# 检测报告
# Test Report

报告编号 A2240338532102001E
Report No. A2240338532102001E



**报告抬头公司名称** 扬州升阳电子有限公司
**Company Name shown on Report** YANGZHOU SHENGYANG ELECTRONICS CO.,LTD.
**地址** 高邮市北开发区长兴路
**Address** CHANGXING ROAD,NORTH DEVELOPMENT ZONE,GAOYOU CITY,JIANGSU PROVINCE,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 applicant**

| | |
|---|---|
| 样品名称 | 导电高分子型固态铝电解电容器 |
| Sample Name | Conductive polymer aluminum solid capacitors |
| 样品接收日期 | 2024.06.12 |
| Sample Received Date | Jun. 12, 2024 |
| 样品检测日期 | 2024.06.12-2024.06.20 |
| Testing Period | Jun. 12, 2024 to Jun. 20, 2024 |

**检测要求/检测依据/检测结果** 请参见下页。
**Test Requested/Test Method/Test Result(s)** Please refer to the following page(s).

**摘要**
**Summary**

根据分析结果，所提交样品中 SVHC 浓度≤0.1%(w/w)。
According to the analytical results, concentrations of SVHC are≤0.1% (w/w) in the submitted sample(s).

批准 Approved by 陈凯敏 实验室经理 Lab Manager
日期 Date 2024.06.25

No. R475314698

上海华测品标检测技术有限公司
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**检测要求**

1.根据客户要求，参照法规(EC) No 1907/2006(REACH)，对所提交样品中 240 种高关注物质(SVHC)进行筛选测试。
2.根据客户要求，对由欧盟成员国向欧盟化学管理局(ECHA)所提交的 2 种于 2024 年 3 月 1 日公布意向成为法规(EC) No 1907/2006(REACH)中高关注度物质(SVHC)的候选物质进行筛选测试。
3.根据客户要求，对由欧盟成员国向欧盟化学管理局(ECHA)所提交的 1 种于 2021 年 6 月 1 日公布意向成为法规(EC) No 1907/2006(REACH)中高关注度物质(SVHC)的候选物质进行筛选测试。
4.根据客户要求，对 7 种潜在意向 SVHC 物质进行筛选测试。

**Test Requested**

1.As specified by client, to screen the 240 substances of very high concern (SVHC) under Regulation(EC) No 1907/2006 of REACH in the submitted sample(s).
2.As specified by client, to screen the 2 substances published on March 1st 2024 submitted by EU Member States to ECHA for intention for identification of substance of very high concern (SVHC) under Regulation (EC) No 1907/2006 of REACH in the submitted sample(s).
3.As specified by client, to screen the 1 substance published on June 1st 2021 submitted by EU Member States to ECHA for intention for identification of substance of very high concern (SVHC) under Regulation (EC) No1907/2006 of REACH in the submitted sample(s).
4.As specified by client, to screen the 7 potential intentional substances for identification of SVHC in the submitted sample(s).

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**检测结果1Test Result(s) 1**

| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | 浓度 Concentration (%) | RL(%) |
|---|---|---|---|---|---|
| | | | | 001 | |
| - | - | 所有 SVHC 物质（见候选清单）<br>All tested SVHC (See the candidate list) | - | N.D. | - |

**检测结果 2 Test Result(s) 2**

| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | 浓度 Concentration (%) | RL (%) |
|---|---|---|---|---|---|
| | | | | 001 | |
| - | - | 所有意向/潜在意向 SVHC 物质（见意向/潜在意向 SVHC 物质清单）<br>All tested intention/potentialintention for identification of SVHC (See the list of intention/potentialintention for identification of SVHC) | - | N.D. | - |

**检测依据 Test Method:**

参考 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 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, PLM, SEM, IC, HPLC, GC-MS, GC-MS(NCI), GC-FID, HPLC-DAD 及 LC-MS-MS 分析。
Analyzed by ICP-OES, UV-Vis, PLM, SEM, IC, HPLC, GC-MS, GC-MS(NCI), GC-FID, HPLC-DAD and LC-MS-MS.

**样品/部位描述 Sample/Part Description**

| 序号 No. | CTI 样品 ID CTI Sample ID | 描述 Description |
|---|---|---|
| 1 | 001 | 电子元器件（整体混合测试）<br>Electronic components(Mix all) |

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**备注 Remark:**

1. 结果仅显示检出的 SVHC，低于 RL 的 SVHC 没有列出。所有测试的 SVHC 见下页的 SVHC/意向/潜在意向 SVHC 清单。The table of tested result(s) only shows detected SVHC, and SVHC that below RL are not reported. Please refer to the List of SVHC/intention/potential intention for identification of SVHC on next pages.
2. w/w % = 重量百分比 weight by weight; 0.1%=1000mg/kg =1000ppm
3. N.D. = 未检出 Not Detected (< RL)
4. RL = 报告检出限 Report Limit (当浓度值≥RL 时显示数据。RL 不同于法规限值。Concentration value will be shown if it ≥ RL. RL is not regulatory limit.)
5. ※ = 意向 SVHC (Intentionfor identification of SVHC)
6. ⁂ = 潜在意向 SVHC (Potential intention for identification of SVHC)
7. *: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 fromthe 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、双(乙酰丙酮酸)二丁基锡、[二月桂酸二辛基锡，锡烷，二辛基-，双(椰油酰氧基)衍生物，以及任何其他锡烷，二辛基-，双(脂肪酰氧基)衍生物。其中 C12 为脂肪酰氧基部分的主要碳原子数]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 DOTEand MOTE), Dibutylbis(pentane-2,4-dionato-O,O')tin,[Dioctyltin 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] by theconversion from the test results of certain compounds(Tributyl Tins(TBT), Dibutyl Tins(DBT), Dioctyl Tins(DOT), Monooctyl Tins(MOT)).
8. **: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 coveredby index number 650-017-00-8 in Annex VI of theRegulation on Classification, Labeling and Packagingof chemical substances and mixtures, the so called CLP Regulation(Regulation (EC) No 1272/2008).
9. ***:C.I.:颜料索引号 Colour Index
10. ****:蒸馏所分离出来的轻油部分 Light fractions from distillation
11. *****: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 Disodiumtetraborate,anhydrous and Tetraboron disodiumheptaoxide,hydrate is evaluated by Disodiumtetraborate, 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.

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12. ▲: 甲醛与苯胺的低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、2,2-二氨基二苯甲烷)的结果换算而来。Concentration value ofFormaldehyde, oligomeric reaction products with anilineby the conversion from the test results ofcertain compounds (2,4-Diaminodiphenylmethane,4,4'- Diaminodiphenylmethane, 2,2-Diaminodiphenylmethane).
13. 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。当其测试结果≥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。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. When the content of the representative substances 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.
14. 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 containvariable substances, the test resultsare calculated based onmain constituents of the representativecompounds for the substances,and the test results of the representative compounds are calculated basedon the result of specified heavy metal elements.
15. 根据客户要求，对样品进行整体混合测试，测试结果不代表样品中任何一种单一材质的含量。
As specified by client, the test was conducted by mixing all materials together.
The result(s) shown on this report may be different from the content of any homogeneous material.

**注释 Note:**

**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.**

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**SVHC 候选清单 Candidate List of SVHC**

| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | RL (%) |
|---|---|---|---|---|
| I | 1 | 蒽 Anthracene | 120-12-7 | 0.005 |
| I | 2 | 4,4'-二氨基二苯基甲烷 4,4'- Diaminodiphenylmethane | 101-77-9 | 0.005 |
| I | 3 | 邻苯二甲酸二丁酯 Dibutyl phthalate(DBP) | 84-74-2 | 0.005 |
| I | 4 | 二氯化钴 Cobalt dichloride* | 7646-79-9 | 0.01 |
| I | 5 | 五氧化二砷 Diarsenic pentaoxide* | 1303-28-2 | 0.01 |
| I | 6 | 三氧化二砷 Diarsenic trioxide* | 1327-53-3 | 0.01 |
| I | 7 | 重铬酸钠 Sodium dichromate* | 7789-12-0<br>10588-01-9 | 0.01 |
| I | 8 | 二甲苯麝香<br>5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene) | 81-15-2 | 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 | 0.005 |
| I | 10 | 六溴环十二烷 Hexabromocyclododecane (HBCDD) | 25637-99-4<br>3194-55-6<br>(134237-50-6)<br>(134237-51-7)<br>(134237-52-8) | 0.005 |
| I | 11 | 短链氯化石蜡<br>Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (SCCPs) | 85535-84-8 | 0.01 |
| I | 12 | 三丁基氧化锡 Bis(tributyltin) oxide (TBTO)* | 56-35-9 | 0.005 |
| I | 13 | 砷酸氢铅 Lead hydrogen arsenate* | 7784-40-9 | 0.01 |
| I | 14 | 邻苯二甲酸丁基苄酯 Benzyl butyl phthalate(BBP) | 85-68-7 | 0.005 |
| I | 15 | 三乙基砷酸酯 Triethyl arsenate* | 15606-95-8 | 0.01 |
| II | 16 | ①蒽油 Anthracene oil | 90640-80-5 | 0.05 |
| II | 17 | ①蒽油,蒽糊,轻油<br>Anthracene oil, anthracene paste, distn. lights**** | 91995-17-4 | 0.05 |
| II | 18 | ①蒽油,蒽糊,蒽馏分<br>Anthracene oil, anthracene paste,anthracene fraction | 91995-15-2 | 0.05 |
| II | 19 | ①蒽油,含蒽量少 Anthracene oil, anthracene-low | 90640-82-7 | 0.05 |
| II | 20 | ①蒽油,蒽糊 Anthracene oil, anthracene paste | 90640-81-6 | 0.05 |
| II | 21 | ①煤焦油沥青,高温 Pitch, coal tar, high-temp. | 65996-93-2 | 0.05 |
| II | 22 | 丙烯酰胺 Acrylamide | 79-06-1 | 0.01 |
| II | 23 | 2,4-二硝基甲苯 2,4-dinitrotoluene | 121-14-2 | 0.01 |
| II | 24 | 邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP) | 84-69-5 | 0.005 |
| II | 25 | ②铬酸铅 Lead chromate | 7758-97-6 | 0.05 |
| II | 26 | ②钼铬红(C.I.颜料红 104)<br>Lead chromate molybdate sulphate red (C.I. Pigment Red 104)*** | 12656-85-8 | 0.05 |
| II | 27 | ②铅铬黄(C.I.颜料黄 34)<br>Lead sulfochromate yellow (C.I. Pigment Yellow 34)*** | 1344-37-2 | 0.05 |
| II | 28 | 磷酸三(2-氯乙基)酯 Tris(2-chloroethyl) phosphate (TCEP) | 115-96-8 | 0.01 |
| III | 29 | 三氯乙烯 Trichloroethylene | 79-01-6 | 0.005 |
| III | 30 | 硼酸 Boricacid* | 10043-35-3<br>11113-50-1 | 0.01 |

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| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | RL (%) |
|---|---|---|---|---|
| III | 31 | ②四硼酸钠，无水 Disodiumtetraborate,anhydrous***** | 1330-43-4 12179-04-3 1303-96-4 | 0.01 |
| III | 32 | ②四硼酸钠，水合物 Tetraboron disodiumheptaoxide,hydrate***** | 12267-73-1 | 0.01 |
| III | 33 | 铬酸钠 Sodium chromate* | 7775-11-3 | 0.01 |
| III | 34 | 铬酸钾 Potassium chromate* | 7789-00-6 | 0.01 |
| III | 35 | 重铬酸铵 Ammonium dichromate* | 7789-09-5 | 0.01 |
| III | 36 | 重铬酸钾Potassium dichromate* | 7778-50-9 | 0.01 |
| IV | 37 | 硫酸钴 Cobalt(Ⅱ) sulphate* | 10124-43-3 | 0.01 |
| IV | 38 | 硝酸钴 Cobalt(Ⅱ) dinitrate* | 10141-05-6 | 0.01 |
| IV | 39 | 碳酸钴 Cobalt(Ⅱ) carbonate* | 513-79-1 | 0.01 |
| IV | 40 | 醋酸钴 Cobalt(Ⅱ) diacetate* | 71-48-7 | 0.01 |
| IV | 41 | 乙二醇单甲醚2-methoxyethanol | 109-86-4 | 0.005 |
| IV | 42 | 乙二醇单乙醚2-ethoxyethanol | 110-80-5 | 0.005 |
| IV | 43 | 三氧化铬Chromium trioxide* | 1333-82-0 | 0.01 |
| IV | 44 | ①铬酸及其低聚物、重铬酸及其低聚物 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 | 0.01 |
| V | 45 | 乙二醇乙醚乙酸酯 2-ethoxyethyl acetate | 111-15-9 | 0.01 |
| V | 46 | 铬酸锶 Strontium chromate* | 7789-06-2 | 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 | 0.01 |
| V | 48 | 肼 Hydrazine | 7803-57-8 302-01-2 | 0.01 |
| V | 49 | N-甲基吡咯烷酮 1-methyl-2-pyrrolidone (NMP) | 872-50-4 | 0.01 |
| V | 50 | 1，2，3-三氯丙烷 1,2,3-trichloropropane | 96-18-4 | 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 | 0.01 |
| VI | 52 | 铬酸铬 Dichromium tris(chromate)* | 24613-89-6 | 0.01 |
| VI | 53 | 氢氧化铬酸锌钾 Potassium hydroxyoctaoxodizincatedichromate* | 11103-86-9 | 0.01 |
| VI | 54 | 氢氧化铬酸锌 Pentazinc chromate octahydroxide* | 49663-84-5 | 0.01 |
| VI | 55 | ②硅酸铝耐火陶瓷纤维 Aluminosilicate Refractory Ceramic Fibres (RCF)** | - | 0.05 |
| VI | 56 | ②氧化锆硅酸铝耐火陶瓷纤维 Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF)** | - | 0.05 |
| VI | 57 | ①甲醛与苯胺的低聚物 Formaldehyde, oligomeric reaction products with aniline▲ | 25214-70-4 | 0.01 |
| VI | 58 | 邻苯二甲酸二甲氧基乙酯 Bis(2-methoxyethyl) phthalate | 117-82-8 | 0.005 |
| VI | 59 | 2-甲氧基苯胺(邻甲氧基苯胺) 2-Methoxyaniline (o-Anisidine) | 90-04-0 | 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 | 140-66-9 | 0.005 |
| VI | 61 | 1,2-二氯乙烷 1,2-dichloroethane | 107-06-2 | 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 | 0.005 |

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|---|---|---|---|---|
| VI | 63 | 砷酸 Arsenic acid* | 7778-39-4 | 0.01 |
| VI | 64 | 砷酸钙 Calcium arsenate* | 7778-44-1 | 0.01 |
| VI | 65 | 砷酸铅 Trilead diarsenate* | 3687-31-8 | 0.01 |
| VI | 66 | N,N-二甲基乙酰胺 N,N-dimethylacetamide (DMAC) | 127-19-5 | 0.005 |
| VI | 67 | 4,4'-亚甲基双(2-氯苯胺)<br>2,2'-dichloro-4,4'-methylenedianiline (MOCA) | 101-14-4 | 0.005 |
| VI | 68 | 酚酞 Phenolphthalein | 77-09-8 | 0.005 |
| VI | 69 | 叠氮化铅 Lead diazide, Lead azide* | 13424-46-9 | 0.01 |
| VI | 70 | 2,4,6-三硝基间苯二酚铅(别名：收敛酸铅)<br>Lead styphnate* | 15245-44-0 | 0.01 |
| VI | 71 | 苦味酸铅 Lead dipicrate* | 6477-64-1 | 0.01 |
| VII | 72 | 1,2-二(2-甲氧基乙氧基)乙烷<br>1,2-bis(2-methoxyethoxy) ethane (TEGDME; triglyme) | 112-49-2 | 0.01 |
| VII | 73 | 乙二醇二甲醚<br>1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) | 110-71-4 | 0.01 |
| VII | 74 | 三氧化二硼 Diboron trioxide* | 1303-86-2 | 0.01 |
| VII | 75 | 甲酰胺 Formamide | 75-12-7 | 0.01 |
| VII | 76 | 甲基磺酸铅 Lead(II) bis(methanesulfonate)* | 17570-76-2 | 0.01 |
| VII | 77 | 异氰尿酸三缩水甘油脂<br>1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC) | 2451-62-9 | 0.01 |
| VII | 78 | 异氰脲酸 β-三缩水甘油酯<br>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 |
| VII | 79 | 4,4'-二(N,N-二甲氨基)二苯甲酮(米氏酮)<br>4,4'-bis(dimethylamino) benzophenone (Michler's ketone) | 90-94-8 | 0.01 |
| VII | 80 | 4,4'-(对二甲氨基)二苯基甲烷(米氏碱)<br>N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base) | 101-61-1 | 0.01 |
| VII | 81 | C.I.碱性紫 3<br>[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride(C.I. Basic Violet 3)*** | 548-62-9 | 0.01 |
| VII | 82 | C.I.碱性蓝 26<br>[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 | 0.01 |
| VII | 83 | C.I.溶剂蓝 4<br>α,α-Bis[4-(dimethylamino)phenyl]-4(phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)*** | 6786-83-0 | 0.01 |
| VII | 84 | α,α-二[(二甲氨基)苯基]-4-甲氨基苯甲醇<br>4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol | 561-41-1 | 0.01 |
| VIII | 85 | 十溴二苯醚<br>Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE) | 1163-19-5 | 0.05 |

# 检测报告
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| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | RL (%) |
|---|---|---|---|---|
| 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]* | - | 0.05 |
| VIII | 87 | 偶氮二甲酰胺 Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))(ADCA) | 123-77-3 | 0.05 |
| VIII | 88 | 对特辛基苯酚乙氧基醚 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated *[covering well-defined substances and UVCB substances, polymers and homologues]* | - | 0.05 |
| VIII | 89 | 全氟十一烷酸 Henicosafluoroundecanoic acid | 2058-94-8 | 0.05 |
| VIII | 90 | 全氟十三酸 Pentacosafluorotridecanoic acid | 72629-94-8 | 0.05 |
| 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-dicarboxylic anhydride | 85-42-7 13149-00-3 14166-21-3 | 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 | 0.05 |
| VIII | 93 | 全氟十四酸 Heptacosafluorotetradecanoic acid | 376-06-7 | 0.05 |
| VIII | 94 | 邻苯二甲酸二异戊酯 Diisopentyl phthalate (DIPP) | 605-50-5 | 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 | 0.05 |
| VIII | 96 | 邻苯二甲酸正戊基异戊基酯 n-pentyl-isopentylphthalate | 776297-69-9 | 0.05 |
| VIII | 97 | 甲氧基乙酸 Methoxyacetic acid | 625-45-6 | 0.05 |
| VIII | 98 | 全氟十二烷酸 Tricosafluorododecanoic acid | 307-55-1 | 0.05 |
| VIII | 99 | 乙二醇二乙醚 1,2-diethoxyethane | 629-14-1 | 0.05 |
| VIII | 100 | 3-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 | 0.05 |
| VIII | 101 | 2,4-二氨基甲苯 4-methyl-m-phenylenediamine (toluene-2,4-diamine) | 95-80-7 | 0.05 |
| VIII | 102 | N-甲基乙酰胺 N-methylacetamide | 79-16-3 | 0.05 |
| VIII | 103 | 氧化铅与硫酸铅的复合物 Pentalead tetraoxide sulphate* | 12065-90-6 | 0.01 |
| VIII | 104 | 4-氨基联苯 Biphenyl-4-ylamine | 92-67-1 | 0.05 |
| VIII | 105 | 地乐酚 Dinoseb (6-sec-butyl-2,4-dinitrophenol) | 88-85-7 | 0.05 |
| VIII | 106 | 双(十八酸基)二氧代三铅 Dioxobis(stearato)trilead* | 12578-12-0 | 0.01 |
| VIII | 107 | 硝酸铅 Lead dinitrate* | 10099-74-8 | 0.01 |
| VIII | 108 | 三碱式硫酸铅 Tetralead trioxide sulphate* | 12202-17-4 | 0.01 |
| VIII | 109 | 氧化铅 Lead monoxide (lead oxide)* | 1317-36-8 | 0.01 |

