

TEST REPORT

Report No.: JJ230418-20056A

Date: April 28, 2023

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Quanzhou Tianyi New Material Technology Co., Ltd

泉州市天益新材料科技有限公司

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Fujian Province

福建省泉州经济技术开发区德泰路锦绣江南9号楼807

Report on the submitted samples said to be:

委托检测的样品及申请者对样品的说明如下：

Sample Name: 样品名称：	天益油墨
Style/Item No.: 型号：	PU.PVC
Serial No.: 序列号：	PU110.103.203.302.400.403.404.408.500.501.601.801.802.803.159.131.133.134.1 59.8018.606
Color: 颜色：	混合色
Country of Origin: 原产地：	China
Buyer: 买家：	PUMA
Test Standard: 测试标准：	Refer to PUMA ZDHC MRSL V2.0
Sample Receiving Date: 收样日期:	April 18,2023 2023 年 04 月 18 日
Testing Period: 测试周期:	April 18,2023 - April 21,2023 2023 年 04 月 18 日 - 2023 年 04 月 21 日
Result: 测试结果:	Please refer to next page(s). 请参见后续页。

Signed for and on behalf of BACL (BACL 授权签名)

Checked by:
审核:

Chevy Feng-冯伟环

Approved by:
核准:

Kithy Li-李艳君

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Summary of Test Result (Only tested the following Item as the requirement of Client):

测试结果概要(依照客户要求仅测试以下项目):

TEST REQUEST 测试要求	CONCLUSION 结论
1. Anti-Microbials & Biocides Content 抗菌剂和杀菌剂含量	Pass 合格
2. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs) Content 烷基酚(AP)和烷基酚聚氧乙烯醚(APEOs)含量	Pass 合格
3. Dyes-Azo (Forming Restricted Amines) Content 染料-偶氮(形成限用胺类)含量	Pass 合格
4. Chlorinated Paraffin content 氯化石蜡含量	Pass 合格
5. Chlorobenzenes and Chlorotoluenes Content 氯苯和氯甲苯含量	Pass 合格
6. Chlorophenols Content(others,MRSL) 氯酚含量(其他,MRSL)	Pass 合格
7. Chlorophenols(PCP,TeCP) Content 氯酚(PCP,TeCP)含量	Pass 合格
8. Dimethyl Fumarate(DMFu) Content 富马酸二甲酯含量	Pass 合格
9. Dyes, Forbidden and Disperse & Other Dyes Content 禁用的分散性染料和其他染料含量	
9.1 Dyes-Disperse (Sensitising) 染料-分散(致敏性)含量	Pass 合格
9.2 Dyes -Carcinogenic or Equivalent Concern 染料-致癌性或等效属性含量	Pass 合格
10. Dyes-Navy Blue Colourant Content 染料-海军蓝染色剂含量	Pass 合格
11. Flame Retardants content 阻燃剂的含量	Pass 合格
12. Glycols/Glycol Ethers Content 乙二醇/乙二醇醚含量	Pass 合格
13. Organostannic compounds content 有机锡化合物含量	Pass 合格
14. Borate, zincsalt Content 硼酸锌盐含量	Pass 合格

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TEST REQUEST 测试要求	CONCLUSION 结论
15. Bisphenol A (BPA) content 双酚A含量	Pass 合格
16. AEEA (2-(2-aminoethylamino) ethanol) Content AEEA(羟乙基乙二胺)含量	Pass 合格
17. Thiourea Content 硫脲含量	Pass 合格
18. Quinoline Content 喹啉含量	Pass 合格
19. Perfluorinated and Polyfluorinated Chemicals (PFCs) content 全氟化和多氟化学品(PFCs)的含量	
19.1 PFOS and Related Substances content PFOS及相关物质含量	Pass 合格
19.2 Perfluorooctanoic acid (PFOA) & its salts content 全氟辛酸 (PFOA)及其盐含量	Pass 合格
19.3 PFOA-related Substances content PFOA相关物质含量	Pass 合格
20. Phthalates content 邻苯二甲酸酯含量	Pass 合格
21. Polycyclic-aromatic hydrocarbons (PAHs) content 多环芳烃含量	Pass 合格
22. Solvents/ Residuals Content 溶剂/残留物含量	Pass 合格
23. Total Heavy Metals Content 重金属总量	Pass 合格
24. UV Absorbers/ Stabilizers Content 紫外线吸收剂/稳定剂含量	Pass 合格

