7789-12-0, 10588-01-9	234-190-3	0.0500

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第二批 13 种 SVHC (2010 年 1 月和 3 月公布) (The second 13 SVHC(Announced in January and March, 2010))

单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
16	①蒽油①Anthracene oil	90640-80-5	292-602-7	0.0500
17	①蒽油，蒽糊，轻油**** ①Anthracene oil, anthracene paste, distn. Lights****	91995-17-4	295-278-5	0.0500
18	①蒽油，蒽糊，蒽馏分 ①Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	295-275-9	0.0500
19	①蒽油，含蒽量少 ①Anthracene oil, anthracene-low	90640-82-7	292-604-8	0.0500
20	①蒽油，蒽糊 ①Anthracene oil, anthracene paste	90640-81-6	292-603-2	0.0500
21	邻苯二甲酸二异丁酯 Diisobutyl phthalate（DIBP）	84-69-5	201-553-2	0.0050
22	2,4-二硝基甲苯 2,4-Dinitrotoluene	121-14-2	204-450-0	0.0100
23	②铬酸铅 ②Lead chromate	7758-97-6	231-846-0	0.0500
24	②钼铬红（C.I.颜料红 104）*** ②Lead chromate molybdate sulphate red (C.I. Pigment Red 104) ***	12656-85-8	235-759-9	0.0500
25	②铅铬黄（C.I.颜料黄 34）*** ②Lead sulfochromate yellow(C.I. Pigment Yellow 34)***	1344-37-2	215-693-7	0.0500
26	①煤焦油沥青，高温 ①Pitch, coal tar, high temperature	65996-93-2	266-028-2	0.0500
27	磷酸三（2-氯乙基）酯 Tris(2-chloroethyl)phosphate（TCEP）	115-96-8	204-118-5	0.0100
28	丙烯酰胺 Acrylamide	79-06-1	201-173-7	0.0100

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第三批 8 种 SVHC（2010 年 6 月公布）(The third 8 SVHC(Announced in June, 2010)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
29	三氯乙烯 Trichloroethylene	79-01-6	201-167-4	0.0100
30	硼酸* Boric acid*	10043-35-3/ 11113-50-1	233-139-2 234-343-4	0.0500
31	无水四硼酸钠* Disodium tetraborate, anhydrous*	1330-43-4 12179-04-3 1303-96-4	215-540-4	0.0500
32	水合硼酸钠* Tetraboron disodium heptaoxide, hydrate*	12267-73-1	235-541-3	0.0500
33	铬酸钠* Sodium chromate*	7775-11-3	231-889-5	0.0500
34	铬酸钾* Potassium chromate*	7789-00-6	232-140-5	0.0500
35	重铬酸铵* Ammonium dichromate*	7789-09-5	232-143-1	0.0500
36	重铬酸钾* Potassium dichromate*	7778-50-9	231-906-6	0.0500

第四批 8 种 SVHC (2010 年 12 月公布) (The fourth 8 SVHC(Announced in December,2010)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
37	三氧化铬* Chromium trioxide*	1333-82-0	215-607-8	0.0500
38	2-甲氧基乙醇 2-Methoxyethanol	109-86-4	203-713-7	0.0500
39	2-乙氧基乙醇 2-Ethoxyethanol	110-80-5	203-804-1	0.0500
40	醋酸钴* Cobalt(II) diacetate*	71-48-7	200-755-8	0.0500
41	碳酸钴* Cobalt(II) carbonate*	513-79-1	208-169-4	0.0500
42	硝酸钴* Cobalt(II) dinitrate*	10141-05-6	233-402-1	0.0500
43	硫酸钴* Cobalt(II) sulphate*	10124-43-3	233-334-2	0.0500
44	三氧化铬及其低聚物产生的酸: * 铬酸 重铬酸 铬酸及重铬酸的低聚物 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	0.0500