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| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | RL (%) |
|---|---|---|---|---|
| VIII | 110 | 钛酸铅 Lead titanium trioxide* | 12060-00-3 | 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 | 0.05 |
| VIII | 112 | 碱式乙酸铅 Acetic acid, lead salt, basic* | 51404-69-4 | 0.01 |
| VIII | 113 | 硫酸二甲酯 Dimethyl sulphate | 77-78-1 | 0.05 |
| VIII | 114 | 呋喃 Furan | 110-00-9 | 0.05 |
| VIII | 115 | 颜料黄 41<br>Pyrochlore, antimony lead yellow* | 8012-00-8 | 0.01 |
| VIII | 116 | 四乙基铅 Tetraethyllead* | 78-00-2 | 0.01 |
| VIII | 117 | 二盐基邻苯二甲酸铅[Phthalato(2-)]dioxotrilead* | 69011-06-9 | 0.01 |
| VIII | 118 | 硫酸二乙酯 Diethyl sulphate | 64-67-5 | 0.05 |
| VIII | 119 | 氨基氰铅盐 Lead cyanamidate* | 20837-86-9 | 0.01 |
| VIII | 120 | 掺杂铅的硅酸钡<br>Silicic acid ($H_2Si_2O_5$), barium salt (1:1), lead-doped* | 68784-75-8 | 0.01 |
| VIII | 121 | 磷酸氧化铅 Trilead dioxide phosphonate* | 12141-20-7 | 0.01 |
| VIII | 122 | 邻甲基苯胺 *o*-Toluidine | 95-53-4 | 0.05 |
| VIII | 123 | 邻氨基偶氮甲苯 *o*-aminoazotoluene | 97-56-3 | 0.05 |
| VIII | 124 | 4-对氨基偶氮苯 4-aminoazobenzene | 60-09-3 | 0.05 |
| VIII | 125 | 6-甲氧基-间甲苯胺 6-methoxy-*m*-toluidine (*p*-cresidine) | 120-71-8 | 0.05 |
| VIII | 126 | 二丁基二氯化锡 Dibutyltin dichloride (DBTC)* | 683-18-1 | 0.05 |
| VIII | 127 | 钛酸铅锆 Lead titanium zirconium oxide* | 12626-81-2 | 0.01 |
| VIII | 128 | 环氧丙烷 Methyloxirane (Propylene oxide) | 75-56-9 | 0.05 |
| VIII | 129 | 1-溴代正丙烷 1-bromopropane (n-propyl bromide) | 106-94-5 | 0.05 |
| VIII | 130 | 碱式碳酸铅 Trilead bis(carbonate) dihydroxide* | 1319-46-6 | 0.01 |
| VIII | 131 | C16-18-脂肪酸铅盐 Fatty acids, C16-18, lead salts* | 91031-62-8 | 0.01 |
| VIII | 132 | 四氧化三铅 Orange lead (lead tetroxide)* | 1314-41-6 | 0.01 |
| VIII | 133 | 二碱式亚硫酸铅(II)<br>Sulfurous acid, lead salt, dibasic* | 62229-08-7 | 0.01 |
| VIII | 134 | 4,4'-二氨基二苯醚及其盐 4,4'-oxydianiline and its salts | 101-80-4 | 0.05 |
| VIII | 135 | 碱式硫酸铅 Lead oxide sulfate* | 12036-76-9 | 0.01 |
| VIII | 136 | 四氟硼酸铅 Lead bis(tetrafluoroborate)* | 13814-96-5 | 0.01 |
| VIII | 137 | 硅酸铅 Silicic acid, lead salt* | 11120-22-2 | 0.01 |
| VIII | 138 | N,N-二甲基甲酰胺 N,N-dimethylformamide | 68-12-2 | 0.05 |
| IX | 139 | 镉 Cadmium | 7440-43-9 | 0.01 |
| IX | 140 | 氧化镉 Cadmium oxide* | 1306-19-0 | 0.01 |
| IX | 141 | 邻苯二甲酸二戊酯 Dipentyl phthalate (DPP) | 131-18-0 | 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]* | - | 0.05 |
| IX | 143 | 全氟辛酸铵 Ammonium pentadecafluorooctanoate (APFO) | 3825-26-1 | 0.01 |
| IX | 144 | 全氟辛烷酸 Pentadecafluorooctanoic acid (PFOA) | 335-67-1 | 0.01 |

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| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | RL (%) |
|---|---|---|---|---|
| X | 145 | ①磷酸三(二甲苯)酯 Trixylyl phosphate | 25155-23-1 | 0.01 |
| X | 146 | C.I.直接黑 38<br>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 |
| X | 147 | 邻苯二甲酸二己酯 Dihexyl phthalate | 84-75-3 | 0.01 |
| X | 148 | 硫化镉 Cadmium sulphide* | 1306-23-6 | 0.01 |
| X | 149 | C.I.直接红 28<br>Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate)<br>(C.I. Direct Red 28)*** | 573-58-0 | 0.01 |
| X | 150 | 醋酸铅(Ⅱ)Lead di(acetate)* | 301-04-2 | 0.01 |
| X | 151 | 1,2-亚乙基硫脲<br>Imidazolidine-2-thione (2-imidazoline-2-thiol) | 96-45-7 | 0.01 |
| XI | 152 | ①邻苯二甲酸二己酯，直链和支链<br>1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear | 68515-50-4 | 0.01 |
| XI | 153 | 氯化镉 Cadmium chloride* | 10108-64-2 | 0.01 |
| XI | 154 | ②过硼酸钠，水合物；过硼酸钠盐<br>Sodium perborate; perboric acid, sodium salt***** | 15120-21-5<br>11138-47-9 | 0.01 |
| XI | 155 | ②过硼酸钠，无水 Sodium peroxometaborate***** | 7632-04-4 | 0.01 |
| XII | 156 | 2-(2H-苯并三唑-2-基)-4,6-二叔戊基苯酚<br>2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) | 25973-55-1 | 0.01 |
| XII | 157 | 2-(2'-羟基-3',5'-二叔丁基苯基)-苯并三唑<br>2-Benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) | 3846-71-7 | 0.01 |
| XII | 158 | 二正辛基-双(巯乙酸2-乙基己酯)锡<br>2-ethylhexyl<br>10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)* | 15571-58-1 | 0.05 |
| XII | 159 | 氟化镉Cadmium fluoride* | 7790-79-6 | 0.01 |
| XII | 160 | 硫酸镉 Cadmium sulphate* | 10124-36-4<br>31119-53-6 | 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<br>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)* | - | 0.05 |
| XIII | 162 | ①1,2-苯二羧酸, 二-C6-10-烷基酯；（葵基，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)<br>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<br>68648-93-1 | 0.05 |

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| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | RL (%) |
|---|---|---|---|---|
| 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）<br>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] | - | 0.05 |
| XIV | 164 | 硝基苯 Nitrobenzene | 98-95-3 | 0.01 |
| XIV | 165 | 2,4-二-叔丁基-6-(5-氯-2H-苯并三唑-2-基)苯酚<br>2,4-di-tert-butyl-6-(5- chlorobenzotriazol-2-yl)phenol (UV-327) | 3864-99-1 | 0.01 |
| XIV | 166 | 2-(2'-羟基-3'-异丁基-5'-叔丁基苯基)苯并三唑<br>2-(2H-benzotriazol-2-yl)- 4-(tert-butyl)-6-(sec-butyl)phenol (UV-350) | 36437-37-3 | 0.01 |
| XIV | 167 | 1,3-丙烷磺内酯 1,3-propanesultone | 1120-71-4 | 0.01 |
| XIV | 168 | 全氟壬酸及其钠和铵盐<br>Perfluorononan-1-oic-acid and its sodium and ammonium salts | 375-95-1<br>21049-39-8<br>4149-60-4 | 0.01 |
| XV | 169 | 苯并(a)芘<br>Benzo[def]chrysene (Benzo[a]pyrene) | 50-32-8 | 0.01 |
| XVI | 170 | 双酚 A<br>4,4'-isopropylidenediphenol (bisphenol A) (BPA) | 80-05-7 | 0.01 |
| XVI | 171 | 全氟癸酸(PFDA)及其钠盐和铵盐<br>Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts | 3108-42-7<br>335-76-2<br>3830-45-3 | 0.01 |
| XVI | 172 | 4-(1,1-二甲基丙基)苯酚<br>(别名：对叔戊基苯酚) *p*-(1,1-dimethylpropyl)phenol | 80-46-6 | 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] | - | 0.05 |
| XVII | 174 | 全氟己基磺酸及其盐<br>Perfluorohexane-1-sulphonic acid and its salts (PFHxS) | - | 0.0005 |
| XVIII | 175 | 得克隆(包括其所有反式和顺式异构体及其组合)<br>Dechlorane plus (including any of its individual anti- and syn-isomers or any combination thereof) | - | 0.01 |
| XVIII | 176 | 苯并[a]蒽Benzo[a]anthracene | 56-55-3 | 0.01 |
| XVIII | 177 | 硝酸镉Cadmium nitrate* | 10325-94-7 | 0.01 |
| XVIII | 178 | 碳酸镉Cadmium carbonate* | 513-78-0 | 0.01 |
| XVIII | 179 | 氢氧化镉Cadmium hydroxide* | 21041-95-2 | 0.01 |
| XVIII | 180 | 䓛Chrysene | 218-01-9 | 0.01 |

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| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | RL (%) |
|---|---|---|---|---|
| XVIII | 181 | ①1,3,4-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)] | - | 0.05 |
| XIX | 182 | 八甲基环四硅氧烷 Octamethylcyclotetrasiloxane (D4) | 556-67-2 | 0.01 |
| XIX | 183 | 十甲基环五硅氧烷Decamethylcyclopentasiloxane (D5) | 541-02-6 | 0.01 |
| XIX | 184 | 十二甲基环六硅氧烷 Dodecamethylcyclohexasiloxane (D6) | 540-97-6 | 0.01 |
| XIX | 185 | 铅 Lead | 7439-92-1 | 0.01 |
| XIX | 186 | 八硼酸二钠 Disodium octaborate* | 12008-41-2 | 0.01 |
| XIX | 187 | 苯并(g,h,i)苝Benzo[ghi]perylene | 191-24-2 | 0.01 |
| XIX | 188 | ①氢化三联苯 Terphenyl, hydrogenated | 61788-32-7 | 0.01 |
| XIX | 189 | 乙二胺 Ethylenediamine (EDA) | 107-15-3 | 0.01 |
| XIX | 190 | 偏苯三酸酐 Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA) | 552-30-7 | 0.01 |
| XIX | 191 | 邻苯二甲酸二环己酯Dicyclohexyl phthalate (DCHP) | 84-61-7 | 0.01 |
| XX | 192 | 4,4'-(1,3-二甲基丁基)二苯酚 2,2-bis(4'-hydroxyphenyl)-4-methylpentane | 6807-17-6 | 0.01 |
| XX | 193 | 苯并[k]荧蒽 Benzo[k]fluoranthene | 207-08-9 | 0.01 |
| XX | 194 | 荧蒽 Fluoranthene | 206-44-0 | 0.01 |
| XX | 195 | 菲 Phenanthrene | 85-01-8 | 0.01 |
| XX | 196 | 芘 Pyrene | 129-00-0 | 0.01 |
| XX | 197 | 1,7,7-三甲基-3-(苯亚甲基)双环[2,2,1]庚-2-酮 1,7,7-trimethyl-3-(phenylmethylene) bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor) (3-BC) | 15087-24-8 | 0.01 |
| XXI | 198 | 2,3,3,3-四氟-2-(七氟丙氧基)丙酸及其盐和酰基卤化物(HFPO-DA) 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 |
| XXI | 199 | 甲二醇乙醚乙酸酯2-methoxyethyl acetate | 110-49-6 | 0.01 |
| XXI | 200 | 4-叔丁基苯酚4-tert-butylphenol | 98-54-4 | 0.01 |
| XXI | 201 | ①三(壬基苯基)亚磷酸酯(TNPP)其中4-壬基苯酚(支链和直链)(4-NP)含量大于等于0.1 % Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP) | - | 0.01 |
| XXII | 202 | 2-苄基-2-二甲基氨基-1-(4-吗啉苯基)丁酮 2-benzyl-2-dimethylamino-4'- morpholinobutyrophenone | 119313-12-1 | 0.01 |
| XXII | 203 | 2-甲基-1-(4-甲硫基苯基)-2-吗啉基-1-丙酮 2-methyl-1-(4-methylthiophenyl)-2- morpholinopropan-1-one | 71868-10-5 | 0.01 |
| XXII | 204 | 邻苯二甲酸二异己酯 Diisohexyl phthalate | 71850-09-4 | 0.01 |
| XXII | 205 | 全氟丁烷磺酸(PFBS)及其盐 Perfluorobutane sulfonic acid (PFBS) and its salts | - | 0.01 |
| XXIII | 206 | 1-乙烯基咪唑 1-vinylimidazole | 1072-63-5 | 0.01 |
| XXIII | 207 | 2-甲基咪唑 2-methylimidazole | 693-98-1 | 0.01 |
| XXIII | 208 | 对羟基苯甲酸丁酯 Butyl 4-hydroxybenzoate | 94-26-8 | 0.01 |

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| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | RL (%) |
|---|---|---|---|---|
| XXIII | 209 | 双(乙酰丙酮酸)二丁基锡 Dibutylbis(pentane-2,4-dionato-O,O')tin* | 22673-19-4 | 0.05 |
| XXIV | 210 | 四乙二醇二甲醚<br>bis(2-(2-methoxyethoxy)ethyl) ether | 143-24-8 | 0.01 |
| XXIV | 211 | 二月桂酸二辛基锡，锡烷，二辛基-，双(椰油酰氧基)衍生物，以及任何其他锡烷，二辛基-，双(脂肪酰氧基)衍生物。其中 C12 为脂肪酰氧基部分的主要碳原子数<br>Dioctyltin 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* | - | 0.05 |
| XXV | 212 | 1,4-二恶烷 1,4-dioxane | 123-91-1 | 0.01 |
| XXV | 213 | 2,2-双(溴甲基) -1,3-丙二醇<br>三溴新戊醇/3-溴-2,2-二溴乙基丙醇<br>2,3-二溴丙醇<br>2,2-bis(bromomethyl) propane-1,3-diol (BMP)<br>2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA)<br>2,3-dibromo-1-propanol (2,3-DBPA) | 3296-90-0<br>36483-57-5<br>1522-92-5<br>96-13-9 | 0.01 |
| XXV | 214 | 2-(4-叔丁基苄基)丙醛及其立体异构体<br>2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers | - | 0.01 |
| XXV | 215 | 2,2-二(4-羟基苯基)丁烷(双酚 B)<br>4,4'-(1-methylpropylidene)bisphenol (bisphenol B) | 77-40-7 | 0.01 |
| XXV | 216 | 戊二醛 Glutaral | 111-30-8 | 0.01 |
| XXV | 217 | ①中链氯化石蜡(UVCB 物质，由≥80%的直链氯代烷烃组成，碳链长度在 C14 到 C17 之间)<br>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 |
| XXV | 218 | 硼酸钠盐 Orthoboric acid, sodium salt* | 13840-56-7 | 0.01 |
| XXV | 219 | ①烷基酚，碳链(C12 为主，直链或支链)主要在对位，包括其任何单个异构体或组合<br>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 |
| XXVI | 220 | (±)-1,7,7-三甲基-3-[(4-甲基苯基)亚甲基]双环[2.2.1]庚-2-酮，包括任何单独的异构体和/或其组合<br>(±)-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) | - | 0.01 |
| XXVI | 221 | 2,2'-亚甲基双-(4-甲基-6-叔丁基苯酚)<br>6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol | 119-47-1 | 0.01 |
| XXVI | 222 | S-(三环[5.2.1.$0^{2,6}$]癸-3-烯-8(或 9)-基)O-(异丙基或异丁基或 2-乙基己基)O-(异丙基或异丁基或 2-乙基己基)二硫代磷酸酯<br>S-(tricyclo[5.2.1.$0^{2,6}$]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 |
| XXVI | 223 | 乙烯基-三(2-甲氧基乙氧基)硅烷 tris(2-methoxyethoxy)vinylsilane | 1067-53-4 | 0.01 |
| XXVII | 224 | N-羟甲基丙烯酰胺 N-(hydroxymethyl)acrylamide | 924-42-5 | 0.01 |

# 检测报告
# Test Report



| 批次<br>Batch | 序号<br>No. | 物质名称<br>Substance Name(s) | CAS 号<br>CAS No. | RL (%) |
|---|---|---|---|---|
| XXVIII | 225 | 1,2-二(2,4,6-三溴苯氧基)乙烷<br>1,1'-[ethane-1,2-diylbisoxy]bis [2,4,6-tribromobenzene] | 37853-59-1 | 0.01 |
| XXVIII | 226 | 四溴双酚 A<br>2,2',6,6'-tetrabromo-4,4'- isopropylidenediphenol (TBBPA) | 79-94-7 | 0.01 |
| XXVIII | 227 | 双酚 S<br>4,4'-sulphonyldiphenol (BPS) | 80-09-1 | 0.01 |
| XXVIII | 228 | 偏硼酸钡 Barium diboron tetraoxide* | 13701-59-2 | 0.01 |
| XXVIII | 229 | 3,4,5,6-四溴-1,2-苯二羧酸双(2-乙基己基)酯，包括任何单独的异构体和/或其组合 Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof | - | 0.01 |
| XXVIII | 230 | 4-羟基苯甲酸 2-甲基丙酯 Isobutyl 4-hydroxybenzoate | 4247-02-3 | 0.01 |
| XXVIII | 231 | 三聚氰胺 Melamine | 108-78-1 | 0.05 |
| XXVIII | 232 | 全氟庚酸及其盐 Perfluoroheptanoic acid and its salts | - | 0.01 |
| XXVIII | 233 | 2,2,3,3,5,5,6,6-八氟-4-(1,1,1,2,3,3,3-七氟丙烷-2-基)吗啉和<br>2,2,3,3,5,5,6,6-八氟烷-4-(七氟丙基)吗啉的反应物料<br>Reaction mass of 2,2,3,3,5,5,6,6-octafluoro-<br>4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl) morpholine and<br>2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine | - | 0.05 |
| XXIX | 234 | 二苯基(2,4,6-三甲基苯甲酰基)氧化膦<br>Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | 75980-60-8 | 0.01 |
| XXIX | 235 | 4,4'-二氯二苯砜 Bis(4-chlorophenyl) sulphone | 80-07-9 | 0.01 |
| XXX | 236 | 2,4,6-三叔丁基苯酚<br>2,4,6-tri-tert-butylphenol(2,4,6-TTBP) | 732-26-3 | 0.01 |
| XXX | 237 | 2-[2-羟基-5-(1,1,3,3-四甲丁基)苯基]苯并三唑<br>2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol(UV-329) | 3147-75-9 | 0.01 |
| XXX | 238 | 2-(4-甲基苄基)-2-(二甲基氨基)-1-(4-吗啉苯基)-1-丁酮<br>2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)<br>phenyl]butan-1-one | 119344-86-4 | 0.01 |
| XXX | 239 | 2-(5-氯-2H-苯三唑-2-基)-6-(1,1-二甲基乙基)-4-甲基苯酚<br>Bumetrizole(UV-326) | 3896-11-5 | 0.01 |
| XXX | 240 | ①2-苯基丙烯与苯酚的低聚和烷基化反应产物<br>Oligomerisation and alkylation reaction products of 2-phenylpropene<br>and phenol | - | 0.01 |