Pass = Meet the Requirement of Client

合格 = 符合客户要求



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Result:

测试结果:

Tested part(s):

测试部位:

(1) Grey ink

灰色油墨

Remark:Result(s) of sample shown are the total weight of wet sample(s).

备注:样品结果显示的是样品湿测的测试结果

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1. Anti-Microbials & Biocides Content

抗菌剂和杀菌剂含量

Test Method: Solvent extraction, analysis was performed by LC MS.

测试方法: 溶剂萃取, 然后采用LC MS进行分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
o-Phenylphenol(+salts) 邻苯基苯酚(及其盐)	90-43-7	mg/kg	10	N.D.	5000
Permethrin 氯菊酯	-	mg/kg	10	N.D.	250
Triclosan(TCS) 三氯生	3380-34-5	mg/kg	10	N.D.	250
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL

- RL = Report Limit

- mg/kg = ppm

注释:

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2. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs) Content

烷基酚(AP)和烷基酚聚氧乙烯醚(APEOs)含量

Test Method: APEOs: Sample prep and analysis using EN ISO 18218-1:2015 with quantification according to EN ISO 18254-1:2016 (For leather) ; EN ISO 18254-1:2016 with determination of APEO using LC/MS or LC/MS/MS (For all materials except Leather).

APs: With reference to EN ISO 21084:2019, analysis was performed by gas chromatographic-mass spectrometer (GC-MS) (For textiles and leather) ; 1 g sample/20 mL THF, sonication for 60 minutes at 70 degrees C, analysis according to EN ISO 21084:2019 (For polymers and all other materials).

测试方法: APEOs: 使用 EN ISO 18218-1:2015 进行样品制备和分析, 并根据 EN ISO 18254-1:2016 进行量化(真皮); EN ISO 18254-1:2016, 使用 LC/MS 或者 LC/MS/MS 进行分析(除皮革外所有其他材料)

APs: 参考 EN ISO 21084:2019, 采用气相色谱质谱联用仪(GC-MS)分析(纺织品和皮革); 1 g 样品/20 mL THF, 在70摄氏度下超声萃取60分钟, 再依据 EN ISO 21084:2019 进行分析(聚合物和所有其他材料)

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Nonylphenol, mixed isomers (NP) 壬基苯酚, 混合同分异构体	-	mg/kg	3	N.D.	250
Octylphenol, mixed isomers (OP) 辛基苯酚, 混合同分异构体	-	mg/kg	3	N.D.	250
Nonylphenol Ethoxylates (NPEO) 壬基酚聚氧乙烯醚	-	mg/kg	10	N.D.	500
Octylphenol Ethoxylates (OPEO) 辛基酚聚氧乙烯醚	-	mg/kg	10	N.D.	500
Conclusion 结论	/	/	/	Pass 合格	/

Note:

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3. Dyes-Azo (Forming Restricted Amines) Content

染料-偶氮(形成限用胺类)含量

Test Method: With reference to EN ISO 14362-1: 2017 (for textile) or EN ISO 17234-1:2020 (for leather), Analysis was performed by gas chromatographic-mass spectrometer (GC-MS) and high performance liquid chromatography with diode array detector (HPLC-DAD).