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第五批 7 种 SVHC (2011 年 6 月公布) (The fifth 7 SVHC(Announced in June, 2011)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
45	乙二醇乙醚乙酸酯 (2-EEA)2-ethoxyethyl acetate	111-15-9	203-839-2	0.0100
46	铬酸锶*strontium chromate*	7789-06-2	232-142-6	0.0500
47	①邻苯二甲酸二(C7-11 支链与直链)烷基酯 (DHNUP) ①1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	271-084-6	0.0500
48	肼 Hydrazine	7803-57-8 302-01-2	206-114-9	0.0100
49	1-甲基-2-吡咯烷酮 1-methyl-2-pyrrolidone	872-50-4	212-828-1	0.0100
50	1,2,3-三氯丙烷 1,2,3-trichloropropane	96-18-4	202-486-1	0.0100
51	①邻苯二甲酸二 (C6-8 支链与直链)烷基酯，富 C7 链 (DIHP) ①1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	276-158-1	0.0500

第六批 20 种 SVHC (2011 年 12 月公布) (The sixth 20 SVHC(Announced in December, 2011)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
52	②硅酸铝耐火陶瓷纤维 ②Aluminosilicate, Refractory Ceramic Fibres	—	650-017-00-8**	0.0500
53	②氧化锆硅酸铝耐火陶瓷纤维 ②Zirconia Aluminosilicate, Refractory Ceramic Fibres	—	650-017-00-8**	0.0500
54	铬酸铬* Dichromium tris(chromate) *	24613-89-6	246-356-2	0.0500
55	氢氧化铬酸锌钾* Potassium hydroxyoctaoxodizincate di-chromate*	11103-86-9	234-329-8	0.0500

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序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
56	锌黄(C.I.颜料黄 36)*** Pentazinc chromate octahydroxide (C.I. pigment yellow 36)***	49663-84-5	256-418-0	0.0500
57	甲醛苯胺共聚物 Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4	500-036-1	0.0500
58	邻苯二甲酸二甲氧乙酯 Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	204-212-6	0.0050
59	邻氨基苯甲醚 2-Methoxyaniline; o-Anisidine	90-04-0	201-963-1	0.0100
60	对特辛基苯酚 4-(1,1,3,3-tetramethylbutyl)phenol,(4-tert-Octylphenol)	140-66-9	205-426-2	0.0100
61	1,2-二氯乙烷 1,2-Dichloroethane	107-06-2	203-458-1	0.0100
62	二乙二醇二甲醚 Bis(2-methoxyethyl) ether	111-96-6	203-924-4	0.0100
63	砷酸*Arsenic acid*	7778-39-4	231-901-9	0.0500
64	砷酸钙*Calcium arsenate*	7778-44-1	231-904-5	0.0500
65	砷酸铅*Trilead diarsenate*	3687-31-8	222-979-5	0.0500
66	N,N-二甲基乙酰胺 N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4	0.0100
67	酚酞 Phenolphthalein	77-09-8	201-004-7	0.0500
68	4,4'-亚甲基双-2-氯苯胺 2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	202-918-9	0.0100
69	叠氮化铅*Lead azide; Lead diazide*	13424-46-9	236-542-1	0.0500
70	2,4,6-三硝基苯二酚铅*Lead styphnate*	15245-44-0	239-290-0	0.0500
71	苦味酸铅*Lead dipicrate*	6477-64-1	229-335-2	0.0500

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第七批 13 种 SVHC（2012 年 6 月公布）(The seventh 13 SVHC(Announced in June, 2012)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
72	三甘醇二甲醚 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	203-977-3	0.0100
73	1, 2-二甲氧基乙烷 1, 2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9	0.0100
74	三氧化二硼*Diboron trioxide*	1303-86-2	215-125-8	0.0500
75	甲酰胺 Formamide	75-12-7	200-842-0	0.0100
76	甲磺酸铅(II)* Lead(II)bis(methanesulfonate)*	17570-76-2	401-750-5	0.0500
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	0.0500
78	替罗昔隆 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	0.0500
79	4,4'-四甲基二氨二苯酮 4,4’-bis(dimethylamino)benzophenone (Michler’sketone)	90-94-8	202-027-5	0.0100
80	4,4'-亚甲基双(N,N-二甲基苯胺) N,N,N’,N’-tetramethyl-4,4’-methylenedianiline (Michler’sbase)	101-61-1	202-959-2	0.0100
81	结晶紫 [4-[4,4’-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. BasicViolet 3)	548-62-9	208-953-6	0.0500
82	碱性蓝 26 [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammoniumchloride (C.I. Basic Blue 26)	2580-56-5	219-943-6	0.0500
83	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	0.0500
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	0.0100