# 检测报告
# Test Report



**意向/潜在意向 SVHC 物质清单 List of intention/potential intention for identification of SVHC**

| 批次 Batch | 序号 No. | 物质名称 Substance Name(s) | CAS 号 CAS No. | RL(%) |
|---|---|---|---|---|
| XXXI | 1 | 磷酸三苯酯 Triphenyl phosphate | 115-86-6 | 0.01 |
| XXXI | 2 | 过氧化二异丙苯 Bis(α,α-dimethylbenzyl) peroxide | 80-43-3 | 0.01 |
| ※ | 3 | 间苯二酚 Resorcinol | 108-46-3 | 0.01 |
| ⁂ | 4 | 八甲基三硅氧烷 Octamethyltrisiloxane | 107-51-7 | 0.01 |
| ⁂ | 5 | 六甲基二硅氧烷 Hexamethyldisiloxane | 107-46-0 | 0.01 |
| ⁂ | 6 | 十二甲基五硅氧烷 Dodecamethylpentasiloxane | 141-63-9 | 0.01 |
| ⁂ | 7 | 十甲基四硅氧烷 Decamethyltetrasiloxane | 141-62-8 | 0.01 |
| ⁂ | 8 | 1,1,1,3,5,5,5-七甲基三硅氧烷 1,1,1,3,5,5,5-heptamethyltrisiloxane | 1873-88-7 | 0.01 |
| ⁂ | 9 | 1,1,1,3,5,5,5-七甲基-3-[(三甲基甲硅烷基)氧基]三硅氧烷 1,1,1,3,5,5,5-heptamethyl-3-[(trimethylsilyl)oxy]trisiloxane | 17928-28-8 | 0.01 |
| ⁂ | 10 | 全氟三丙胺 Perfluamine | 338-83-0 | 0.01 |

# 检测报告
# Test Report



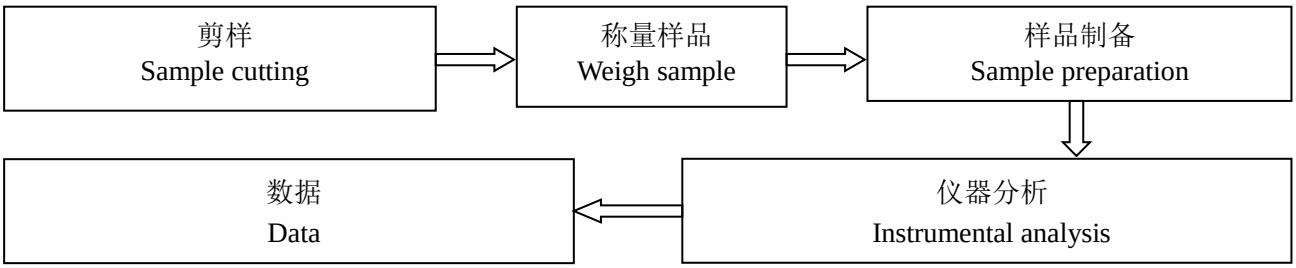
**附加信息 Appendix:**

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 concentrationabove 0.1 % weight by weight (w/w) has the duty to communicate information in accordance with Article33 of European Union regulation concerning the Registration, Evaluation, Authorization and Restrictionof 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 theconsumer with sufficient information to allow safe use of the article including, as a minimum, the nameof 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 theCandidate List on their own shall provide the recipient of the substance with a safety data sheet for freecompiled 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 apreparation does not meet the criteria for classification as dangerous in accordance with Directive1999/45/EC, but contains any substance that is included in the Candidate List in an individualconcentration of ≥ 0.1 % by weight for non-gaseous mixtures or ≥ 0.2 % by volume for gaseousmixtures.

# 检测报告
# Test Report



**检测流程 Test Process**



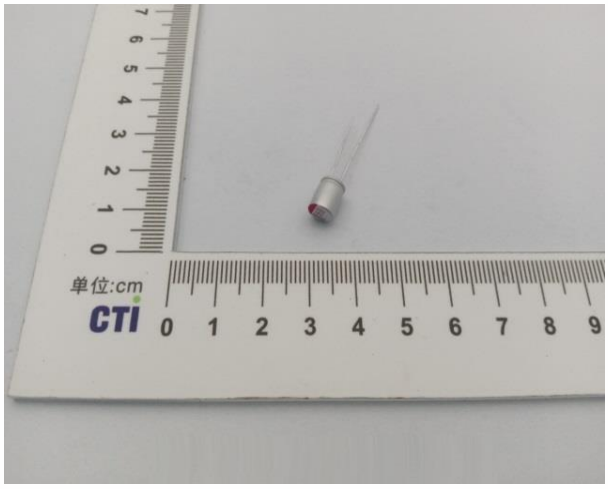
# 检测报告
# Test Report



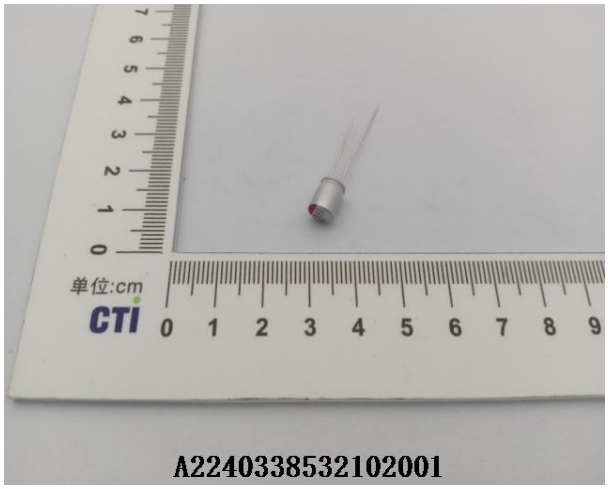
## 样品图片

## Photo(s) of the sample(s)

成品 Final Product




测试样品 Tested Sample



# 检测报告
# Test 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 invalid without approved signature, special seal and the seal on the perforation;
2. 报告抬头公司名称及地址、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 Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn’t verified;
3. 本报告检测结果仅对受测样品负责；
   The result(s) shown in this report refer(s) only to the sample(s) tested;
4. 除非另有说明，报告参照 ILAC-G8:09/2019 / CNAS-GL015:2022 使用简单接受（w=0）二元判定规则进行符合性判定；
   Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
5. 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;
6. 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.

*** 报告结束 ***
*** End of Report ***

# 检测报告
# Test Report

报告编号 A2240338532101001E
Report No. A2240338532101001E



| | |
|---|---|
| **报告抬头公司名称** | 扬州升阳电子有限公司 |
| **Company Name shown on Report** | YANGZHOU SHENGYANG ELECTRONICS CO.,LTD. |
| **地址** | 高邮市北开发区长兴路 |
| **Address** | CHANGXING ROAD,NORTH DEVELOPMENT ZONE,GAOYOU CITY,JIANGSU PROVINCE,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 applicant**

| | |
|---|---|
| 样品名称 | 导电高分子型固态铝电解电容器 |
| Sample Name | Conductive polymer aluminum solid capacitors |
| 样品接收日期 | 2024.06.12 |
| Sample Received Date | Jun. 12, 2024 |
| 样品检测日期 | 2024.06.12-2024.06.19 |
| Testing Period | Jun. 12, 2024 to Jun. 19, 2024 |

**测试内容 Test Conducted:**
根据客户的申请要求，具体要求详见下一页。
As requested by the applicant. For details refer to next page(s).

批准 Approved by: 陈凯敏 实验室经理 Lab Manager

日期 Date: 2024.06.20

上海华测品标检测技术有限公司
Centre Testing International Pinbiao(Shanghai) Co., Ltd.

No. R475311085
上海市闵行区万芳路 1351 号
No.1351, Wanfang Road, Minhang District, Shanghai, China

# 检测报告
# Test Report



**测试摘要 Executive Summary:**

| 测试要求<br>TEST REQUEST | 测试结果<br>CONCLUSION |
|---|---|
| 1. 美国环保署有毒物质控制法(TSCA)第 6(h)部分关于持久性、生物累积性和毒性(PBT)化学物质的管控<br>Persistent, Bioaccumulative, and Toxic (PBT) Chemicals under US EPA Toxic Substances Control Act (TSCA) Section 6(h) | |
| - 十溴二苯醚<br>Decabromodiphenyl Ether (DecaBDE) | 符合<br>PASS |
| 异丙基化磷酸三苯酯<br>Phenol, Isopropylated Phosphate (PIP (3:1)) | 符合<br>PASS |
| - 2,4,6-三叔丁基苯酚<br>2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP) | 符合<br>PASS |
| - 六氯丁二烯<br>Hexachlorobutadiene (HCBD) | 符合<br>PASS |
| - 五氯苯硫酚<br>Pentachlorothiophenol (PCTP) | 符合<br>PASS |
| 2. 欧盟法规（EC）No.1907/2006 (REACH)附录 17 及其修订案<br>Annex XVII of European regulation (EC) No. 1907/2006 (REACH) with Amendment(s) | |
| - 玩具和儿童护理品中的邻苯二甲酸酯（盐）<br>Phthalates in toys and childcare articles | 符合<br>PASS |
| - 砷<br>Arsenic(As) | 见结果页<br>See test result(s) |
| 3. (1) 根据欧盟 RoHS 指令 2011/65/EU 及其修订指令(EU) 2015/863 和客户要求, 对所提交样品中的铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs), 邻苯二甲酸酯(DBP, BBP, DEHP, DIBP)进行测试。<br>As specified by client and RoHS Directive 2011/65/EU with amendment (EU) 2015/863, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP) in the submitted sample(s). | 见结果页<br>See test result(s) |
| (2) 根据客户要求, 对所提交样品中的氯(Cl), 溴(Br), 全氟辛烷磺酸(PFOS)进行测试。<br>As specified by client, to test Chlorine (Cl), Bromine (Br), PerfluorooctaneSulfonates(PFOS) in the submitted sample(s). | 符合<br>PASS |

# 检测报告
# Test Report



(3)根据客户要求，对所提交样品中的多环芳烃(PAHs),锑(Sb)，六溴环十二烷(HBCDD)，氟(F)，碘(I) ,全氟辛酸(PFOA),红磷进行测试。 **见结果页**

As specified by client, to test Polycyclic Aromatic Hydrocarbons (PAHs), Antimony(Sb), Hexabromocyclododecane (HBCDD), Fluorine (F), Iodine (I), Perfluorooctanoic Acid(PFOA), Red phosphorusin the submitted sample(s). **See test result(s)**

**********详细结果，请见下页**********

********** Forfurther details, please refer to the following page(s)**********

# 检测报告
# Test Report



**1.1 美国环保署有毒物质控制法(TSCA)第 6(h)部分关于持久性、生物累积性和毒性(PBT)化学物质的管控 Persistent, Bioaccumulative, and Toxic (PBT) Chemicals under US EPA Toxic Substances Control Act (TSCA) Section 6(h)**

**▼十溴二苯醚 Decabromodiphenyl Ether (DecaBDE)**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| 十溴二苯醚 Decabromodiphenyl Ether (DecaBDE) | N.D. | N.D. | N.D. | 5 | N.D. |

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| 十溴二苯醚 Decabromodiphenyl Ether (DecaBDE) | N.D. | N.D. | N.D. | 5 | N.D. |

备注 Remark:

- MDL = 方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

**▼异丙基化磷酸三苯酯(PIP Phenol, Isopropylated Phosphate (PIP (3:1))**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL (mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| 异丙基化磷酸三苯酯 Phenol, Isopropylated Phosphate (PIP (3:1)) | N.D. | N.D. | N.D. | 5 | N.D. |

# 检测报告
# Test Report



| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL (mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| 异丙基化磷酸三苯酯 Phenol, Isopropylated Phosphate (PIP (3:1)) | N.D. | N.D. | N.D. | 5 | N.D. |

备注 Remark:
- MDL = 方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

**▼2,4,6-三叔丁基苯酚 2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP)**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| 2,4,6-三叔丁基苯酚 2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP) | N.D. | N.D. | N.D. | 5 | 3000 |

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| 2,4,6-三叔丁基苯酚 2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP) | N.D. | N.D. | N.D. | 5 | 3000 |

备注 Remark:
- MDL = 方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

**▼六氯丁二烯 Hexachlorobutadiene (HCBD)**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL (mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| 六氯丁二烯 Hexachlorobutadiene (HCBD) | N.D. | N.D. | N.D. | 5 | N.D. |

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL (mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| 六氯丁二烯 Hexachlorobutadiene (HCBD) | N.D. | N.D. | N.D. | 5 | N.D. |

备注 Remark:

- MDL = 方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

**▼五氯苯硫酚 Pentachlorothiophenol (PCTP)**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL (mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| 五氯苯硫酚 Pentachlorothiophenol (PCTP) | N.D. | N.D. | N.D. | 5 | 10000 |

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | | | 方法检出限 MDL (mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| 五氯苯硫酚 Pentachlorothiophenol (PCTP) | N.D. | N.D. | N.D. | 5 | 10000 |

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备注 Remark:
- MDL = 方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

**2.1 欧盟法规（EC）No.1907/2006 (REACH)附录 17 及其修订案**

**Annex XVII of European regulation (EC) No. 1907/2006 (REACH) with Amendment(s)**

▼玩具和儿童护理品中的邻苯二甲酸酯（盐）

Phthalates in toys and childcare articles

根据欧盟法规（EC）No.1907/2006 (REACH) 附录 17 及修订案(EU) No.552/2009 & No 2015/326 的条目 51 和 52，使用方法 EN 14372:2004，通过 GC-MS 分析。

As specified in entry 51 & entry 52, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendments No.552/2009 & No 2015/326, method(s) EN 14372:2004 was/were used, and the item(s) was/were analyzed by GC-MS.

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| **邻苯二甲酸酯 Phthalates** | | | | | |
| 邻苯二甲酸二丁酯 Dibutyl phthalate (DBP) CAS#:84-74-2 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸丁基苄基酯 Butyl benzyl phthalate (BBP) CAS#:85-68-7 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二(2-乙基)己酯 Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP) CAS#:84-69-5 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 总和 Total（DBP+ BBP+ DEHP+ DIBP） | N.D. | N.D. | N.D. | -- | ＜1000 mg/kg |
| 邻苯二甲酸二正辛酯 Di-n-octyl phthalate (DNOP) CAS#:117-84-0 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二异壬酯 Di-isononyl phthalate (DINP) CAS#:28553-12-0,68515-48-0 | N.D. | N.D. | N.D. | 50 mg/kg | -- |

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| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| **邻苯二甲酸酯 Phthalates** | | | | | |
| 邻苯二甲酸二异癸酯 Di-iso-decyl phthalate (DIDP) CAS#:26761-40-0,68515-49-1 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 总和 Total（DNOP+ DINP+ DIDP） | N.D. | N.D. | N.D. | -- | ＜1000 mg/kg |
| 客户对其它邻苯二甲酸酯(盐)的附加要求 Client's additional requirement on other phthalate(s) | | | | | |
| 邻苯二甲酸二甲酯 Dimethyl phthalate (DMP) CAS#:131-11-3 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二乙酯 Diethyl phthalate (DEP) CAS#:84-66-2 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二丙酯 Dipropyl phthalate (DPrP) CAS#:131-16-8 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二戊酯 Dipentyl phthalate (DPP) CAS#:131-18-0 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二环己酯 Dicyclohexyl phthalate (DCHP) CAS#:84-61-7 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二异辛酯 Diisooctyl phthalate (DIOP) CAS#:27554-26-3 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二壬酯 Dinonyl phthalate (DNP) CAS#:84-76-4 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二己酯 Di-n-hexyl phthalate (DNHP) CAS#:84-75-3 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二(2-甲氧基)乙酯 Bis(2-methoxyethyl) phthalate (DMEP) CAS#:117-82-8 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二异戊酯 Diisopentylphthalate (DIPP) CAS#:605-50-5 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二苄酯 Dibenzyl phthalate (DBzP) CAS#:523-31-9 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二苯酯 Diphenyl phthalate (DPhP) CAS#:84-62-8 | N.D. | N.D. | N.D. | 50 mg/kg | -- |

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| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| **邻苯二甲酸酯 Phthalates** | | | | | |
| 己二甲酸二乙基己基酯 Di(2-ethylhexyl) Adipate (DEHA) CAS#:103-23-1 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| *邻苯二甲酸烷基酯(C7-11 支型和线性结构) 1,2-Benzenedicarboxylic acid, di-(C7-11)-branched and linear alkyl esters (DHNUP) CAS#:68515-42-4 | N.D. | N.D. | N.D. | 100 mg/kg | -- |
| *邻苯二甲酸烷基酯(C6-8 支型结构,C7 富集) 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) CAS#:71888-89-6 | N.D. | N.D. | N.D. | 100 mg/kg | -- |
| 邻苯二甲酸二异己酯 Di-iso-hexyl-phthalates (DIHxP) CAS#:71850-09-4 | N.D. | N.D. | N.D. | 50 mg/kg | -- |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| **邻苯二甲酸酯 Phthalates** | | | | | |
| 邻苯二甲酸二丁酯 Dibutyl phthalate (DBP) CAS#:84-74-2 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸丁基苄基酯 Butyl benzyl phthalate (BBP) CAS#:85-68-7 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二(2-乙基)己酯 Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP) CAS#:84-69-5 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 总和 Total（DBP+ BBP+ DEHP+ DIBP） | N.D. | N.D. | N.D. | -- | ＜1000 mg/kg |
| 邻苯二甲酸二正辛酯 Di-n-octyl phthalate (DNOP) CAS#:117-84-0 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二异壬酯 Di-isononyl phthalate (DINP) CAS#:28553-12-0,68515-48-0 | N.D. | N.D. | N.D. | 50 mg/kg | -- |

# 检测报告
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| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| **邻苯二甲酸酯 Phthalates** | | | | | |
| 邻苯二甲酸二异癸酯 Di-iso-decyl phthalate (DIDP) CAS#:26761-40-0,68515-49-1 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 总和 Total（DNOP+ DINP+ DIDP） | N.D. | N.D. | N.D. | -- | ＜1000 mg/kg |
| 客户对其它邻苯二甲酸酯(盐)的附加要求 Client's additional requirement on other phthalate(s) | | | | | |
| 邻苯二甲酸二甲酯 Dimethyl phthalate (DMP) CAS#:131-11-3 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二乙酯 Diethyl phthalate (DEP) CAS#:84-66-2 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二丙酯 Dipropyl phthalate (DPrP) CAS#:131-16-8 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二戊酯 Dipentyl phthalate (DPP) CAS#:131-18-0 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二环己酯 Dicyclohexyl phthalate (DCHP) CAS#:84-61-7 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二异辛酯 Diisooctyl phthalate (DIOP) CAS#:27554-26-3 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二壬酯 Dinonyl phthalate (DNP) CAS#:84-76-4 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二己酯 Di-n-hexyl phthalate (DNHP) CAS#:84-75-3 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二(2-甲氧基)乙酯 Bis(2-methoxyethyl) phthalate (DMEP) CAS#:117-82-8 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二异戊酯 Diisopentylphthalate (DIPP) CAS#:605-50-5 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二苄酯 Dibenzyl phthalate (DBzP) CAS#:523-31-9 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| 邻苯二甲酸二苯酯 Diphenyl phthalate (DPhP) CAS#:84-62-8 | N.D. | N.D. | N.D. | 50 mg/kg | -- |

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# Test Report



| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| **邻苯二甲酸酯 Phthalates** | | | | | |
| 己二甲酸二乙基己基酯 Di(2-ethylhexyl) Adipate (DEHA) CAS#:103-23-1 | N.D. | N.D. | N.D. | 50 mg/kg | -- |
| *邻苯二甲酸烷基酯(C7-11 支型和线性结构) 1,2-Benzenedicarboxylic acid, di-(C7-11)-branched and linear alkyl esters (DHNUP) CAS#:68515-42-4 | N.D. | N.D. | N.D. | 100 mg/kg | -- |
| *邻苯二甲酸烷基酯(C6-8 支型结构,C7 富集) 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) CAS#:71888-89-6 | N.D. | N.D. | N.D. | 100 mg/kg | -- |
| 邻苯二甲酸二异己酯 Di-iso-hexyl-phthalates (DIHxP) CAS#:71850-09-4 | N.D. | N.D. | N.D. | 50 mg/kg | -- |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于报告检出限<Report Limit)
- mg/kg = ppm = 百万分之一 parts per million
- -1000 mg/kg = 0.1%
- -*=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



**▼砷 Arsenic(As)**

根据欧盟法规（EC）No.1907/2006 (REACH) 附录 17 及修订案 No.552/2009 的条目 19，使用方法参考 US EPA 3052:1996 & US EPA 6010D:2018，通过 ICP-OES 分析。

As specified in entry 19, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendment No.552/2009,Refer to method(s) US EPA 3052:1996 & US EPA 6010D:2018, and the item(s) was/were analyzed by ICP-OES.