测试方法: 参考EN ISO 14362-1: 2017 (纺织品)或EN ISO 17234-1:2020(皮革), 采用气相色谱质谱联用仪(GC-MS)和高效液相色谱-二极管阵列检测法(HPLC-DAD)测定。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
4-Aminobiphenyl(1#) 4-氨基联苯	92-67-1	mg/kg	20	N.D.	150
Benzidine(2#) 联苯胺	92-87-5	mg/kg	20	N.D.	150
4-Chloro-o-methylaniline (3#) 4-氯-2-甲基苯胺	95-69-2	mg/kg	20	N.D.	150
2-Naphthylamine(4#) 2-萘胺	91-59-8	mg/kg	20	N.D.	150
o-aminoazotoluene(5#) 邻氨基偶氮甲苯	97-56-3	mg/kg	20	N.D.	150
5-nitro-o-toluidine(6#) 2-氨基-4-硝基甲苯	99-55-8	mg/kg	20	N.D.	150
4-chloroaniline(7#) 4-氯苯胺	106-47-8	mg/kg	20	N.D.	150
2,4-diaminoanisole(8#) 4-甲氧基间苯二胺	615-05-4	mg/kg	20	N.D.	150
4,4' - diaminodiphenylmethane (9#) 4,4'-二氨基二苯甲烷	101-77-9	mg/kg	20	N.D.	150
3,3'-Dichlorobenzidine (10#) 3,3'-二氯联苯胺	91-94-1	mg/kg	20	N.D.	150
3,3'-Dimethoxybenzidine (11#) 3,3'-二甲氧基联苯胺	119-90-4	mg/kg	20	N.D.	150
3,3' -dimethylbenzidine (12#) 3,3' -二甲基联苯胺	119-93-7	mg/kg	20	N.D.	150
4,4'-methylenedi-o- toluidine(13#) 4,4'-二氨基-3,3'-二甲基联 苯基甲烷	838-88-0	mg/kg	20	N.D.	150

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
p-cresidine(14#) 2-甲氧基-5-甲基苯胺	120-71-8	mg/kg	20	N.D.	150
4,4'-methylene-bis-(2-chloro-aniline)(15#) 4,4'-二氨基-3,3'-二氯二苯甲烷	101-14-4	mg/kg	20	N.D.	150
4,4' -oxydianiline(16#) 4,4'-二氨基二苯醚	101-80-4	mg/kg	20	N.D.	150
4,4' -thiodianiline(17#) 4,4'-二氨基二苯硫醚	139-65-1	mg/kg	20	N.D.	150
O-Toluidine(18#) 邻甲苯胺	95-53-4	mg/kg	20	N.D.	150
2,4-Diaminotoluene(19#) 2,4-二氨基甲苯	95-80-7	mg/kg	20	N.D.	150
2,4,5-Trimethylaniline (20#) 2,4,5-三甲基苯胺	137-17-7	mg/kg	20	N.D.	150
2-Methoxyaniline; o-Anisidine(21#) 邻氨基苯甲醚	90-04-0	mg/kg	20	N.D.	150
4-Aminoazobenzene(22#) 4-氨基偶氮苯	60-09-3	mg/kg	20	N.D.	150
2,4-dimethylbenzene-1-amine(23#) 2,4-二甲基苯胺	95-68-1	mg/kg	20	N.D.	150
2,6-dimethylbenzene-1-amine(24#) 2,6-二甲基苯胺	87-62-7	mg/kg	20	N.D.	150
4-Chloro-o-toluidinium chloride(25#) 4-氯-邻甲苯胺氯化物	3165-93-3	mg/kg	20	N.D.	150
2-Naphthylammoniumacetate(26#) 2-萘基胺醋酸盐	553-00-4	mg/kg	20	N.D.	150
4-Methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate(27#) 4-甲氧基亚苯基硫酸铵	39156-41-7	mg/kg	20	N.D.	150

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit
				(1)	客户限量
2,4,5-Trimethylaniline hydrochloride(28#) 2,4,5-三甲基苯胺盐酸盐	21436-97-5	mg/kg	20	N.D.	150
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL

- RL = Report Limit

- mg/kg = ppm

- 22#: The EN ISO 14362-1:2017 & EN ISO 17234-1:2020 method(s) will enable further cleavage of 4-aminoazobenzene to non-forbidden amines: aniline or 1, 4-phenylenediamine. If the test result for 4-aminoazobenzene (CAS No. 60-09-3) is considered as "Not Detected" since both aniline and / or 1, 4-phenylenediamine is not found by mentioned test method. Otherwise the test method(s) of EN ISO 14362-3:2017, EN ISO 17234-2:2011 is(are) employed to verify the presence of 4-aminoazobenzene.