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第八批 54 种 SVHC（2012 年 12 月公布）(The eighth 54 SVHC(Announced in December, 2012)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
85	十溴联苯醚 Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	214-604-9	0.0050
86	全氟十三酸 Pentacosafluorotridecanoic acid	72629-94-8	276-745-2	0.0100
87	全氟十二酸 Tricosafluorododecanoic acid	307-55-1	206-203-2	0.0100
88	全氟十一烷酸 Henicosafluoroundecanoic acid	2058-94-8	218-165-4	0.0100
89	全氟十四酸 Heptacosafluorotetradecanoic acid	376-06-7	206-803-4	0.0100
90	①对特辛基苯酚乙氧基醚 ①4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated -covering well-defined substances and UVCB substances, polymers and homologues	—	—	0.0100
91	①4-壬基苯酚，支链和直链 ①4-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	—	—	0.0100
92	偶氮二甲酰胺 Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8	0.0100
93	六氢邻苯二甲酸酐 Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA)	85-42-7	201-604-9	0.0100
94	甲基六氢苯酐、4-甲基六氢苯酐、甲基六氢化邻苯二甲酸酐、3-甲基六氢苯二甲酯酐 Hexahydromethylphathalic anhydride, Hexahydro-4-methylphathalic anhydride,Hexahydro-1-methylphathalic anhydride,Hexahydro-3-methylphathalic 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	0.0100

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序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
95	甲氧基乙酸 Methoxy acetic acid	625-45-6	210-894-6	0.0100
96	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	0.0100
97	邻苯二甲酸二异戊酯 Diisopentylphthalate (DIPP)	605-50-5	210-088-4	0.0100
98	邻苯二甲酸正戊基异戊基酯 N-pentyl-isopentylphtalate	776297-69-9	—	0.0100
99	乙二醇二乙醚 1,2-Diethoxyethane	629-14-1	211-076-1	0.0100
100	N,N-二甲基甲酰胺 N,N-dimethylformamide; dimethyl formamide	68-12-2	200-679-5	0.0100
101	二丁基二氯化锡 Dibutyltin dichloride (DBT)	683-18-1	211-670-0	0.0100
102	碱式乙酸铅*Acetic acid, lead salt, basic*	51404-69-4	257-175-3	0.0500
103	碱式碳酸铅* Basic lead carbonate (trileadbis(carbonate)dihydroxide)*	1319-46-6	215-290-6	0.0500
104	碱式硫酸铅*Lead oxide sulfate (basic lead sulfate)*	12036-76-9	234-853-7	0.0500
105	[1,2-苯二羧酸根合]二氧化三铅* [Phthalato(2-)]dioxotrilead (dibasic lead phthalate)*	69011-06-9	273-688-5	0.0500
106	双(十八酸基)二氧代三铅*Dioxobis(stearato)trilead*	12578-12-0	235-702-8	0.0500
107	C16-18-脂肪酸铅盐*Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7	0.0500
108	四氟硼酸铅*Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0	0.0500
109	氨基氰铅盐*Lead cynamidate*	20837-86-9	244-073-9	0.0500
110	硝酸铅*Lead dinitrate*	10099-74-8	233-245-9	0.0500
111	氧化铅*Lead oxide (lead monoxide)*	1317-36-8	215-267-0	0.0500
112	四氧化三铅，铅丹*Lead tetroxide (orange lead)*	1314-41-6	215-235-6	0.0500
113	钛酸铅*Lead titanium trioxide*	12060-00-3	235-038-9	0.0500
114	钛酸铅锆*Lead Titanium Zirconium Oxide*	12626-81-2	235-727-4	0.0500
115	②氧化铅与硫酸铅的复合物*Pentalead tetraoxide sulphate*	12065-90-6	235-067-7	0.0500
116	②颜料黄 41***Pyrochlore, antimony lead yellow C.I.***	8012-00-8	232-382-1	0.0500
117	②铅掺杂的硅钡酸盐*②Silicic acid, barium salt, lead-doped*	68784-75-8	272-271-5	0.0500
118	硅酸铅*Silicic acid, lead salt*	11120-22-2	234-363-3	0.0500
119	亚硫酸铅（II）*Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1	0.0500
120	四乙基铅*Tetraethyllead*	78-00-2	201-075-4	0.0500