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| 砷 Arsenic (As) | N.D. | N.D. | N.D. | 10 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 012 | |
| 砷 Arsenic (As) | N.D. | N.D. | N.D. | 10 mg/kg |

备注 Remark:
- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于报告检出限<Report Limit)
- mg/kg = ppm = 百万分之一 parts per million

**样品/部位描述 Sample/Part Description**

| 序号 No. | CTI 样品 ID CTI Sample ID | 描述 Description |
|---|---|---|
| 1 | 001 | 白色电解纸 White electrolytic paper |
| 2 | 002 | 黑色液体 Black liquid |
| 3 | 003 | 红色油墨 Red ink |
| 4 | 004 | 黑色橡胶 Black rubber |
| 5 | 005 | 白色颗粒 White grains |
| 6 | 012 | 黄色胶带 Yellow adhesive tape |

# 检测报告
# Test Report



**3.1 检测依据 Test Method**

| 测试项目<br>Tested Item(s) | 测试方法<br>Test Method | 测试仪器<br>Measured Equipment(s) |
|---|---|---|
| 铅 Lead (Pb) | IEC 62321-5:2013 | ICP-OES |
| 镉 Cadmium (Cd) | IEC 62321-5:2013 | ICP-OES |
| 汞 Mercury (Hg) | IEC 62321-4:2013+AMD1:2017 CSV | ICP-OES |
| 六价铬 Hexavalent Chromium (Cr(VI)) | IEC 62321-7-1:2015 | UV-Vis |
| | IEC 62321-7-2:2017 | UV-Vis |
| 多溴联苯 Polybrominated Biphenyls (PBBs) | IEC 62321-6:2015 | GC-MS |
| 多溴二苯醚 PolybrominatedDiphenyl Ethers (PBDEs) | IEC 62321-6:2015 | GC-MS |
| 邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP) | IEC 62321-8:2017 | GC-MS |
| 多环芳烃 Polycyclic Aromatic Hydrocarbons (PAHs) | AfPS GS 2019:01 PAK | GC-MS |
| 锑 Antimony(Sb) | 参考 US EPA 3052:1996 & US EPA 6010D:2018<br>Refer to US EPA 3052:1996 & US EPA 6010D:2018 | ICP-OES |
| 六溴环十二烷 Hexabromocyclododecane (HBCDD) | IEC 62321-9:2021 | GC-MS |
| 氟 Fluorine (F) | 参考 EN 14582:2016<br>Refer to EN 14582:2016 | IC |
| 氯 Chlorine (Cl) | 参考 EN 14582:2016<br>Refer to EN 14582:2016 | IC |
| 溴 Bromine (Br) | 参考 EN 14582:2016<br>Refer to EN 14582:2016 | IC |
| 碘 Iodine (I) | 参考 EN 14582:2016<br>Refer to EN 14582:2016 | IC |
| 全氟辛酸 Perfluorooctanoic Acid(PFOA) | 参考 US EPA 3550C:2007 & US EPA 8321B:2007<br>Refer to US EPA 3550C:2007 & US EPA 8321B:2007 | LC-MS-MS/LC-MS |
| 全氟辛烷磺酸 PerfluorooctaneSulfonates(PFOS) | 参考 US EPA 3550C:2007 & US EPA 8321B:2007<br>Refer to US EPA 3550C:2007 & US EPA 8321B:2007 | LC-MS-MS/LC-MS |
| 红磷 Red phosphorus | 参考 GB/T 6040-2002, GB/T 9722-2006, GB/T 17359-2012, EPA 6010D:2014<br>Refer to GB/T 6040-2002, GB/T 9722-2006, GB/T 17359-2012, EPA 6010D:2014 | ICP-OES, PY-GC-MS, FTIR, EM |

# 检测报告
# Test Report



**3.2 检测结果 Test Result(s)**

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| 铅 Lead (Pb) | N.D. | N.D. | N.D. | 2 mg/kg |
| 镉 Cadmium (Cd) | N.D. | N.D. | N.D. | 2 mg/kg |
| 汞 Mercury (Hg) | N.D. | N.D. | N.D. | 2 mg/kg |
| 六价铬 Hexavalent Chromium (Cr(VI)) | N.D. | N.D. | N.D. | 8 mg/kg |
| | -- | -- | -- | 0.10 μg/cm² (LOQ) |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 006 | |
| 铅 Lead (Pb) | 9 mg/kg | N.D. | N.D. | 2 mg/kg |
| 镉 Cadmium (Cd) | N.D. | N.D. | N.D. | 2 mg/kg |
| 汞 Mercury (Hg) | N.D. | N.D. | N.D. | 2 mg/kg |
| 六价铬 Hexavalent Chromium (Cr(VI)) | N.D. | N.D. | -- | 8 mg/kg |
| | -- | -- | N.D.▼ | 0.10 μg/cm² (LOQ) |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 007 | 008 | 009 | |
| 铅 Lead (Pb) | N.D. | N.D. | N.D. | 2 mg/kg |
| 镉 Cadmium (Cd) | N.D. | N.D. | N.D. | 2 mg/kg |
| 汞 Mercury (Hg) | N.D. | N.D. | N.D. | 2 mg/kg |
| 六价铬 Hexavalent Chromium (Cr(VI)) | -- | -- | -- | 8 mg/kg |
| | N.D.▼ | N.D.▼ | N.D.▼ | 0.10 μg/cm² (LOQ) |

| 测试项目 Tested Item(s) | 结果 Result | | 方法检出限 MDL |
|---|---|---|---|
| | 010 | 012 | |
| 铅 Lead (Pb) | N.D. | N.D. | 2 mg/kg |
| 镉 Cadmium (Cd) | N.D. | N.D. | 2 mg/kg |
| 汞 Mercury (Hg) | N.D. | N.D. | 2 mg/kg |
| 六价铬 Hexavalent Chromium (Cr(VI)) | -- | N.D. | 8 mg/kg |
| | N.D.▼ | -- | 0.10 μg/cm² (LOQ) |

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| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| **多溴联苯 Polybrominated Biphenyls (PBBs)** | | | | |
| 一溴联苯 Monobromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 二溴联苯 Dibromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 三溴联苯 Tribromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 四溴联苯 Tetrabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 五溴联苯 Pentabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 六溴联苯 Hexabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 七溴联苯 Heptabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 八溴联苯 Octabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 九溴联苯 Nonabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 十溴联苯 Decabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 012 | |
| **多溴联苯 Polybrominated Biphenyls (PBBs)** | | | | |
| 一溴联苯 Monobromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 二溴联苯 Dibromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 三溴联苯 Tribromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 四溴联苯 Tetrabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 五溴联苯 Pentabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 六溴联苯 Hexabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 七溴联苯 Heptabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 八溴联苯 Octabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 九溴联苯 Nonabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |
| 十溴联苯 Decabromobiphenyl | N.D. | N.D. | N.D. | 5 mg/kg |

# 检测报告
# Test Report



| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| **多溴二苯醚 PolybrominatedDiphenyl Ethers (PBDEs)** | | | | |
| 一溴二苯醚 Monobromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 二溴二苯醚 Dibromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 三溴二苯醚 Tribromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 四溴二苯醚 Tetrabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 五溴二苯醚 Pentabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 六溴二苯醚 Hexabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 七溴二苯醚 Heptabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 八溴二苯醚 Octabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 九溴二苯醚 Nonabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 十溴二苯醚 Decabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 012 | |
| **多溴二苯醚 PolybrominatedDiphenyl Ethers (PBDEs)** | | | | |
| 一溴二苯醚 Monobromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 二溴二苯醚 Dibromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 三溴二苯醚 Tribromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 四溴二苯醚 Tetrabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 五溴二苯醚 Pentabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 六溴二苯醚 Hexabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 七溴二苯醚 Heptabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 八溴二苯醚 Octabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 九溴二苯醚 Nonabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |
| 十溴二苯醚 Decabromodiphenyl ether | N.D. | N.D. | N.D. | 5 mg/kg |

# 检测报告
# Test Report



| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| **邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)** | | | | |
| 邻苯二甲酸二丁酯 Dibutyl phthalate (DBP) CAS#:84-74-2 | N.D. | N.D. | N.D. | 50 mg/kg |
| 邻苯二甲酸丁基苄基酯 Butyl benzyl phthalate (BBP) CAS#:85-68-7 | N.D. | N.D. | N.D. | 50 mg/kg |
| 邻苯二甲酸二(2-乙基)己酯 Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7 | N.D. | N.D. | N.D. | 50 mg/kg |
| 邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP) CAS#:84-69-5 | N.D. | N.D. | N.D. | 50 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 012 | |
| **邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)** | | | | |
| 邻苯二甲酸二丁酯 Dibutyl phthalate (DBP) CAS#:84-74-2 | N.D. | N.D. | N.D. | 50 mg/kg |
| 邻苯二甲酸丁基苄基酯 Butyl benzyl phthalate (BBP) CAS#:85-68-7 | N.D. | N.D. | N.D. | 50 mg/kg |
| 邻苯二甲酸二(2-乙基)己酯 Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7 | N.D. | N.D. | N.D. | 50 mg/kg |
| 邻苯二甲酸二异丁酯 Diisobutyl phthalate (DIBP) CAS#:84-69-5 | N.D. | N.D. | N.D. | 50 mg/kg |

# 检测报告
# Test Report



| 测试项目 Tested Item(s) | 结果 Result | | | | 方法检出限 MDL |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | 004 | |
| **多环芳烃 Polycyclic Aromatic Hydrocarbons (PAHs)** | | | | | |
| 萘 Naphthalene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 菲 Phenanthrene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 蒽 Anthracene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 荧蒽 Fluoranthene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 芘 Pyrene | N.D. | N.D. | N.D. | 0.7 mg/kg | 0.2 mg/kg |
| 䓛 Chrysene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 苯并(a)蒽 Benzo(a)anthracene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 苯并(b)荧蒽 Benzo(b)fluoranthene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 苯并(k)荧蒽 Benzo(k)fluoranthene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 苯并(j)荧蒽 Benzo(j)fluoranthene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 苯并(a)芘 Benzo(a)pyrene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 苯并(e)芘 Benzo(e)pyrene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 二苯并(a,h)蒽 Dibenzo(a,h)anthracene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 苯并(g,h,i)苝 Benzo(g,h,i)perylene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 茚并(1,2,3-cd)芘 Indeno(1,2,3-cd)pyrene | N.D. | N.D. | N.D. | N.D. | 0.2 mg/kg |
| 菲,蒽,荧蒽,芘总量 Sum (Phenanthrene, Anthracene, Fluoranthene, Pyrene) | N.D. | N.D. | N.D. | 0.7 mg/kg | / |
| 15 PAHs 总量 Sum 15 PAHs | N.D. | N.D. | N.D. | 0.7 mg/kg | / |

# 检测报告
# Test Report



| 测试项目 Tested Item(s) | 结果 Result | | 方法检出限 MDL |
|---|---|---|---|
| | 005 | 012 | |
| **多环芳烃 Polycyclic Aromatic Hydrocarbons (PAHs)** | | | |
| 萘 Naphthalene | N.D. | N.D. | 0.2 mg/kg |
| 菲 Phenanthrene | N.D. | N.D. | 0.2 mg/kg |
| 蒽 Anthracene | N.D. | N.D. | 0.2 mg/kg |
| 荧蒽 Fluoranthene | N.D. | N.D. | 0.2 mg/kg |
| 芘 Pyrene | N.D. | N.D. | 0.2 mg/kg |
| 䓛 Chrysene | N.D. | N.D. | 0.2 mg/kg |
| 苯并(a)蒽 Benzo(a)anthracene | N.D. | N.D. | 0.2 mg/kg |
| 苯并(b)荧蒽 Benzo(b)fluoranthene | N.D. | N.D. | 0.2 mg/kg |
| 苯并(k)荧蒽 Benzo(k)fluoranthene | N.D. | N.D. | 0.2 mg/kg |
| 苯并(j)荧蒽 Benzo(j)fluoranthene | N.D. | N.D. | 0.2 mg/kg |
| 苯并(a)芘 Benzo(a)pyrene | N.D. | N.D. | 0.2 mg/kg |
| 苯并(e)芘 Benzo(e)pyrene | N.D. | N.D. | 0.2 mg/kg |
| 二苯并(a,h)蒽 Dibenzo(a,h)anthracene | N.D. | N.D. | 0.2 mg/kg |
| 苯并(g,h,i)苝 Benzo(g,h,i)perylene | N.D. | N.D. | 0.2 mg/kg |
| 茚并(1,2,3-cd)芘 Indeno(1,2,3-cd)pyrene | N.D. | N.D. | 0.2 mg/kg |
| 菲,蒽,荧蒽,芘总量 Sum (Phenanthrene, Anthracene, Fluoranthene, Pyrene) | N.D. | N.D. | / |
| 15 PAHs 总量 Sum 15 PAHs | N.D. | N.D. | / |

# 检测报告
# Test Report



**可接触的表面材料中 PAHs 含量限值(mg/kg)(按风险评估的结果分类)**
**Maximum PAHs limits (mg/kg) for the materials with relevant contact/grip and operating surfaces that are to be categorised based on the results of the risk assessment**

| 参数 **Parameters** | 一类 Category 1 | 二类 Category 2 | | 三类 Category 3 | |
|---|---|---|---|---|---|
| | 可放入口中的材料，或预期和皮肤接触时间超过 30 秒（长时间接触）2009/48/EC 定义的玩具材料或供 3 岁以下儿童使用的产品<br>Materials intended to be placed in the mouth, or materials in toys according to Directive 2009/48/EC or materials for the use by children up to 3 years of age coming into long-term contact with skin (more than 30s) duringthe intended use | 未包含在第一类材料中，预期和皮肤接触时间超过30秒(长时间接触)，或者和皮肤短时间频繁接触**的材料<br>Materials not covered by category 1, coming into long-term contact (more than 30s) or short-term repetitive contact** with skin during the intended or foreseeable use | | 未包含在第一类和第二类材料中，预期和皮肤接触时间不超过30秒（短时间接触）的材料<br>Materials not covered by category 1 nor by category 2, coming into short-term contact (up to 30s) with skin during the intended or foreseeable use | |
| | | 供儿童（< 14 岁）使用的产品（包括主动和被动直接接触）<br>Use by children (< 14 years) (include both active and passive direct contact) | 其他类产品<br>Other consumer products | 供儿童（< 14 岁）使用的产品（包括主动和被动直接接触）<br>Use by children (< 14 years) (include both active and passive direct contact) | 其他类产品<br>Other consumerproducts |
| 苯并(a)芘<br>Benzo(a)pyrene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(e)芘<br>Benzo(e)pyrene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(a)蒽<br>Benzo(a)anthracene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(b)荧蒽<br>Benzo(b)fluoranthene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(j)荧蒽<br>Benzo(j)fluoranthene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(k)荧蒽<br>Benzo(k)fluoranthene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 䓛Chrysene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 二苯并(a,h)蒽<br>Dibenz(a,h)anthracene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 苯并(g,h,i)苝<br>Benzo(g,h,i)perylene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 茚并(1,2,3-cd)芘<br>Indenol(1,2,3-cd)pyrene | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 1 |
| 菲,蒽,荧蒽,芘 | 总量< 1 | 总量< 5 | 总量< 10 | 总量< 20 | 总量< 50 |

# 检测报告
# Test Report



| | | | | | |
|---|---|---|---|---|---|
| Phenanthrene, Anthracene, Fluoranthene, Pyrene | < 1 Sum | < 5 Sum | < 10 Sum | < 20 Sum | < 50 Sum |
| 萘 Naphthalene | < 1 | < 2 | | < 10 | |
| 15 PAHs 总量 Sum 15 PAHs | < 1 | < 5 | < 10 | < 20 | < 50 |

**“短时间频繁接触”来自REACH法规附录XVII第50项的修订案(法规 (EU) No. 1272/2013)
Definition “short-term repetitive contact” taken from REACH Annex XVII entry 50 amendment (REGULATION (EU) No.1272/2013)

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| 锑 Antimony (Sb) | 59 mg/kg | N.D. | N.D. | 10 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 012 | |
| 锑 Antimony (Sb) | N.D. | N.D. | N.D. | 10 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| 六溴环十二烷 Hexabromocyclododecane (HBCDD) | N.D. | N.D. | N.D. | 20 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 012 | |
| 六溴环十二烷 Hexabromocyclododecane (HBCDD) | N.D. | N.D. | N.D. | 20 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| 氟 Fluorine (F) | N.D. | N.D. | N.D. | 10 mg/kg |
| 碘 Iodine (I) | N.D. | N.D. | N.D. | 10 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 012 | |
| 氟 Fluorine (F) | N.D. | N.D. | N.D. | 10 mg/kg |
| 碘 Iodine (I) | N.D. | N.D. | N.D. | 10 mg/kg |

# 检测报告
# Test Report



| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| 氯 Chlorine (Cl) | N.D. | N.D. | 378 mg/kg | 10 mg/kg | <900 mg/kg |
| 溴 Bromine (Br) | N.D. | N.D. | N.D. | 10 mg/kg | <900 mg/kg |
| 总计（氯+溴）Total (Cl + Br ) | N.D. | N.D. | 378 mg/kg | -- | 1500 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| 氯 Chlorine (Cl) | N.D. | N.D. | N.D. | 10 mg/kg | <900 mg/kg |
| 溴 Bromine (Br) | N.D. | N.D. | N.D. | 10 mg/kg | <900 mg/kg |
| 总计（氯+溴）Total (Cl + Br ) | N.D. | N.D. | N.D. | -- | 1500 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 001 | 002 | 003 | | |
| 全氟辛烷磺酸 PerfluorooctaneSulfonates (PFOS) | N.D. | N.D. | N.D. | 0.010 mg/kg | 1000 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL | 客户限值 Client's Limit |
|---|---|---|---|---|---|
| | 004 | 005 | 012 | | |
| 全氟辛烷磺酸 PerfluorooctaneSulfonates (PFOS) | N.D. | N.D. | N.D. | 0.010 mg/kg | 1000 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| 全氟辛酸 Perfluorooctanoic Acid (PFOA) | N.D. | N.D. | N.D. | 0.010 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 012 | |
| 全氟辛酸 Perfluorooctanoic Acid (PFOA) | N.D. | N.D. | N.D. | 0.010 mg/kg |

# 检测报告
# Test Report



| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 001 | 002 | 003 | |
| 红磷 Red phosphorus | N.D. | N.D. | N.D. | 500 mg/kg |

| 测试项目 Tested Item(s) | 结果 Result | | | 方法检出限 MDL |
|---|---|---|---|---|
| | 004 | 005 | 012 | |
| 红磷 Red phosphorus | N.D. | N.D. | N.D. | 500 mg/kg |

**样品/部位描述 Sample/Part Description**

| 序号 No. | CTI 样品 ID CTI Sample ID | 描述 Description |
|---|---|---|
| 1 | 001 | 白色电解纸 White electrolytic paper |
| 2 | 002 | 黑色液体 Black liquid |
| 3 | 003 | 红色油墨 Red ink |
| 4 | 004 | 黑色橡胶 Black rubber |
| 5 | 005 | 白色颗粒 White grains |
| 6 | 006 | 深灰色铝箔 Dark grey aluminum foil |
| 7 | 007 | 灰色铝箔 Grey aluminum foil |
| 8 | 008 | 银色金属 Silvery metal |
| 9 | 009 | 混测，银色金属 Mixed test, silvery metal |
| 10 | 010 | 混测，有银色镀层的金属 Mixed test, metal with silvery plating |
| 11 | 012 | 黄色胶带 Yellow adhesive tape |

# 检测报告
# Test Report



**备注:** **对于检测铅，镉，汞，砷，锑之样品已消解完全。**

-根据客户要求，对样品进行混合测试，测试结果不代表混合测试样品中任何一种单一材质的含量。

-N.D. = 未检出 (小于方法检出限或定量限)

-mg/kg = ppm = 百万分之一

-LOQ = 定量限，六价铬的定量限为 0.10 μg/cm$^2$

-▼六价铬浓度小于 0.10 μg/cm$^2$, 样品未检出六价铬。由于未获知样品的存储条件和生产日期，样品的六价铬测试结果仅能代表测试时样品含六价铬的状态。

**Remark:** **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury, Arsenic, Antimony.**

-As specified by client, the test was conducted by mixing several samples together. The result(s) shown on this report may be different from the content of any homogeneous material.