注释:

- N.D. = 未检出或低于报告检出限

- RL = 报告检出限

- mg/kg = ppm

- 22#: EN ISO 14362-1:2017 & EN ISO 17234-1:2020方法会促使4-氨基偶氮苯进一步分裂为非禁用的胺: 苯胺和1, 4-二胺基苯。如果未检出胺和/或1, 4-二胺基苯, 4-氨基偶氮苯的测试结果被评定为未检出。否则需采用EN ISO 14362-3:2017, EN ISO 17234-2:2011方法验证4-氨基偶氮苯的存在。

4. Chlorinated Paraffin content

氯化石蜡含量

Test Method: With reference to prEN ISO 22699-2, analysis was performed by GC/MS-NCI.

测试方法: 参考prEN ISO 22699-2, 采用GC/MS-NCI进行分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit
				(1)	客户限量
short-chained chlorinated paraffins(SCCP) 短链氯化石蜡	85535-84-8	mg/kg	50	N.D.	Textile: 50; Leather: 250
Medium-chained chlorinated paraffins (MCCP) 中链氯化石蜡	85535-85-9	mg/kg	100	N.D.	500
Conclusion 结论	/	/	/	Pass 合格	/

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5. Chlorobenzenes and Chlorotoluenes Content

氯苯和氯甲苯含量

Test Method: With reference to DIN 54232:2010, analysis was performed by gas chromatographic-mass spectrometer (GC-MS).

测试方法: 参考 DIN 54232:2010, 采用气相色谱质谱联用仪 (GC-MS) 进行分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Chlorobenzene 一氯苯	-	mg/kg	0.2	N.D.	-
Dichlorobenzenes 二氯苯	-	mg/kg	0.2	N.D.	-
Trichlorobenzenes 三氯苯	-	mg/kg	0.2	N.D.	-
Tetrachlorobenzenes 四氯苯	-	mg/kg	0.2	N.D.	-
Pentachlorobenzenes 五氯苯	--	mg/kg	0.2	N.D.	-
Hexachlorobenzenes 六氯苯	--	mg/kg	0.2	N.D.	-
Chlorotoluenes 一氯甲苯	-	mg/kg	0.2	N.D.	-
Dichlorotoluenes 二氯甲苯	-	mg/kg	0.2	N.D.	-
Trichlorotoluenes 三氯甲苯	-	mg/kg	0.2	N.D.	5
Tetrachlorotoluenes 四氯甲苯	-	mg/kg	0.2	N.D.	5
Pentachlorotoluenes 五氯甲苯	--	mg/kg	0.2	N.D.	-
1,2-Dichlorobenzene(1,2-DCB) 1,2-二氯苯	95-50-1	mg/kg	0.2	0.6	500

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
sum of Chlorobenzene, Dichlorobenzenes, Trichlorobenzenes, Tetrachlorobenzenes, Pentachlorobenzenes, Hexachlorobenzenes, Chlorotoluenes, Dichlorotoluenes, Trichlorotoluenes, Tetrachlorotoluenes, Pentachlorotoluenes	-	mg/kg	-	N.D.	200
Conclusion 结论	/	/	/	Pass 合格	/

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- mg/kg = ppm
- The results less than RL are not taken into account while calculating the sum contents.

注释:

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- RL = 报告检出限
- mg/kg = ppm
- 加和含量计算时未计入小于报告检出限的结果。

6. Chlorophenols Content(others, MRSL)

氯酚含量(其他, MRSL)

Test Method: With reference to EN ISO 17070:2015, Analysis was performed by gas chromatographic-mass spectrometer (GC-MS).