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序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
121	三碱式硫酸铅*Tetralead trioxide sulphate*	12202-17-4	235-380-9	0.0500
122	磷酸氧化铅*Trilead dioxide phosphonate*	12141-20-7	235-252-2	0.0500
123	呋喃 Furan	110-00-9	203-727-3	0.0100
124	环氧丙烷 Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	200-879-2	0.0100
125	硫酸二乙酯 Diethyl sulphate	64-67-5	200-589-6	0.0100
126	硫酸二甲酯 Dimethyl sulphate	77-78-1	201-058-1	0.0100
127	乙基-2-甲基-2-(3-甲基丁基)-1,3-恶唑烷 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7	0.0100
128	地乐酚（二硝丁酚） Dinoseb	88-85-7	201-861-7	0.0100
129	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	0.0100
130	4,4'-二氨基二苯醚 4,4'-oxydianiline and its salts	101-80-4	202-977-0	0.0100
131	4-氨基偶氮苯 4-Aminoazobenzene;4-Phenylazoaniline	60-09-3	200-453-6	0.0100
132	2,4-二氨基甲苯 4-methyl-m-phenylenediamine (2,4-toluene-diamine)	95-80-7	202-453-1	0.0100
133	2-甲氧基-5-甲基苯胺 6-methoxy-m-toluidine (p-cresidine)	120-71-8	204-419-1	0.0100
134	4-氨基联苯 Biphenyl-4-ylamine	92-67-1	202-177-1	0.0100
135	邻氨基偶氮甲苯 o-aminoazotoluene	97-56-3	202-591-2	0.0050
136	邻甲基苯胺 o-Toluidine; 2-Aminotoluene	95-53-4	202-429-0	0.0100
137	N-甲基乙酰胺 N-methylacetamide	79-16-3	201-182-6	0.0100
138	溴代正丙烷 1-bromopropane; n-propyl bromide	106-94-5	203-445-0	0.0100

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第九批 6 种 SVHC（2013 年 6 月公布）(The ninth 6 SVHC(Announced in June, 2013)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
139	镉 Cadmium	7440-43-9	231-152-8	0.0050
140	氧化镉*Cadmium oxide*	1306-19-0	215-146-2	0.0500
141	十五代氟辛酸铵盐 Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4	0.0100
142	全氟辛酸 Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-397-9	0.0100
143	邻苯二甲酸二正戊酯 Dipentyl phthalate (DPP)	131-18-0	205-017-9	0.0100
144	①4-壬基酚，支链和直链，乙氧基[由一含 9 个碳的直链和/或支链烷基链，在碳 4 的位置共价有苯酚、乙氧基覆盖的非线性结构和明确的物质，包括任何单一的同分异构体和/或其合] ①4-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]	—	—	0.0500

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第十批 7 种 SVHC（2013 年 12 月公布）(The tenth 7 SVHC(Announced in December, 2013)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
145	硫化镉*Cadmium sulphide *	1306-23-6	215-147-8	0.0100
146	邻苯二甲酸二己酯 Dihexyl phthalate	84-75-3	201-559-5	0.0100
147	②C.I.直接红 28 ②Disodium 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	0.0100
148	②C.I.直接黑 38 ②Disodium 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	0.0100
149	亚乙基硫脲 Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	202-506-9	0.0100
150	醋酸铅*Lead di(acetate) *	301-04-2	206-104-4	0.0500
151	磷酸三（二甲苯）酯 Trixylyl phosphate	25155-23-1	246-677-8	0.0100

第十一批 4 种 SVHC（2014 年 6 月公布）(The eleventh 4 SVHC(Announced in June, 2014)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
152	邻苯二甲酸二己酯（直链与支链） 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5	0.0100
153	氯化镉*Cadmium chloride*	10108-64-2	233-296-7	0.0100
154	水合高硼酸钠盐类 Sodium perborate; perboric acid, sodium salt*	—	239-172-9, 234-390-0	0.0100
155	过硼酸钠*Sodium peroxometaborate*	7632-04-4	231-556-4	0.0100