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL or LOQ)

-mg/kg = ppm = parts per million

-LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 μg/cm$^2$

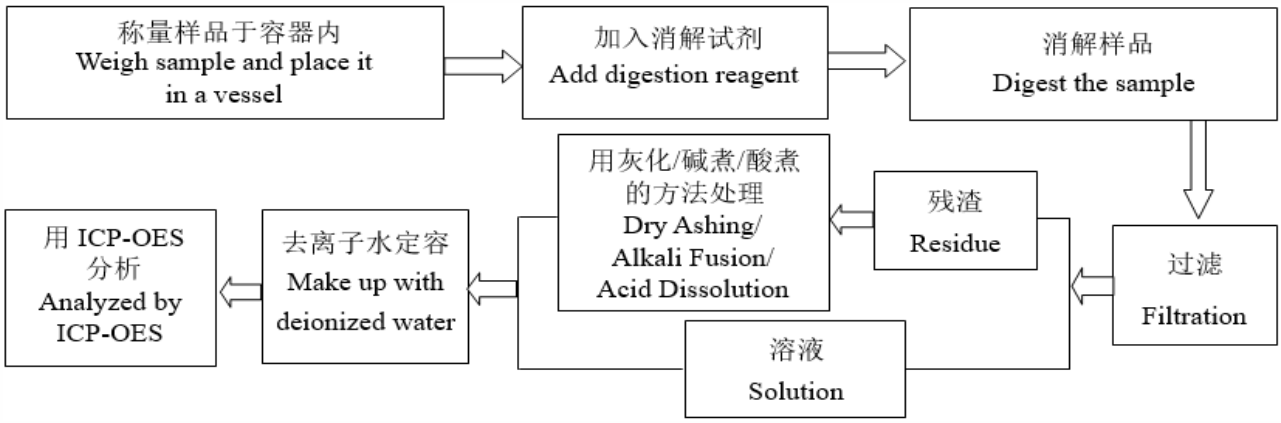
-▼The sample is negativefor Cr(VI) − The Cr(VI) concentration is below 0.10μg/cm$^2$. The coating is considered a non-Cr(VI) based coating. Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

**注释:** **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。**

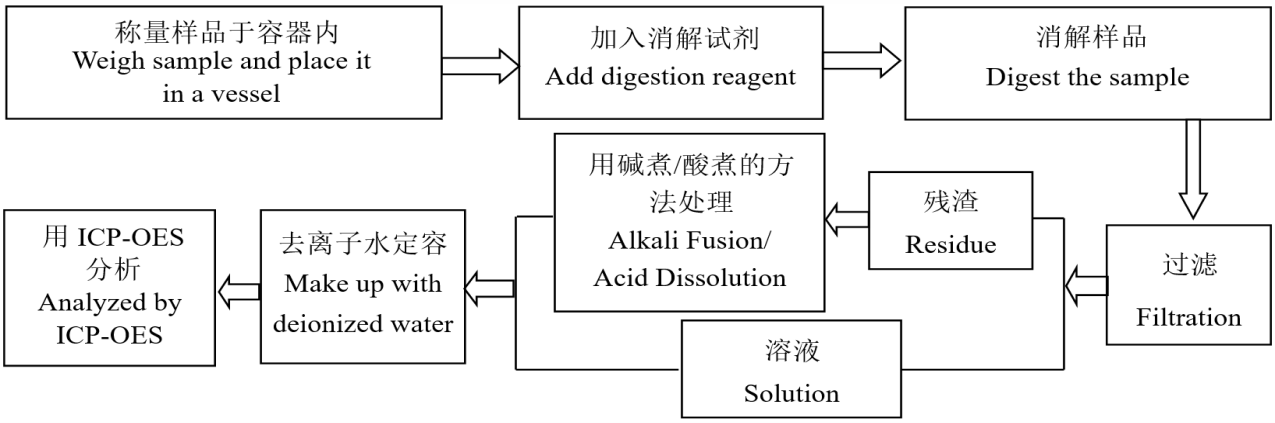
**Note:** **The testing data and result(s) in this report is(are) just for scientific research, education, internal qualitycontrol and product development etc.**

**3.3 检测流程 Test Process**

**3.3.1. 铅 Lead (Pb), 镉 Cadmium (Cd)**

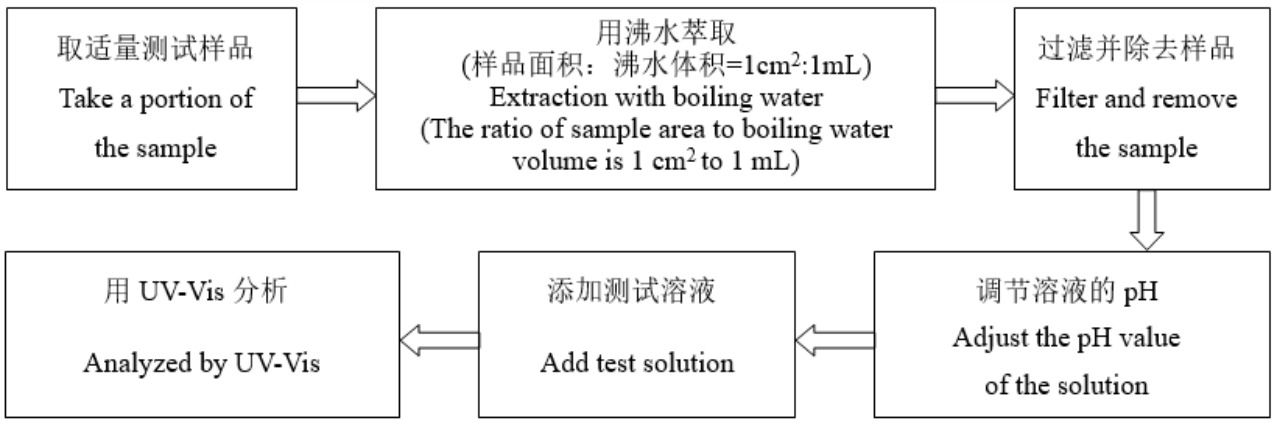



**3.3.2. 汞 Mercury (Hg)**

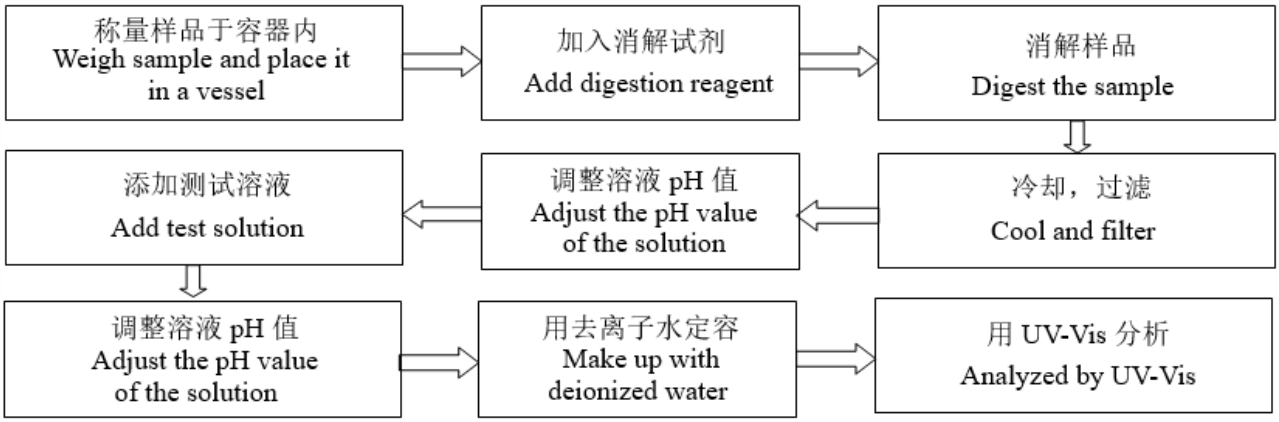



**3.3.3. 六价铬 Hexavalent Chromium (Cr(VI))**

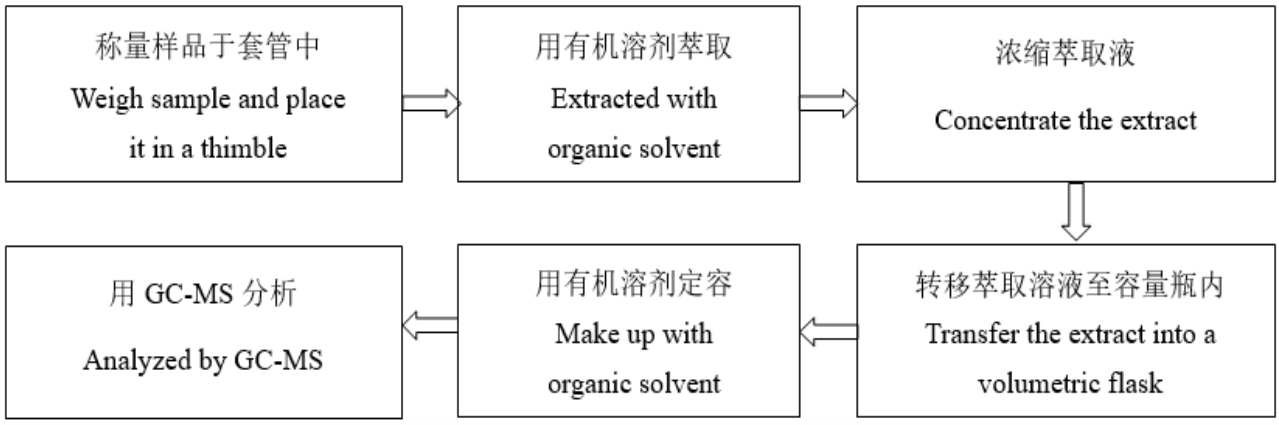
**(1) IEC 62321-7-1:2015**



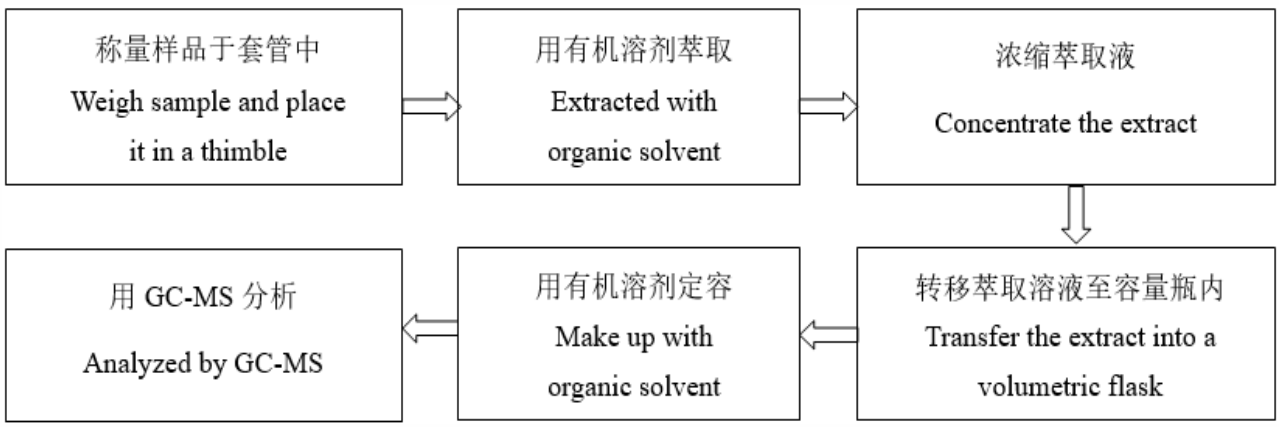
**(2) IEC 62321-7-2:2017**



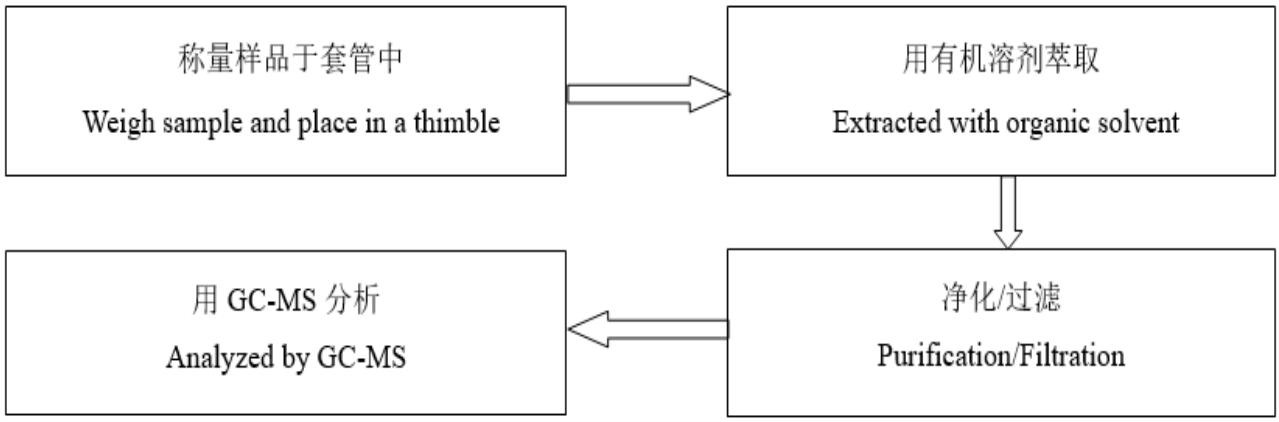

**3.3.4. 多溴联苯 Polybrominated Biphenyls (PBBs)，多溴二苯醚 PolybrominatedDiphenyl Ethers (PBDEs)**



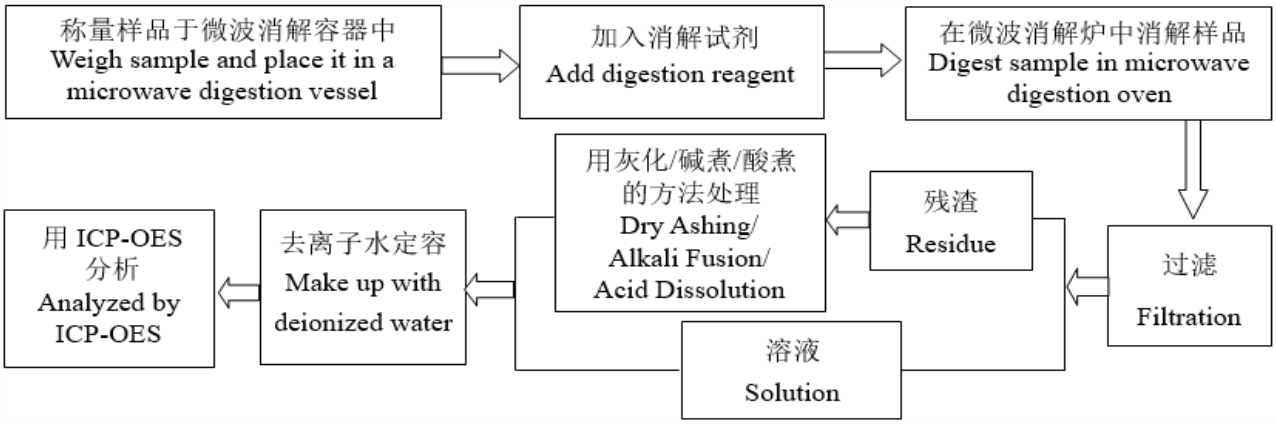

**3.3.5. 邻苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)**



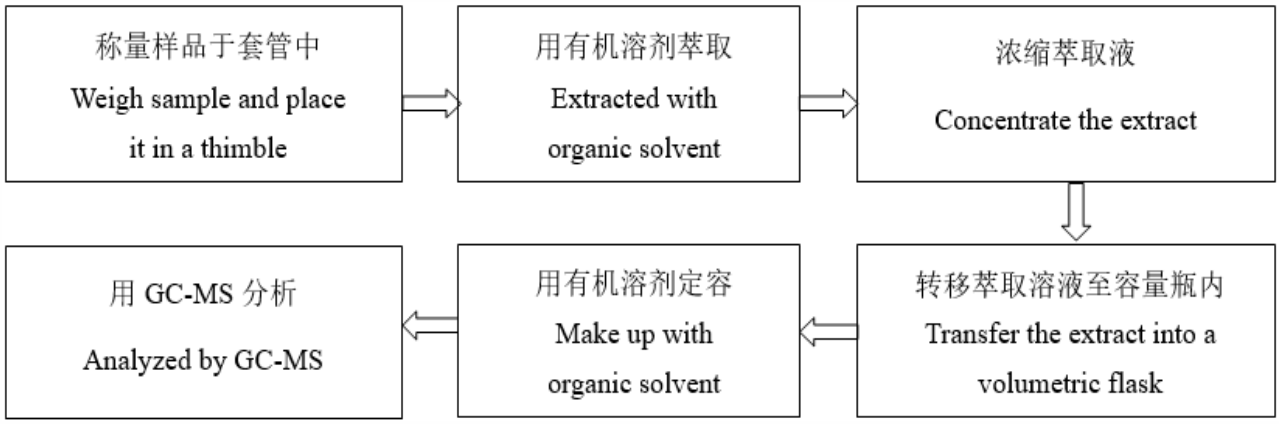
**3.3.6. 多环芳烃 Polycyclic Aromatic Hydrocarbons (PAHs)**