测试方法: 参考EN ISO 17070:2015, 采用气相色谱质谱联用仪(GC-MS)分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
2-Chlorophenol(2-CP) 2-氯苯酚	95-57-8	mg/kg	0.5	N.D.	50
3-chlorophenol(3-CP) 3-氯苯酚	108-43-0	mg/kg	0.5	N.D.	50
4-chlorophenol(4-CP) 4-氯苯酚	106-48-9	mg/kg	0.5	N.D.	50
2,3-Dichlorophenol(2,3-DCP) 2,3-二氯苯酚	576-24-9	mg/kg	0.5	N.D.	50
2,4-Dichlorophenol(2,4-DCP) 2,4-二氯苯酚	120-83-2	mg/kg	0.5	N.D.	50

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
2,5-Dichlorophenol(2,5-DCP) 2,5-二氯苯酚	583-78-8	mg/kg	0.5	N.D.	50
2,6-Dichlorophenol(2,6-DCP) 2,6-二氯苯酚	87-65-0	mg/kg	0.5	N.D.	50
3,4-Dichlorophenol(3,4-DCP) 3,4-二氯苯酚	95-77-2	mg/kg	0.5	N.D.	50
3,5-Dichlorophenol(3,5-DCP) 3,5-二氯苯酚	591-35-5	mg/kg	0.5	N.D.	50
2,3,4-Trichlorophenol (2,3,4-TriCP) 2,3,4-三氯苯酚	15950-66-0	mg/kg	0.5	N.D.	50
2,3,5-Trichlorophenol (2,3,5-TriCP) 2,3,5-三氯苯酚	933-78-8	mg/kg	0.5	N.D.	50
2,3,6-Trichlorophenol (2,3,6-TriCP) 2,3,6-三氯苯酚	933-75-5	mg/kg	0.5	N.D.	50
2,4,5-Trichlorophenol (2,4,5-TriCP) 2,4,5-三氯苯酚	95-95-4	mg/kg	0.5	N.D.	50
2,4,6-Trichlorophenol (2,4,6-TriCP) 2,4,6-三氯苯酚	88-06-2	mg/kg	0.5	N.D.	50
3,4,5-Trichlorophenol (3,4,5-TriCP) 3,4,5-三氯苯酚	609-19-8	mg/kg	0.5	N.D.	50
sum of all	-	mg/kg	-	N.D.	50
Conclusion 结论	/	/	/	Pass 合格	/

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注释：

- N.D. = 未检出或低于检出限
- RL = 报告检出限
- mg/kg = ppm
- 加和含量计算时未计入小于报告检出限的结果。

Bay Area Compliance Laboratories Corp. (Dongguan)

No. 12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China

Tel: +86-769-86858888 Fax: +86-769-86858891

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7. Chlorophenols(PCP,TeCP) Content

氯酚(PCP,TeCP)含量

Test Method: With reference to EN ISO 17070:2015, Analysis was performed by gas chromatographic-mass spectrometer (GC-MS).

测试方法: 参考EN ISO 17070:2015, 采用气相色谱质谱联用仪(GC-MS)分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Tetrachlorophenol(TeCP) 四氯苯酚	-	mg/kg	0.5	N.D.	20
Pentachlorophenol(PCP) 五氯苯酚	87-86-5	mg/kg	0.5	N.D.	20
sum of all	-	mg/kg	-	N.D.	20
Conclusion 结论	/	/	/	Pass 合格	/

Note:

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- RL = Report Limit
- mg/kg = ppm
- The results less than RL are not taken into account while calculating the sum contents.

注释:

- N.D. = 未检出或低于检出限
- RL = 报告检出限
- mg/kg = ppm
- 加和含量计算时未计入小于报告检出限的结果。

8. Dimethyl Fumarate(DMFu) Content

富马酸二甲酯含量

Test Method: With reference to CEN ISO/TS 16186:2012, analysis was performed by gas chromatographic-mass spectrometer (GC-MS).