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第十二批 6 种 SVHC（2014 年 12 月公布）(The twelfth 6 SVHC(Announced in December, 2014)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
156	2-(2'-羟基-3',5'-二叔戊基苯基)苯并三唑 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8	0.0100
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	0.0100
158	氟化镉* Cadmium fluoride*	7790-79-6	232-222-0	0.0500
159	硫酸镉* Cadmium sulphate*	10124-36-4; 31119-53-6	233-331-6	0.0500
160	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	0.0500
161	二正辛基-双(巯乙酸 2-乙基己酯)（DOTE）和三（2-乙基己基巯基乙酸）辛锡（MOTE）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)	—	—	0.0500

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第十三批 2 种 SVHC（2015 年 6 月公布）(The thirteenth 2 SVHC(Announced in June, 2015)) 单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
162	1,2-苯二羧酸，二-碳 6-10-烷基酯 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	0.0100
163	5-仲丁基-丁基-2-(2,4-二甲基环己胺-3-乙二胺-1-基)-5-甲基-1,3-二氧乙烷 [1], 5-仲丁基-丁基-2-(4,6-二甲基环己胺-3-乙二胺-1-基)-5-甲基-1,3-二氧乙烷[2]（这两种物质的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 isomers of [1] and [2] or any combination thereof]	—	—	0.0100

第十四批 5 种 SVHC（2015 年 12 月公布）(The fourteenth 5 SVHC(Announced in December, 2015))

单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
164	硝基苯 Nitrobenzene	98-95-3	202-716-0	0.0100
165	2,4-二-叔丁基-6-(5-氯-2H-苯并三唑-2-基)苯酚 (UV-327) 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8	0.0100
166	2-(2'-羟基-3'-异丁基-5'-叔丁基苯基)苯并三唑(UV-350) 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1	0.0100
167	1,3-丙烷磺内酯 1,3-propanesultone	1120-71-4	214-317-9	0.0100
168	全氟壬酸及盐(2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-十七氟壬酸和其钠和铵盐) Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-heptadecafluorononanoic acid and its sodium and ammonium salts	375-95-1 21049-39-8 4149-60-4	206-801-3	0.0100

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第十五批 1 种 SVHC（2016 年 6 月公布）(The fifteenth 1 SVHC(Announced in June, 2016))

单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
169	苯并芘 Benzo[def]chrysene	50-32-8	200-028-5	0.0100

第十六批 4 种 SVHC（2017 年 1 月公布）(The sixteenth 4 SVHC(Announced in January, 2017))

单位(Unit)：%

序号 No.	物质名称 Substance Name(s)	CAS 号 CAS No.	EC 号 EC No.	报告限 Report Limit
170	2,2-双(4-羟基苯基)丙烷（双酚A） 4,4'-isopropylidenediphenol (bisphenol A)（BPA）	80-05-7	201-245-8	0.0100
171	支链与直链的4-庚基苯酚 (4-HPbl) 4-heptylphenol, branched and linear (4-HPbl)	—	—	0.0500
172	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	-- 206-400-3 221-470-5	0.0100
173	对-(1,1-二甲基丙基)酚 （对叔戊基苯酚） (PTAP) 4-tert-pentylphenol (PTAP)	80-46-6	201-280-9	0.0100

注释(Note)：

-0.1%=1000mg/kg

-mg/kg=ppm=parts per million

-*：无机 SVHC 的化合物通过检测钴、氯、钠、砷、铬、钾、铅、硼、锆、钛、锡、磷、钙、锌、锶、钼、铝、镉元素的结果换算而来，并用适当溶剂萃取进行确认，同时建议客户检查化学配方表，进一步确认是否含有上述物质。

Inorganic SVHC compounds are obtained by converting the test results of cobalt, chloride, sodium, arsenic, chromium, potassium, lead, boron, zirconium, titanium, tin, phosphorus, calcium, zinc, strontium, molybdenum, aluminum and cadmium elements, and confirmed through the appropriate solvent extraction. At the same time, customers are suggested to check the chemical formula table, to further confirm whether above materials are contained.