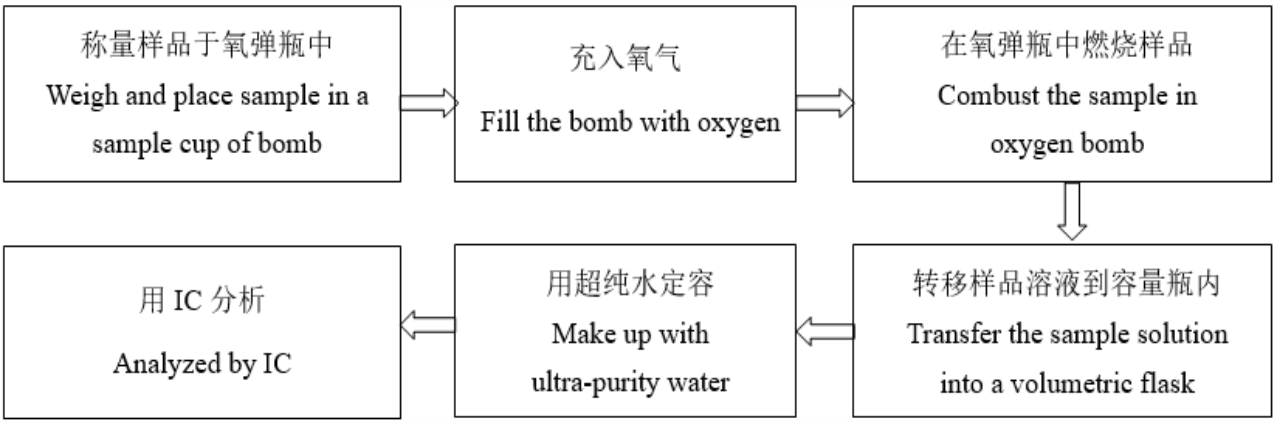

**3.3.7. 锑 Antimony(Sb)**



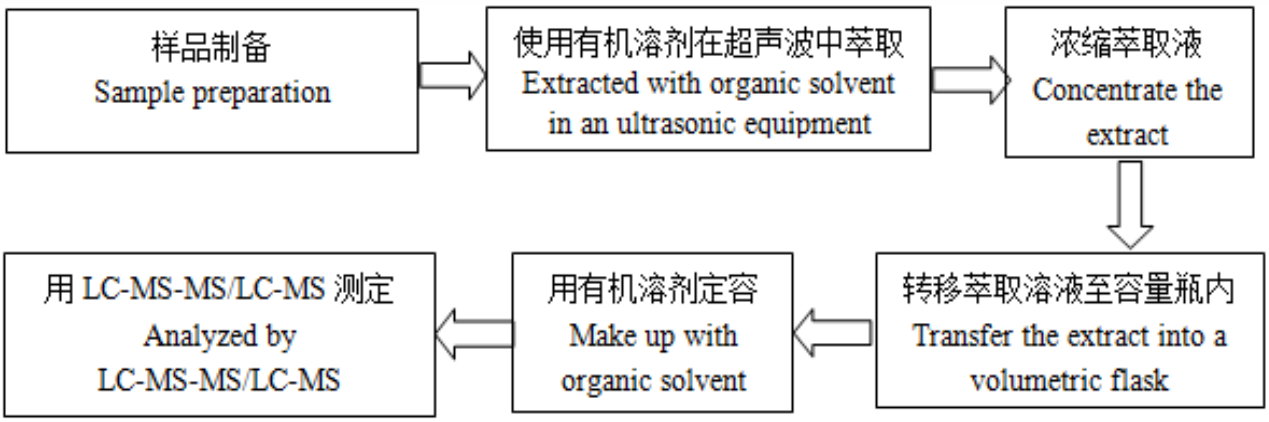

**3.3.8. 六溴环十二烷 Hexabromocyclododecane (HBCDD)**



**3.3.9. 氟 Fluorine (F), 氯 Chlorine (Cl), 溴 Bromine (Br), 碘 Iodine (I)**



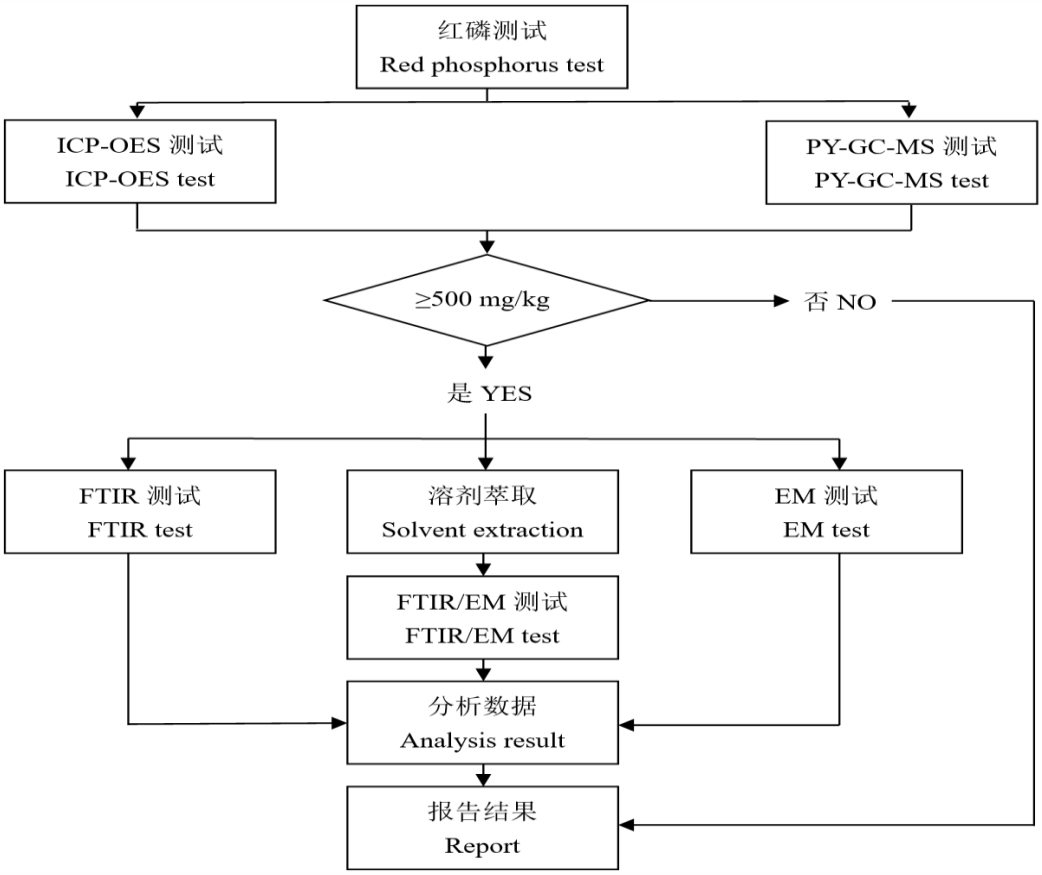

**3.3.10. 全氟辛酸(PFOA)Perfluorooctanoic Acid(PFOA), 全氟辛烷磺酸(PFOS)PerfluorooctaneSulfonates(PFOS)**



# 检测报告
# Test Report



**3.3.11. 红磷 Red phosphorus**



# 检测报告
# Test Report

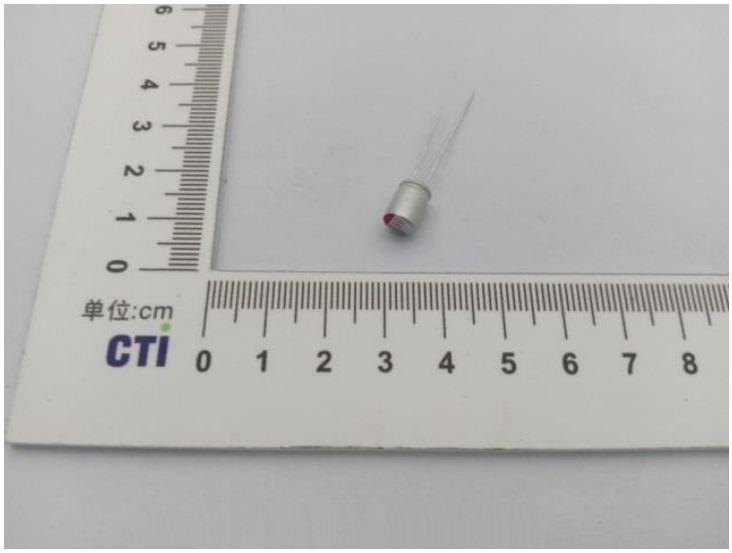


## 样品图片

## Photo(s) of the sample(s)

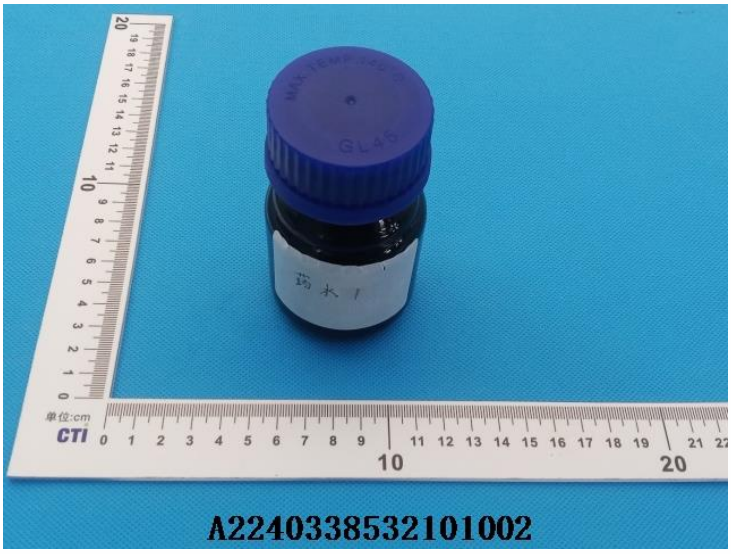
成品（客户参考图片（非测试样品））

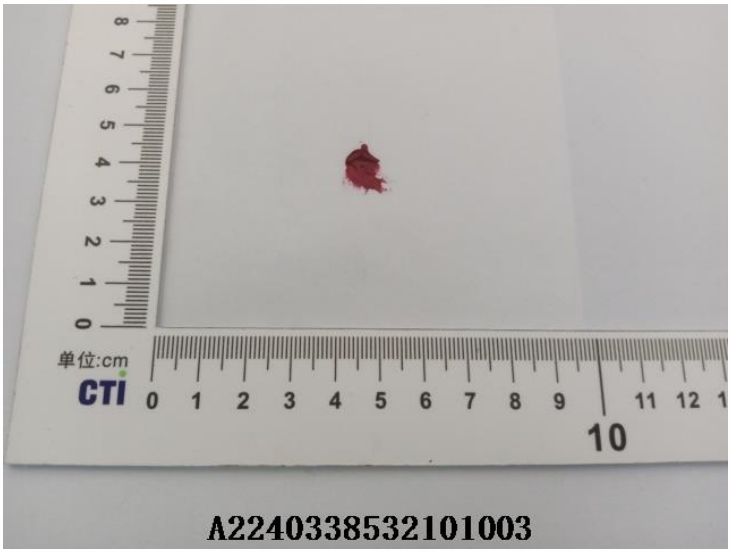
Final Product(Client Reference Photo(Non-tested sample)）




# 检测报告
# Test Report

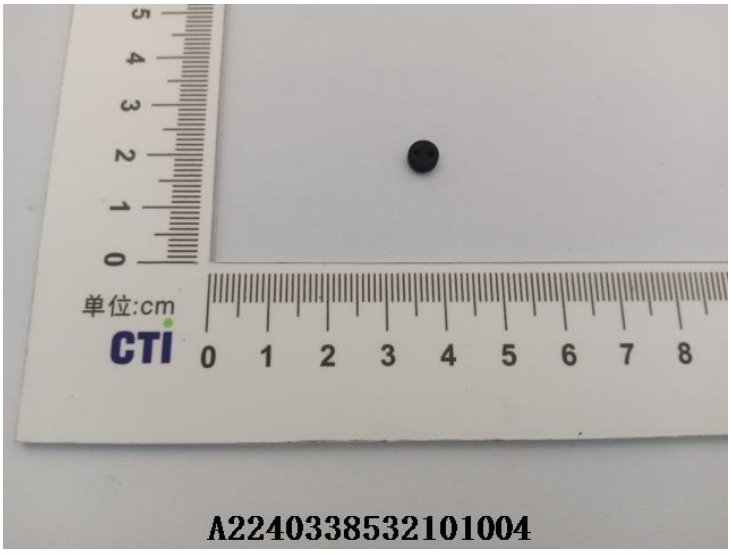


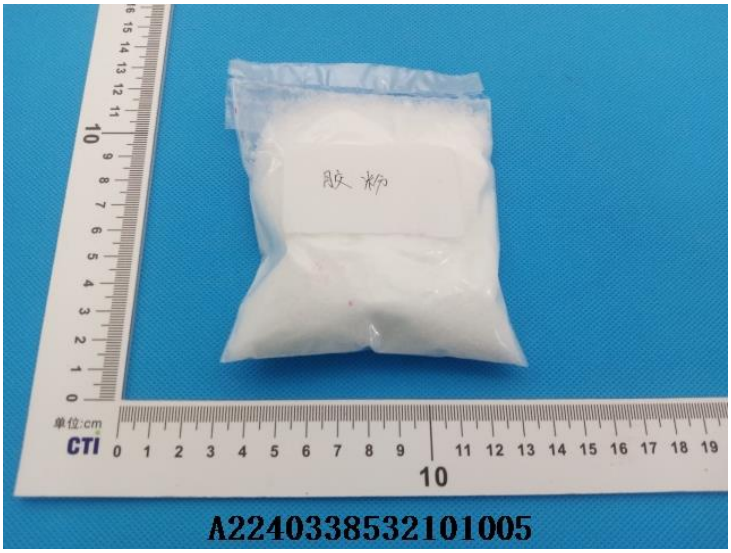


# 检测报告
# Test Report





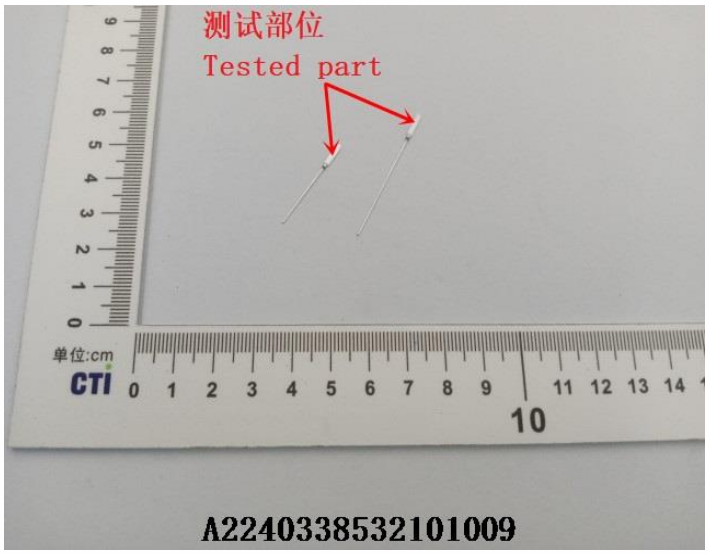



# 检测报告
# Test Report



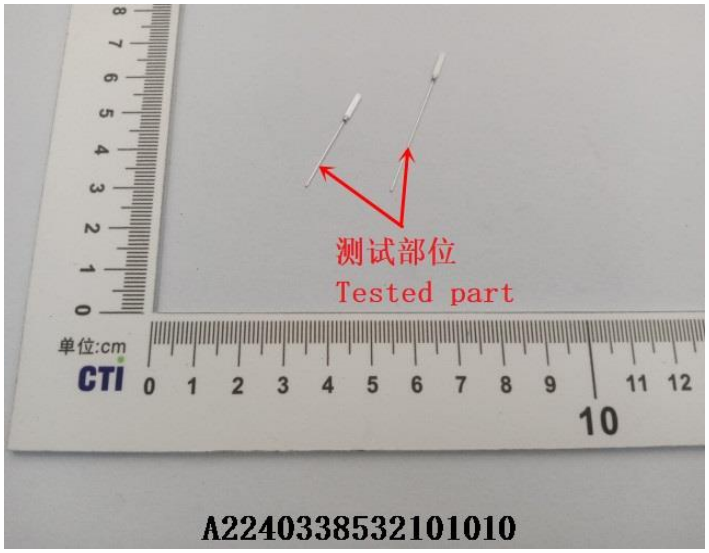

# 检测报告
# Test Report



# 检测报告
# Test Report






# 检测报告
# Test 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 invalid without approved signature, special seal and the seal on the perforation;
2. 报告抬头公司名称及地址、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 Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. 本报告检测结果仅对受测样品负责；
   The result(s) shown in this report refer(s) only to the sample(s) tested;
4. 除非另有说明，报告参照 ILAC-G8:09/2019 / CNAS-GL015:2022 使用简单接受（w=0）二元判定规则进行符合性判定;Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
5. 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;
6. 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.

*** 报告结束 ***
*** End of Report ***

# 检测报告
# Test Report

报告编号 A2240338532101011E
Report No. A2240338532101011E



**报告抬头公司名称** 扬州升阳电子有限公司
**Company Name shown on Report** YANGZHOU SHENGYANG ELECTRONICS CO.,LTD.
**地址** 高邮市北开发区长兴路
**Address** CHANGXING ROAD,NORTH DEVELOPMENT ZONE,GAOYOU CITY,JIANGSU PROVINCE,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 applicant**

| | |
|---|---|
| 样品名称 | 导电高分子型固态铝电解电容器 |
| Sample Name | Conductive polymer aluminum solid capacitors |
| 样品接收日期 | 2024.06.12 |
| Sample Received Date | Jun. 12, 2024 |
| 样品检测日期 | 2024.06.12-2024.06.19 |
| Testing Period | Jun. 12, 2024 to Jun. 19, 2024 |

**测试内容 Test Conducted:**
根据客户的申请要求，具体要求详见下一页。
As requested by the applicant. For details refer to next page(s).

批准 Approved by: 陈凯敏 实验室经理 Lab Manager

日期 Date: 2024.06.20

上海华测品标检测技术有限公司
Centre Testing International Pinbiao(Shanghai) Co., Ltd.

No. R475311085
上海市闵行区万芳路 1351 号
No.1351, Wanfang Road, Minhang District, Shanghai, China

# 检测报告
# Test Report



**测试摘要 Executive Summary:**

| 测试要求<br>TEST REQUEST | 测试结果<br>CONCLUSION |
|---|---|
| 欧盟持久性有机污染物(POPs)法规(EU) 2019/1021<br>Regulation (EU) 2019/1021 on persistent organic pollutants (POPs) | |
| - 多溴二苯醚<br>Polybrominated Diphenyl Ethers (PBDEs) | 见结果页<br>**See test result(s)** |
| - 全氟辛烷磺酸(PFOS)及其衍生物<br>Perfluorooctane sulfonic acid (PFOS) and its derivatives | 见结果页<br>**See test result(s)** |
| - 六溴环十二烷<br>Hexabromocyclododecane (HBCDD) | 见结果页<br>**See test result(s)** |
| - 短链氯化石蜡<br>Short Chain Chlorinated Paraffins (SCCPs) | 见结果页<br>**See test result(s)** |
| - 五氯苯<br>Pentachlorobenzene | 见结果页<br>**See test result(s)** |
| - 六氯苯<br>Hexachlorobenzene | 见结果页<br>**See test result(s)** |
| - 六溴联苯<br>Hexabromobiphenyl | 见结果页<br>**See test result(s)** |
| - 多氯联苯<br>Polychlorinated Biphenyls(PCBs) | 见结果页<br>**See test result(s)** |
| - 多氯化萘<br>Polychlorinated Naphthalenes (PCNs) | 见结果页<br>**See test result(s)** |
| - 六氯丁二烯<br>Hexachlorobutadiene (HCBD) | 见结果页<br>**See test result(s)** |
| - 五氯苯酚及其盐和酯<br>Pentachlorophenol and its salts and esters | 见结果页<br>**See test result(s)** |
| - 全氟辛酸(PFOA)及其盐和相关物质<br>Perfluorooctanoic acid (PFOA) and its salts & related substances | 见结果页<br>**See test result(s)** |
| - 全氟己基磺酸(PFHxS)及其盐和相关物质<br>Perfluorohexane-1-sulphonic acid (PFHxS) and its salts & related substances | 见结果页<br>**See test result(s)** |

**********详细结果，请见下页**********

********** Forfurther details, please refer to the following page(s)**********

# 检测报告
# Test Report



**欧盟持久性有机污染物(POPs)法规(EU) 2019/1021 Regulation (EU) 2019/1021 on persistent organic pollutants (POPs)**

▼**多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)**

测试方法：IEC 62321-6:2015；测试仪器：GC-MS

Test Method: IEC 62321-6:2015; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) |
|---|---|---|
| | 011 | |
| 四溴二苯醚 Tetrabromodiphenyl ether | N.D. | 5 |
| 五溴二苯醚 Pentabromodiphenyl ether | N.D. | 5 |
| 六溴二苯醚 Hexabromodiphenyl ether | N.D. | 5 |
| 七溴二苯醚 Heptabromodiphenyl ether | N.D. | 5 |
| 十溴二苯醚 Decabromodiphenyl ether | N.D. | 5 |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