测试方法: 参考 CEN ISO/TS 16186:2012, 采用气相色谱质谱联用仪(GC-MS)分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Dimethylfumarate(DMFu) 富马酸二甲酯	624-49-7	mg/kg	0.05	N.D.	0.1
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

- N.D. = 未检出或小于报告限
- RL = 报告限
- mg/kg = ppm

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9. Dyes, Forbidden and Disperse & Other Dyes Content

禁用的分散性染料和其他染料含量

9.1 Dyes-Disperse (Sensitising)

染料-分散(致敏性)含量

Test Method: With reference to DIN 54231:2005, by solvent extraction and analysis was performed by liquid chromatography/quadrupole mass spectrometer (LC/MS/MS)

测试方法: 参考DIN 54231:2005, 超声萃取用液相色谱-质谱联用仪 (LC-MS/MS) 进行检测

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
C.I. Disperse Yellow 39 分散黄39	12236-29-2	mg/kg	15	N.D.	250
C.I. Disperse Brown 1 分散棕1	23355-64-8	mg/kg	15	N.D.	250
C.I. Disperse Yellow 1 分散黄1	119-15-3	mg/kg	15	N.D.	250
C.I. Disperse Blue 102 分散蓝102	12222-97-8	mg/kg	15	N.D.	250
C.I. Disperse Blue 106 分散蓝106	12223-01-7	mg/kg	15	N.D.	250
C.I. Disperse Orange 37/76/59 C.I.分散橙 37/76/59	12223-33-5/13301-61-6/51811-42-8	mg/kg	15	N.D.	250
C.I. Disperse Orange 1 分散橙 1	2581-69-3	mg/kg	15	N.D.	250
C.I. Disperse Yellow 3 分散黄3	2832-40-8	mg/kg	15	N.D.	250
C.I. Disperse Red 11 分散红11	2872-48-2	mg/kg	15	N.D.	250
C.I. Disperse Red 1 分散红1	2872-52-8	mg/kg	15	N.D.	250
C.I. Disperse Red 17 分散红17	3179-89-3	mg/kg	15	N.D.	250
C.I. Disperse Yellow 49 分散黄49	54824-37-2	mg/kg	15	N.D.	250
C.I. Disperse Blue 7 分散蓝7	3179-90-6	mg/kg	15	N.D.	250
C.I. Disperse Blue 26 分散蓝26	3860-63-7	mg/kg	15	N.D.	250
C.I. Disperse Yellow 9 分散黄 9	6373-73-5	mg/kg	15	N.D.	250

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
C.I. Disperse Blue 124 分散蓝124	61951-51-7	mg/kg	15	N.D.	250
C.I. Disperse Blue 35 分散蓝35	12222-75-2	mg/kg	15	N.D.	250
C.I. Disperse Orange 3 分散橙3	730-40-5	mg/kg	15	N.D.	250
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- mg/kg = ppm

9.2 Dyes -Carcinogenic or Equivalent Concern

染料-致癌性或等效属性含量

Test Method: With reference to DIN 54231:2005, by solvent extraction and analysis was performed by liquid chromatography/quadrupole mass spectrometer (LC/MS/MS)

测试方法: 参考DIN 54231:2005, 超声萃取用液相色谱-质谱联用仪 (LC-MS/MS) 进行检测

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
C.I. Direct Black 38 直接黑38	1937-37-7	mg/kg	15	N.D.	250
C.I. Direct Blue 6 直接蓝6	2602-46-2	mg/kg	15	N.D.	250
C.I. Acid Red 26 酸性红26	3761-53-3	mg/kg	15	N.D.	250
C.I. Basic Red 9 碱性红9	569-61-9	mg/kg	15	N.D.	250
C.I. Direct Red 28 直接红28	573-58-0	mg/kg	15	N.D.	250
C.I. Basic Violet 14 碱性紫14	632-99-5	mg/kg	15	N.D.	250
C.I. Disperse Blue 1 分散蓝1	2475-45-8	mg/kg	15	N.D.	250
C.I. Disperse Blue 3 分散蓝3	2475-46-9	mg/kg	15	N.D.	250