-**：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).

-***：C.I.：颜料索引号, C.I.:Colour Index

-****：蒸馏所分离出来的轻油部分, Light fractions from distillation

Shenzhen Hongcai Testing Technology Co., Ltd 深圳市虹彩检测技术有限公司 报告专用章

检测报告(Test Report)

–①：由于这些物质是 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，所有这些物质的检测结果是由选定的具有代表性的物质的主要组成成分的检测结果换算而来的。

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.

–② ：由于此物质含有多种物质，检测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检测结果是基于特定的元素的结果换算而来。

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.

附加信息(Appendix)：

3） 依据法规（EC）No 1907/2006(REACH)第 33 条规定——有责任交流物品当中有关物质的信息。

According to the Article 33 of the Regulation (EC) No 1907/2006(REACH)-Duty to communicate information on substances in articles.

－物品中所含有的某一物质若符合第 57 条的标准且被鉴定依照第 59 条（1）该物质在物品中的结果在质量比（w/w）0.1%以上，其供应方需向接收方提供此物品的详细信息，若可以，还需提供包括至少物质名称在内的可获取的物质安全使用信息。

Any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a Result above 0.1% weight by weight(w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.

－根据消费者要求，物品中所含有的某一物质若符合第 57 条的标准且被鉴定依照第 59 条（1）该物质在物品中的结果在质量比（w/w）0.1%以上，其供应方需向消费者提供此物品的详细信息，若可以，还需提供包括至少物质名称在内的可获取的物质安全使用信息。有关信息在请求后 45 天内免费提供。

On request by a consumer any supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a Result above 0.1% weight by weight(w/w) shall provide the consumer with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.The relevant information shall be provided, free of charge, within 45 days of receipt of the request.

Shenzhen Hongcai Testing Technology Co., Ltd 深圳市虹彩检测技术有限公司 报告专用章

检测报告(Test Report)

4） 依据法规（EC）No 1907/2006（REACH）第 33 条规定——通告物品中所含有的物质。
According to the Article 33 of the Regulation (EC) No 1907/2006(REACH)-Notification of the Substance in Article.

－如果某一物质符合第 57 条的标准且依照第 59 条（1）被鉴定，该物品所含有的物质列入了候选名单中，其 EU&EEA 生产商或者进口商必须告知 ECHA（欧盟化学品管理局）。若此物质结果超过了 0.1%质量比（w/w）且其生产/进口数量每年总计在 1 吨以上，生产商和进口商有义务进行通报。

If a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1), EU and EEA producers or importers of articles have to notify ECHA when their article contains a substance on the Candidate List. This obligation applies if the substance is present above 0.1%(w/w) and its quantities in the produced/imported articles are above 1 tonne in total per year.

5） 依据法规（EC）No 1907/2006(REACH) 的其他条例规定,有义务提供物质本身的信息或者在配制品中的信息。
According to the other articles of the Regulation(EC) No 1907/2006(REACH),The relevant obligation for the substance on its own or in preparation.

－义务：物质, OBLIGATIONS:SUBSTANCES

从 2008 年 10 月 28 日开始，当物质列入候选名单时，其 EU&EEA 供应方必须提供给客户安全数据清单。

From 28 October 2008, EU&EEA suppliers of a substance have to provide a safety data sheet to their customers when the substance is on the Candidate List.

－义务：配置品, OBLIGATIONS:PREPARATIONS

从 2008 年 10 月 28 日开始，根据指令 1999/45/EC，没有划分为危险品的配制品，若配制品中含有至少一种列入清单中的物质，其结果不超过非气态性配制品的质量比（w/w）0.1%，且不超过气态性配制品的体积比 0.2%，可以根据接受方的要求，EU&EEA 供应商必须提供给接受方安全数据清单。

From 28 October 2008, EU&EEA suppliers of a preparation not classified as dangerous according to Directive 1999/45/EC have to provide the recipients, at their request, with a safety data sheet if the preparation contains at least one substance on the Candidate List and its individual Result is at least 0.1%(w/w) for non gaseous preparations and at least 0.2% by volume for gaseous preparations.

*****报告结束(End)*****