# 检测报告
# Test Report



▼全氟辛烷磺酸(PFOS)及其衍生物 **Perfluorooctane sulfonic acid (PFOS) and its derivatives**

测试方法：CEN/TS 15968:2010；测试仪器：LC-MS-MS & GC-MS

Test Method: CEN/TS 15968:2010; Test Equipment: LC-MS-MS & GC-MS

| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | | | 011 | | |
| 1 | 全氟辛基磺酸 Perfluorooctanesulfonic acid (PFOS) | 1763-23-1 | N.D. | 0.010 | -- |
| 2 | 全氟辛基磺酸钠 Sodium perfluorooctanesulfonate (PFOS-Na)* | 4021-47-0 | N.D. | 0.010 | -- |
| 3 | 全氟辛基磺酸钾 Perfluorooctanesulfonic acid, potassium salt (PFOS-K)* | 2795-39-3 | N.D. | 0.020 | -- |
| 4 | 全氟辛基磺酸锂 Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)* | 29457-72-5 | N.D. | 0.010 | -- |
| 5 | 全氟辛基磺酸镁 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, magnesium salt (2:1) (PFOS-Mg)* | 91036-71-4 | N.D. | 0.020 | -- |
| 6 | 全氟辛基磺酸铵 Perfluorooctanesulfonic acid, ammonium salt (PFOS-$NH_4$)* | 29081-56-9 | N.D. | 0.010 | -- |
| 7 | 全氟辛基磺酸二乙醇铵 Perfluorooctane sulfonate diethanolamine salt (PFOS-$NH(OH)_2$)* | 70225-14-8 | N.D. | 0.020 | -- |
| 8 | 全氟辛基磺酸四乙基胺 Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-$N(C_2H_5)_4$)* | 56773-42-3 | N.D. | 0.020 | -- |
| 9 | 全氟辛烷磺酸四丁基铵 Tetrabutylammoniumperfluorooctane sulfonate (PFOS-$NH(C_{16}H_{36})$)* | 111873-33-7 | N.D. | 0.015 | -- |
| 10 | 全氟辛基磺酸二癸二甲基铵 Didecyl dimethyl ammonium perfluorooctanesulfonate(PFOS-DDA)* | 251099-16-8 | N.D. | 0.020 | -- |
| 11 | 全氟辛基磺酰氟 Perfluoro-1-octanesulfonyl fluoride (PFOSF)* | 307-35-7 | N.D. | 0.010 | -- |
| 12 | 全氟辛基磺酸哌啶 Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctanesulfonate* | 71463-74-6 | N.D. | 0.020 | -- |
| 13 | 全氟辛基磺酸四甲基胺 Tetramethylammoniumperfluorooctanesulfonate (PFOS-$C_4H_{12}N$)* | 56773-44-5 | N.D. | 0.010 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | | | 011 | | |
| 14 | 全氟辛基磺酸二乙胺 Perfluorooctanesulfonic acid diethylamine salt (PFOS-$C_4H_{11}N$)* | 2205029-08-7 | N.D. | 0.010 | -- |
| 15 | 全氟辛基磺酸三乙胺 Triethylammoniumperfluorooctanesulfonate (PFOS-$C_6H_{15}N$)* | 54439-46-2 | N.D. | 0.010 | -- |
| 16 | 全氟辛基磺酸三丁基甲基胺 N,N-Dibutyl-N-methylbutan-1-aminium heptadecafluorooctane-1-sulfonate (PFOS-$C_{13}H_{30}N$)* | 124472-68-0 | N.D. | 0.015 | -- |
| 17 | 全氟辛基磺酸戊基(三丙基)氮胺 N,N,N-Tripropylpentan-1-aminium heptadecafluorooctane-1-sulfonate (PFOS-$C_{14}H_{32}N$)* | 56773-56-9 | N.D. | 0.015 | -- |
| 18 | 全氟辛基磺酸四丁基膦 Tetrabutylphosphoniumperfluorooctanesulfonate (PFOS-$C_{16}H_{36}P$)* | 2185049-59-4 | N.D. | 0.015 | -- |
| 19 | 全氟辛基磺酸庚基二甲基-[2-(2-甲基丙-2-烯酰氧基)乙基]胺 Heptyldimethyl{2-[(2-methylprop-2-enoyl)oxy]ethyl}azanium heptadecafluorooctane-1-sulfonate (PFOS-$C_{15}H_{30}NO_2$)* | 1203998-97-3 | N.D. | 0.015 | -- |
| 20 | 全氟辛基磺酸双[4-(1,1-二甲基乙基)苯基]-碘鎓 Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, salt with perfluoro-1-octanesulfonic acid (1:1) (PFOS-$C_{20}H_{26}I$)* | 213740-80-8 | N.D. | 0.020 | -- |
| 21 | 全氟辛基磺酸二苯基(2,4,6-三甲基苯基)硫 Diphenyl(2,4,6-trimethylphenyl)sulfoniumperfluoro-1-octanesulfonate (PFOS-$C_{21}H_{21}S$)* | 258341-99-0 | N.D. | 0.020 | -- |
| 22 | 全氟辛基磺酸十六烷基吡啶 1-Hexadecylpyridinium perfluoro-1-octanesulfonate (PFOS-$C_{21}H_{38}N$)* | 334529-63-4 | N.D. | 0.020 | -- |
| 23 | 全氟辛基磺酸酐 Perfluorooctane sulfonic anhydride (PFOSAN)* | 423-92-7 | N.D. | 0.020 | -- |
| 24 | 氟虫胺 N-Ethylperfluoro-1-octanesulfonamide (N-Et-FOSA) | 4151-50-2 | N.D. | 0.050 | -- |
| 25 | 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-N-甲基-辛磺酰胺 N-Methylperfluoro-1-octanesulfonamide (N-Me-FOSA) | 31506-32-8 | N.D. | 0.050 | -- |
| 26 | N-乙基全氟辛基磺酰胺乙醇 2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol (N-Et-FOSE) | 1691-99-2 | N.D. | 0.050 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | | | 011 | | |
| 27 | 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-N-(2-羟乙基)-N-甲基-1-辛基磺酰胺 2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol (N-Me-FOSE) | 24448-09-7 | N.D. | 0.050 | -- |
| 28 | 全氟辛基磺酰胺 Perfluorooctane sulfonamide (PFOSA) | 754-91-6 | N.D. | 0.010 | -- |
| 29 | 全氟辛基磺酰胺锂盐(1:1)Perfluorooctanesulfonamide lithium salt (1:1) (PFOSA-Li)* | 76752-79-9 | N.D. | 0.010 | -- |
| 30 | 全氟辛基磺酰胺钠盐(1:1) Perfluorooctanesulfonamide Sodium salt (1:1) (PFOSA-Na)* | 76752-78-8 | N.D. | 0.010 | -- |
| 31 | 全氟辛基磺酰胺钾盐(1:1) Perfluorooctanesulfonamide Potassium salt (1:1) (PFOSA-K)* | 76752-70-0 | N.D. | 0.010 | -- |
| 32 | 全氟辛基磺酰胺铵盐(1:1) Perfluorooctanesulfonamide Ammonium salt (1:1) (PFOSA-$NH_4$)* | 76752-72-2 | N.D. | 0.010 | -- |
| 33 | 全氟辛基磺酰胺三乙胺 Heptadecafluorooctane-1-sulphonamide, compound with triethylamine (1:1) (PFOSA-$C_6H_{15}N$)* | 76752-82-4 | N.D. | 0.010 | -- |
| 34 | 全氟辛烷磺酰氨基乙酸 Glycine, N-[(heptadecafluorooctyl)sulfonyl]- (FOSAA) | 2806-24-8 | N.D. | 0.010 | -- |
| 35 | 全氟辛烷磺酰氨基乙酸钾 N-[(Perfluorooctyl)sulfonyl]glycine potassium salt (1:1) (FOSAA-K)* | 75260-69-4 | N.D. | 0.010 | -- |
| 36 | 全氟辛烷磺酰氨基乙酸钠 N-[(Perfluorooctyl)sulfonyl]glycine sodium salt (1:1) (FOSAA-Na)* | 115716-87-5 | N.D. | 0.010 | -- |
| 37 | 全氟辛烷磺酰氨基乙酸盐 N-[(Perfluorooctyl)sulfonyl]glycinate (FOSAA(anion))* | 909405-47-6 | N.D. | 0.010 | -- |
| 38 | N-(十七氟辛基磺酰基)-N-甲基甘氨酸 N-Methyl perfluorooctanesulfonamidoacetic acid (N-Me-FOSAA) | 2355-31-9 | N.D. | 0.050 | -- |
| 39 | N-(十七氟辛基磺酰基)-N-甲基甘氨酸钾 Potassium N-((heptadecafluorooctyl)sulphonyl)-N-methylglycinate (N-Me-FOSAA-K)* | 70281-93-5 | N.D. | 0.050 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | | | 011 | | |
| 40 | N-(十七氟辛基磺酰基)-N-甲基甘氨酸盐 2-(N-Methylperfluorooctanesulfonamido) acetate (N-Me-FOSAA (anion))* | 909405-48-7 | N.D. | 0.050 | -- |
| 41 | N-乙基-N-((十七氟辛基)磺酰基)甘氨酸 N-ethyl-N-[(heptadecafluorooctyl)sulphonyl] glycine(N-Et-FOSAA) | 2991-50-6 | N.D. | 0.050 | -- |
| 42 | N-乙基-N-[(十七烷氟辛基)磺酰基]-甘氨酸钾盐 Glycine, N-ethyl-N-[(heptadecafluorooctyl)sulfonyl]-, potassium salt (N-Et-FOSAA-K)* | 2991-51-7 | N.D. | 0.050 | -- |
| 43 | N-乙基-N-((十七氟辛基)磺酰基)甘氨酸钠 Sodium 2-(N-ethylperfluorooctanesulfonamido) acetate (N-Et-FOSAA-Na)* | 3871-50-9 | N.D. | 0.050 | -- |
| 44 | N-乙基-N-((十七氟辛基)磺酰基)甘氨酸铵 Ammonium 2-(N-ethylperfluorooctanesulfonamido) acetate (N-Et-FOSAA-$NH_4$)* | 2991-52-8 | N.D. | 0.050 | -- |
| 45 | N-乙基-N-((十七氟辛基)磺酰基)甘氨酸盐 2-(N-Ethyl-perfluorooctanesulfonamido)acetate (N-Et-FOSAA(anion))* | 909405-49-8 | N.D. | 0.050 | -- |
| 46 | 双(2-全氟辛基磺酰基-N-氨乙基)磷酸 Bis[2-[N-ethyl (heptadecafluorooctanesulphonyl) amino]ethyl]hydrogen phosphate (EtFOSEdiPAPs) | 2965-52-8 | N.D. | 0.050 | -- |
| 47 | 总和 Total | -- | N.D. | -- | 1000 |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million
- *该物质的结果由其特定化合物的结果换算而来。
  Result(s) shown of the substance(s) is/ are converted from the result(s) of certain compound(s).
- 根据欧盟持久性有机污染物(POPs)法规(EU) 2019/1021，全氟辛烷磺酸(PFOS)及其衍生物被定义为一类化学物质，但法规中并未给出物质清单。结论是根据所测试的项目含量得出的。
  According to Regulation (EU) 2019/1021 on persistent organic pollutants (POPs), Perfluorooctane sulfonic acid (PFOS) and its derivatives are defined as a class of chemicals. There is not an official list in the regulation. The conclusion is based on the tested chemicals.

# 检测报告
# Test Report



**▼六溴环十二烷 Hexabromocyclododecane (HBCDD)**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|
| | | 011 | | |
| 六溴环十二烷 Hexabromocyclododecane (HBCDD) | 25637-99-4<br>3194-55-6<br>134237-50-6<br>134237-51-7<br>134237-52-8 | N.D. | 5 | 100 |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million
- “六溴环十二烷(HBCDD)”指：六溴环十二烷(HBCDD)、1,2,5,6,9,10-六溴环十二烷及其非对映异构体(α-HBCDD, β-HBCDD, γ-HBCDD)
  ‘Hexabromocyclododecane (HBCDD)’ means: Hexabromocyclododecane (HBCDD), 1,2,5,6,9,10-hexabromocyclododecane and its maindiastereoisomers: α-HBCDD, β-HBCDD, γ-HBCDD

**▼短链氯化石蜡 Short Chain Chlorinated Paraffins (SCCPs)**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS(NCI)

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS(NCI)

| 测试项目 Tested Item(s) | 结果 Result(mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|
| | 011 | | |
| 短链氯化石蜡 Short Chain Chlorinated Paraffins (SCCPs) | N.D. | 100 | 1500 |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

# 检测报告
# Test Report



▼五氯苯 Pentachlorobenzene

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result(mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|
| | 011 | | |
| 五氯苯 Pentachlorobenzene | N.D. | 5 | N.D. |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

▼六氯苯 Hexachlorobenzene

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result(mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|
| | 011 | | |
| 六氯苯 Hexachlorobenzene | N.D. | 5 | 10 |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

▼六溴联苯 Hexabromobiphenyl

测试方法：IEC 62321-6:2015；测试仪器：GC-MS

Test Method: IEC 62321-6:2015; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result(mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|
| | 011 | | |
| 六溴联苯 Hexabromobiphenyl | N.D. | 5 | N.D. |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

# 检测报告
# Test Report



**▼多氯联苯 Polychlorinated Biphenyls(PCBs)**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result(mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|
| | 011 | | |
| 多氯联苯 Polychlorinated Biphenyls(PCBs) | N.D. | 5 | N.D. |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

**▼多氯化萘 Polychlorinated Naphthalenes (PCNs)**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result(mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|
| | 011 | | |
| 多氯化萘 Polychlorinated Naphthalenes (PCNs) | N.D. | 5 | N.D. |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

**▼六氯丁二烯 Hexachlorobutadiene (HCBD)**

测试方法：参考 US EPA 3550C:2007 & US EPA 8270E:2018；测试仪器：GC-MS

Test Method: Refer to US EPA 3550C:2007 & US EPA 8270E:2018; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result(mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|
| | 011 | | |
| 六氯丁二烯 Hexachlorobutadiene | N.D. | 20 | N.D. |

# 检测报告
# Test Report



备注 Remark:
- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million

**▼五氯苯酚及其盐和酯 Pentachlorophenol and its salts and esters**

测试方法：参考 ISO 17070:2015；测试仪器：GC-MS

Test Method: Refer to ISO 17070:2015; Test Equipment: GC-MS

| 测试项目 Tested Item(s) | 结果 Result(mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|
| | 011 | | |
| 五氯苯酚及其盐和酯 Pentachlorophenol and its salts and esters | N.D. | 1 | 5 |

备注 Remark:
- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million
- 五氯苯酚及其盐和酯的结果以五氯苯酚计。
  The test result of Pentachlorophenol and its salts and estersis calculated by Pentachlorophenol.

**▼全氟辛酸(PFOA)及其盐和相关物质 Perfluorooctanoic acid (PFOA) and its salts & related substances**

测试方法：CEN/TS 15968:2010；测试仪器：LC-MS-MS & GC-MS

Test Method: CEN/TS 15968:2010; Test Equipment: LC-MS-MS & GC-MS

| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | | | 011 | | |
| 1 | 全氟辛酸 Perfluorooctanoic acid (PFOA) | 335-67-1 | N.D. | 0.010 | -- |
| 2 | 全氟辛酸铵 Ammonium pentadecafluorooctanoate(APFO)* | 3825-26-1 | N.D. | 0.010 | -- |
| 3 | 全氟辛酸钠 Sodium perfluorooctanoate (PFOA-Na)* | 335-95-5 | N.D. | 0.020 | -- |
| 4 | 全氟辛酸钾 Potassium perfluorooctanoate (PFOA-K)* | 2395-00-8 | N.D. | 0.020 | -- |
| 5 | 全氟辛酸银 Silver perfluorooctanoate (PFOA-Ag)* | 335-93-3 | N.D. | 0.020 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | | | 011 | | |
| 6 | 全氟辛氟 Perfluorooctanoyl fluoride (PFOA-F)* | 335-66-0 | N.D. | 0.010 | -- |
| 7 | 全氟辛酸锂 Lithium perfluorooctanoate(PFOA-Li)* | 17125-58-5 | N.D. | 0.010 | -- |
| 8 | 全氟辛酸铯 Cesium perfluorooctanoate (PFOA-Cs)* | 17125-60-9 | N.D. | 0.020 | -- |
| 9 | 全氟辛酸钴 Cobalt perfluorooctanoate (PFOA-Co)* | 35965-01-6 | N.D. | 0.025 | -- |
| 10 | 全氟辛酸铬 Chromium(III) perfluorooctanoate (PFOA-Cr)* | 68141-02-6 | N.D. | 0.025 | -- |
| 11 | 全氟辛酸四乙基铵 N,N,N-Triethylethanaminiumperfluorooctanoate (PFOA-NH($C_8H_{19}$))* | 98241-25-9 | N.D. | 0.015 | -- |
| 12 | 全氟辛酸四丙基铵 Tetrapropylammoniumperfluorooctanoate (PFOA-NH($C_{12}H_{27}$))* | 277749-00-5 | N.D. | 0.015 | -- |
| 13 | 全氟辛酸 N,N,N-三甲基甲烷 Perfluorooctanoate N,N,N-Trimethylmethanaminium (PFOA-NH($C_4H_{11}$))* | 32609-65-7 | N.D. | 0.015 | -- |
| 14 | 全氟辛酸-哌嗪 Pentadecafluorooctanoic acid-piperazine (2/1) (PFOA-NH($C_4H_{10}N$))* | 423-52-9 | N.D. | 0.015 | -- |
| 15 | 全氟辛酸钾水合物 Potassium pentadecafluorooctanoate-water(1/1/2) (PFOA-K($H_2O$)$_2$)* | 98065-31-7 | N.D. | 0.010 | -- |
| 16 | 全氟辛酸乙胺 Perfluorooctanoic acid compd. with ethanamine (1:1) (PFOA-$C_2H_7N$)* | 1376936-03-6 | N.D. | 0.010 | -- |
| 17 | 全氟辛酸吡啶 Pentadecafluorooctanoic acid-pyridine (1/1) (PFOA-$C_5H_5N$)* | 95658-47-2 | N.D. | 0.010 | -- |
| 18 | 全氟辛酸苯基哌嗪 Pentadecafluorooctanoic acid-1-phenylpiperazine(1:1) (PFOA-$C_{10}H_{14}N_2$)* | 1514-68-7 | N.D. | 0.015 | -- |
| 19 | 全氟辛酸辛基三甲基铵 N,N,N-Trimethyloctan-1-aminium pentadecafluorooctanoate (PFOA-$C_{11}H_{26}N$)* | 927835-01-6 | N.D. | 0.015 | -- |
| 20 | 全氟辛酸盐 Pentadecafluorooctanoate (anion) (PFOA(anion))* | 45285-51-6 | N.D. | 0.010 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | | | 011 | | |
| 21 | **全氟辛酸(PFOA)及其盐 Perfluorooctanoic acid (PFOA) and its salts** | - | N.D. | -- | 0.025 |
| 22 | 全氟辛酸酐 Perfluorooctanoic Anhydride (PFOAA)* | 33496-48-9 | N.D. | 0.020 | 1 |
| 23 | 全氟辛酸甲酯 Methyl perfluorooctanoate(Me-PFOA) | 376-27-2 | N.D. | 0.010 | 1 |
| 24 | 全氟辛酸乙酯 Ethyl perfluorooctanoate (Et-PFOA) | 3108-24-5 | N.D. | 0.010 | 1 |
| 25 | 全氟正辛基碘烷 Perfluorooctyl iodide (PFOI) | 507-63-1 | N.D. | 0.200 | 1 |
| 26 | 1H,1H,2H,2H-全氟-1-癸醇 1H,1H,2H,2H-perfluoro-1-decanol (8:2 FTOH) | 678-39-7 | N.D. | 0.200 | 1 |
| 27 | 1H,1H,2H,2H-全氟癸磺酸 1H,1H,2H,2H-perfluorodecane sulfonic acid (8:2 FTS) | 39108-34-4 | N.D. | 0.200 | 1 |
| 28 | 1H,1H,2H,2H-全氟癸磺酸钠 1H,1H,2H,2H-Perfluorodecanesulfonic Acid Sodium (8:2FTS-Na)* | 27619-96-1 | N.D. | 0.200 | 1 |
| 29 | 1H,1H,2H,2H-全氟癸磺酸钾 Potassium 2-(perfluorooctyl)ethane-1-sulfonate (8:2 FTS-K)* | 438237-73-1 | N.D. | 0.200 | 1 |
| 30 | 1H,1H,2H,2H-全氟癸磺酸铵 8:2 Fluorotelomersulfonate ammonium salt (8:2FTS-$NH_4$)* | 149724-40-3 | N.D. | 0.200 | 1 |
| 31 | 1H,1H,2H,2H-全氟癸磺酸盐 2-(Perfluorooctyl)ethane-1-sulfonate (8:2 FTS (anion))* | 481071-78-7 | N.D. | 0.200 | 1 |
| 32 | 丙烯酸 1H,1H,2H,2H-十七氟癸酯 1,1,2,2-Tetrahydroperfluorodecyl acrylate (8:2 FTAC) | 27905-45-9 | N.D. | 0.200 | 1 |
| 33 | 2-(全氟辛基)乙基甲基丙烯酸酯 2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyl ester (8:2 FTMA) | 1996-88-9 | N.D. | 0.200 | 1 |
| 34 | 1H,1H,2H,2H-全氟癸基三乙氧基硅烷 1H,1H,2H,2H-Perfluorodecyltriethoxysilane (PFSI) | 101947-16-4 | N.D. | 0.200 | 1 |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | | | 011 | | |
| 35 | 1-碘-1H,1H,2H,2H-全氟癸烷 Decane, 1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8- heptadecafluoro-10-iodo- (8:2 FTI) | 2043-53-0 | N.D. | 0.200 | 1 |
| 36 | 双(2-(全氟乙基))磷酸 8:2 Fluorotelomer phosphate diester (8:2diPAP) | 678-41-1 | N.D. | 0.200 | 1 |
| 37 | 双(2-(全氟乙基))磷酸钠 Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2diPAP-Na)* | 114519-85-6 | N.D. | 0.200 | 1 |
| 38 | 双(2-(全氟乙基))磷酸铵 Ammonium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2diPAP-$NH_4$)* | 93776-20-6 | N.D. | 0.200 | 1 |
| 39 | 双(2-(全氟乙基))磷酸二乙醇胺 Bis(2-hydroxyethyl)ammonium bis((perfluorooctyl)ethyl) hydrogen phosphate (8:2diPAP-$C_4H_{11}NO_2$)* | 57677-97-1 | N.D. | 0.200 | 1 |
| 40 | 双(2-(全氟乙基))磷酸盐 8:2 Fluorotelomer phosphate diester ion (1-) (8:2diPAP (anion))* | 1411713-91-1 | N.D. | 0.200 | 1 |
| 41 | 四丁基磷 2H,2H-全氟癸酸酯 Tetrabutylphosphonium 2H,2H-Perfluorodecanoate ($H_2$PFDA-P($C_4H_9$)$_4$) | 882489-14-7 | N.D. | 0.010 | 1 |
| 42 | 2H,2H,3H,3H-全氟十一酸 2H,2H,3H,3H-Perfluoroundecanoic acid ($H_4$PFUnA) | 34598-33-9 | N.D. | 0.010 | 1 |
| 43 | 3-(全氟辛基)丙酸钾 Potassium 3-(perfluorooctyl)propanoate ($H_4$PFUnA-K)* | 83310-58-1 | N.D. | 0.020 | 1 |
| 44 | 2H,2H,3H,3H-全氟十一酸锂 Lithium 3-(perfluorooctyl) propanoate ($H_4$PFUnA-Li)* | 67304-23-8 | N.D. | 0.010 | 1 |
| 45 | 2H,2H-全氟癸酸 2H,2H-Perfluorodecanoate ($H_2$PFDA) | 27854-31-5 | N.D. | 0.010 | 1 |
| 46 | 全氟辛基乙烯 1-Decene,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro- (PFOE) | 21652-58-4 | N.D. | 0.200 | 1 |
| 47 | 全氟癸基三氯硅烷 Perfluorooctylethyltrichlorosilane (FDTS) | 78560-44-8 | N.D. | 0.200 | 1 |
| 48 | 全氟癸基三甲氧硅烷 Perfluorooctylethyltrimethoxysilane (FDTMOS) | 83048-65-1 | N.D. | 0.200 | 1 |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| | | | 011 | | |
| 49 | 双[2 - (全氟癸基)乙基]磷酸酯 Bis[2-(perfluorodecyl)ethyl] Phosphate (10:2 diPAP) | 1895-26-7 | N.D. | 0.200 | 1 |
| 50 | 十七氟-1-癸醇磷酸二氢酯 3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluorodecyldihydrogen phosphate (8:2 monoPAPS) | 57678-03-2 | N.D. | 0.200 | 1 |
| 51 | 2H-全氟-2-癸烯酸 2H-Perfluoro-2-decenoic acid (8:2 FTUCA) | 70887-84-2 | N.D. | 0.010 | 1 |
| 52 | C8-14-全氟烷基乙醇 Alcohols, C8-14, gamma-omega-perfluoro (C8-14-PFEtOH) | 68391-08-2 | N.D. | 0.200 | 1 |
| 53 | 2-全氟辛基乙基乙酸酯 1H,1H,2H,2H-Perfluorodecyl acetate (8:2FTOAc) | 37858-04-1 | N.D. | 0.200 | 1 |
| 54 | **全氟辛酸(PFOA)相关物质 Perfluorooctanoic acid (PFOA) related substances** | - | N.D. | -- | 1 |

备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million
- *该物质的结果由其特定化合物的结果换算而来。
  Result(s) shown of the substance(s) is/ are converted from the result(s) of certain compound(s).
- 根据欧盟持久性有机污染物(POPs)法规(EU) 2019/1021，全氟辛酸(PFOA)及其盐和相关物质被定义为一类化学物质，但法规中并未给出物质清单。结论是根据所测试的项目含量得出的。
  According to Regulation (EU) 2019/1021 on persistent organic pollutants (POPs), Perfluorooctanoic acid (PFOA) and its salts &related substances are defined as a class of chemicals. There is not an official list in the regulation. The conclusion is based on the tested chemicals.

# 检测报告
# Test Report



**▼全氟己基磺酸(PFHxS)及其盐和相关物质 Perfluorohexane-1-sulphonic acid (PFHxS) and its salts & related substances**

测试方法:CEN/TS 15968:2010;测试仪器:LC-MS-MS & GC-MS

Test Method: CEN/TS 15968:2010;TestEquipment:LC-MS-MS & GC-MS

| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) 011 | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| 1 | 全氟己基磺酸 Perfluorohexanesulfonic acid (PFHxS) | 355-46-4 | N.D. | 0.010 | -- |
| 2 | 全氟己基磺酸钠 1-Hexanesulfonic acid,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, sodium salt (PFHxS-Na)* | 82382-12-5 | N.D. | 0.020 | -- |
| 3 | 全氟己基磺酸钾 Potassium perfluorohexane-1-sulphonate (PFHxS-K)* | 3871-99-6 | N.D. | 0.020 | -- |
| 4 | 全氟己基磺酸锂 1-Hexanesulfonic acid,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, lithium salt(1:1) (PFHxS-Li)* | 55120-77-9 | N.D. | 0.010 | -- |
| 5 | 全氟己基磺酸锌 1-Hexanesulfonic acid,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, zinc salt (PFHxS-Zn)* | 70136-72-0 | N.D. | 0.025 | -- |
| 6 | 全氟己基磺酸镓盐 (9CI)1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4, 5,5,6,6,6-tridecafluoro-, gallium salt (9CI) (PFHxS-Ga)* | 341035-71-0 | N.D. | 0.010 | -- |
| 7 | 全氟己基磺酸钪盐 (3:1)1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4, 5,5,6,6,6-tridecafluoro-, scandium(3+) salt (3:1) (PFHxS-Sc)* | 350836-93-0 | N.D. | 0.010 | -- |
| 8 | 全氟己基磺酸钕盐 (3:1)1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4, 5,5,6,6,6-tridecafluoro-, neodymium(3+) salt (3:1) (PFHxS-Nd)* | 41184-65-0 | N.D. | 0.010 | -- |
| 9 | 全氟己基磺酸钇盐(3:1) 1-Hexanesulfonic acid,1,1,2,2,3,3,4,4, 5,5,6,6,6-tridecafluoro-, yttrium(3+) salt (3:1) (PFHxS-Y)* | 41242-12-0 | N.D. | 0.010 | -- |
| 10 | 全氟己基磺酸铯 Cesium Perfluorohexanesulfonate (PFHxS-Cs)* | 92011-17-1 | N.D. | 0.020 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) 011 | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| 11 | 全氟己基磺酸铵 1-Hexanesulfonic acid,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, ammonium salt (1:1)(PFHxS-$NH_4$)* | 68259-08-5 | N.D. | 0.010 | -- |
| 12 | 全氟己基磺酰氯 1,1,2,2,3,3,4,4,5,5,6,6,6-Tridecafluorohexane-1-sulphonyl chloride (PFHxS-Cl)* | 55591-23-6 | N.D. | 0.020 | -- |
| 13 | 全氟己烷磺酸盐 Perfluorohexylsulfonate (PFHxS(anion))* | 108427-53-8 | N.D. | 0.010 | -- |
| 14 | (二-4,1-苯撑硫)双二苯基硫与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸(1:2)的盐 Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2) (PFHxS-$S_3(C_6H_5)_4(C_6H_4)_2$)* | 421555-73-9 | N.D. | 0.020 | -- |
| 15 | 二[4-(1,1-二甲基丙基)苯基]碘与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸的盐 Iodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic (PFHxS-$I(C_6H_4)_2(C_5H_{11})_2$)* | 421555-74-0 | N.D. | 0.020 | -- |
| 16 | 三[4-(1,1-二甲基乙基)苯基]硫-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯 Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-$S(C_6H_4)_3(C_4H_9)_3$)* | 425670-70-8 | N.D. | 0.020 | -- |
| 17 | 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸锌与 N,N-二乙基乙胺 (1:1)1-Hexanesulfonic acid,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with N,N-diethylethanamine (1:1) (PFHxS-$N(C_2H_5)_3$)* | 72033-41-1 | N.D. | 0.020 | -- |
| 18 | 二[(1,1-二甲基乙基)苯基]碘与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸的盐(1:1) (9CI)Iodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (9CI) (PFHxS-$I(C_6H_4)_2(C_4H_9)_2$)* | 866621-50-3 | N.D. | 0.020 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) 011 | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| 19 | (4-甲基苯基)二苯基硫-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1) Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS($S(C_6H_5)_2C_7H_7$)* | 910606-39-2 | N.D. | 0.020 | -- |
| 20 | [4-[(2-甲基-1-氧代-2-丙烯-1-基)氧基]苯基]二苯基硫-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1) Sulfonium, [4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]diphenyl-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-$S(C_6H_5)_2C_{10}H_9O_2$)* | 911027-68-4 | N.D. | 0.020 | -- |
| 21 | [4-[(2-甲基-1-氧代-2-丙烯基)氧基]苯基]二苯硫与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸的盐与 2-乙基三环[3.3.1.13,7]癸-2-甲基-2-丙烯酸酯、3-羟基三环[3.3.1.13,7]癸-2-甲基-2-丙烯酸酯和四氢呋喃-2-甲基-2-丙烯酸酯的聚合物 Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate,3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate andtetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate* | 911027-69-5 | N.D. | 0.020 | -- |
| 22 | 二苯并[k,n][1,4,7,10,13]四氧硫酰氯代十六烷基铵,19-[4-(1,1-二甲基乙基)苯基]-6,7,9,10,12,13-六氢-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1)Dibenzo[k,n][1,4,7,10,13] tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-$SC_{28}H_{31}O_4$)* | 928049-42-7 | N.D. | 0.020 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) 011 | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| 23 | 三苯基(苯甲基)膦-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1)Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-P($C_6H_5$)$_3$$C_7H_7$)* | 1000597-52-3 | N.D. | 0.020 | -- |
| 24 | N,N,N-三丁基-1-丁胺与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸的盐 1-Butanaminium, N,N,N-tributyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (PFHxS-N($C_4H_9$)$_4$)* | 108427-54-9 | N.D. | 0.020 | -- |
| 25 | N,N,N-三乙基乙胺与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸(1:1)的盐 Ethanaminium,N,N,N-triethyl-,salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (PFHxS-N($C_2H_5$)$_4$)* | 108427-55-0 | N.D. | 0.020 | -- |
| 26 | 吡咯烷与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸(1:1)的盐 1-Hexanesulfonic acid,1,1,2,2,3,3,4,4,5,5,6, 6,6-tridecafluoro-, compd. with pyrrolidine (1:1) (PFHxS-N$C_4H_9$)* | 1187817-57-7 | N.D. | 0.020 | -- |
| 27 | 三苯基硫-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1)Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-S($C_6H_5$)$_3$)* | 144116-10-9 | N.D. | 0.020 | -- |
| 28 | 1-(羧甲基)-4-[2-[4-[4-(2,2-二苯基乙烯基)苯基]-1,2,3,3a,4,8b-六氢旋流器戊烷[b]吲哚-7-基]乙烯基]喹啉-十三氟-1-己基磺酸酯(1:1)Quinolinium,1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-$C_{44}H_{37}N_2O_2$)* | 1462414-59-0 | N.D. | 0.020 | -- |
| 29 | 二苯基碘-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1)Iodonium, diphenyl-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-I($C_6H_5$)$_2$)* | 153443-35-7 | N.D. | 0.020 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) 011 | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| 30 | N,N,N-三甲基甲胺与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸(1:1)的盐 Methanaminium,N,N,N-trimethyl-,salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (PFHxS-N($CH_3$)$_4$)* | 189274-31-5 | N.D. | 0.020 | -- |
| 31 | 2-甲基-2-丙胺与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸(1:1)的盐 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-, compd. with 2-methyl-2-propanamine (1:1) (PFHxS-$NH_2$($CH_3$)$_3$)* | 202189-84-2 | N.D. | 0.020 | -- |
| 32 | 二[4-(1,1-二甲基乙基)苯基]碘-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1)Iodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-I($C_6H_4$)$_2$($C_4H_9$)$_2$)* | 213740-81-9 | N.D. | 0.020 | -- |
| 33 | 二(4-甲基苯基)苯基硫-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1)Sulfonium, bis(4-methylphenyl) phenyl-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-S($C_7H_7$)$_2$$C_6H_5$)* | 341548-85-4 | N.D. | 0.020 | -- |
| 34 | N-[4-[[4-(二乙氨基)苯基][4-(乙氨基)-1-萘基]亚甲基]-2,5-环己二烯-1-亚基]-N-乙基乙胺-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1) Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-($NC_{10}H_{14}$)$_3$$C_5H_4$)* | 1310480-24-0 | N.D. | 0.020 | -- |
| 35 | N-[4-[[4-(二甲氨基)苯基][4-(乙胺基)-1-萘基]亚甲基]-2,5-环己二烯-1-亚甲基]-N-甲基甲铵-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯(1:1)Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-,1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-($NC_8H_{10}$)$_2$$C_{13}H_{12}$)* | 1310480-27-3 | N.D. | 0.020 | -- |

# 检测报告
# Test Report



| 序号 No. | 测试项目 Tested Item(s) | CAS No. | 结果 Result (mg/kg) 011 | 方法检出限 MDL(mg/kg) | 限值 Limit (mg/kg) |
|---|---|---|---|---|---|
| 36 | N-[4-[[4-(二甲氨基)苯基][4-(苯氨基)-1-萘基]亚甲基]-2,5-环己二烯-1-亚基]-N-甲基甲铵-1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸酯 (1:1)Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl] methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) (PFHxS-$(NC_8H_{10})_2C_{17}H_{12}$)* | 1310480-28-4 | N.D. | 0.020 | -- |
| 37 | β-环糊精与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸根(1-)(1:1)形成的化合物 Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1) (PFHxS-$C_{42}H_{70}O_{35}$)* | 1329995-45-0 | N.D. | 0.020 | -- |
| 38 | γ-环糊精与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸根(1-)(1:1)形成的化合物 Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid ion(1-)(1:1) (PFHxS-$C_{48}H_{80}O_{40}$)* | 1329995-69-8 | N.D. | 0.020 | -- |
| 39 | 2,2'-亚氨基二乙醇与 1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己基磺酸(1:1)形成的化合物 Tridecafluorohexanesulphonic acid, compound with 2,2'-iminodiethanol (1:1) (PFHxS-$NH(C_2H_5O)_2$)* | 70225-16-0 | N.D. | 0.020 | -- |
| 40 | **全氟己基磺酸(PFHxS)及其盐 Perfluorohexane-1-sulphonic acid (PFHxS) and its salts** | -- | N.D. | -- | 0.025 |
| 41 | 全氟己基磺酰氟 1-Hexanesulfonyl fluoride, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro- (PFHxSF)* | 423-50-7 | N.D. | 0.010 | -- |
| 42 | 全氟己基磺酰胺 1-Hexane-sulfonamide,1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro- (FHxSA) | 41997-13-1 | N.D. | 0.010 | -- |
| 43 | N-甲基全氟己烷磺酰胺 N-methylperfluorohexanesulfonamide (MeFHxSA) | 68259-15-4 | N.D. | 0.200 | -- |
| 44 | **全氟己基磺酸(PFHxS)相关物质 Perfluorohexane-1-sulphonic acid (PFHxS) related substances** | -- | N.D. | -- | 1 |

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备注 Remark:

- MDL =方法检出限 Method Detection Limit
- N.D. = 未检出 Not Detected (小于方法检出限<MDL)
- mg/kg = ppm = 百万分之一 parts per million
- *该物质的结果由其特定化合物的结果换算而来。
  Result(s) shown of the substance(s) is/ are converted from the result(s) of certain compound(s).

**样品/部位描述 Sample/Part Description**

| 序号 No. | CTI 样品 ID CTI Sample ID | 描述 Description |
|---|---|---|
| 1 | 011 | 电子元器件（整体混合测试）<br>Electronic components(Mix all) |

备注 Remark:

- 根据客户要求，对样品进行整体混合测试，测试结果不代表样品中任何一种单一材质的含量。
  As specified by client, the test was conducted by mixing all materials together.
  The result(s) shown on this report may be different from the content of any homogeneous material.

**注释 Note:**

- **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
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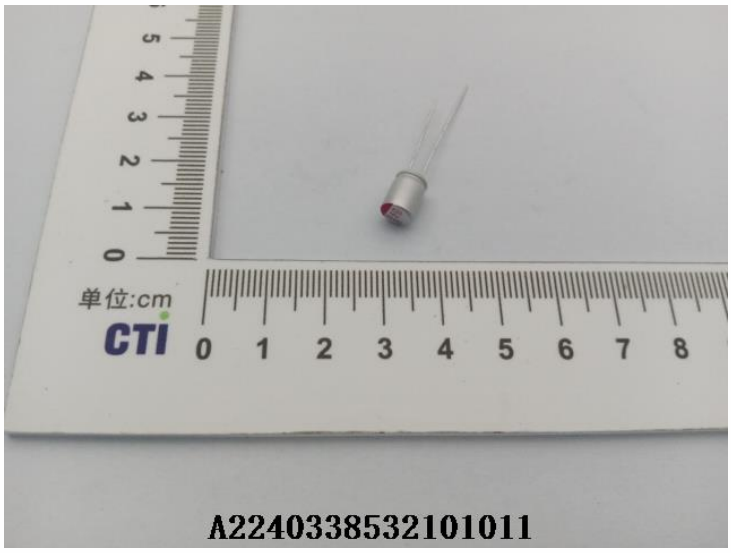
## 样品图片

## Photo(s) of the sample(s)




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 invalid without approved signature, special seal and the seal on the perforation;
2. 报告抬头公司名称及地址、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 Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. 本报告检测结果仅对受测样品负责；
   The result(s) shown in this report refer(s) only to the sample(s) tested;
4. 除非另有说明，报告参照 ILAC-G8:09/2019 / CNAS-GL015:2022 使用简单接受（w=0）二元判定规则进行符合性判定;Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
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*** 报告结束 ***
*** End of Report ***