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
C.I. Basic Blue 26 碱性蓝 26	2580-56-5	mg/kg	15	N.D.	250
C.I. Basic Green 4 (Malachite Green Chloride) C.I.碱性绿 4 (孔雀石绿氯化物)	569-64-2	mg/kg	15	N.D.	250
C.I. Basic Green 4 (Malachite Green Oxalate) C.I.碱性绿 4 (孔雀石绿草酸盐)	2437-29-8	mg/kg	15	N.D.	250
C.I. Basic Green 4 (Malachite Green) C.I.碱性绿 4(孔雀石绿)	10309-95-2	mg/kg	15	N.D.	250
C.I. Disperse Orange 11 分散橙11	82-28-0	mg/kg	15	N.D.	250
C.I. Acid Violet 49 酸性紫49	1694-09-3	mg/kg	15	N.D.	250
Basic violet 3 with >0.1% of Michler's Ketone 碱性紫3 (米氏酮>0.1%)	548-62-9	mg/kg	15	N.D.	250
C.I. Basic Green 4 leuco base C.I. 碱性绿4(隐色孔雀石绿)	129-73-7	mg/kg	15	N.D.	250
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- mg/kg = ppm

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10. Dyes-Navy Blue Colourant Content

染料-海军蓝染色剂含量

Test Method: With reference to DIN 54231-2005, analysis was performed by high-pressure liquid chromatography (HPLC) and liquid chromatography-quadrupole mass spectrometer(LC-MS/MS).

测试方法: 参考 DIN 54231-2005, 采用高效液相色谱仪(HPLC)和液相色谱-质谱联用仪(LC-MS/MS)进行测定。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Component 1: C39H23ClCrN7O12S.2 Na	118685-33-9	mg/kg	30	N.D.	250
Component 2: C46H30CrN10O20S2.3 Na	--	mg/kg	30	N.D.	250
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL

- RL = Report Limit

- mg/kg = ppm

注释:

- N.D. = 未检出或低于检出限

- RL = 报告检出限

- mg/kg = ppm

11. Flame Retardants content

阻燃剂的含量

Test Method: With reference to ISO 17881-1:2016/ISO 17881-2:2016, Analysis was performed by liquid chromatography-quadrupole mass spectrometer(LC-MS/MS) / gas chromatographic-mass spectrometer (GC-MS).

测试方法: 测定参考 ISO 17881-1:2016/ISO 17881-2:2016, 用液相色谱-质谱联用仪(LC-MS/MS)/气相色谱质谱联用仪(GC-MS)进行测定。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Tris(2-chloroethyl) phosphate(TCEP) 磷酸三(2-氯乙基)酯	115-96-8	mg/kg	5	N.D.	250
Decabromodiphenyl oxide(DecaBDE) 十溴二苯醚	1163-19-5	mg/kg	5	N.D.	250
Tris (2,3-dibromopropyl) phosphate(TRIS/TDBPP) 磷酸三(2,3-二溴丙基)酯	126-72-7	mg/kg	5	N.D.	250
Pentabromodiphenyl ether(PentaBDE) 五溴二苯醚	32534-81-9	mg/kg	5	N.D.	250

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Octabromodiphenyl ether (OctaBDE) 八溴二苯醚	32536-52-0	mg/kg	5	N.D.	250
BIS(2,3-DIBROMOPROPY L) PHOSPHATE(BIS) 二(2,3-二溴丙基)-磷酸酯	5412-25-9	mg/kg	5	N.D.	250
Tris(1-aziridinyl) phosphine oxide(TEPA) 三-(1-吡丙啶基)氧化磷溶液	545-55-1	mg/kg	5	N.D.	250
Polybromobiphenyls (PBBs) 多溴联苯	-	mg/kg	5	N.D.	250
Tetrabromobisphenol A (TBBPA) 四溴双酚A	79-94-7	mg/kg	5	N.D.	250
Hexabromocyclododecan e(HBCDD) 六溴环十二烷	3194-55-6	mg/kg	5	N.D.	250
2,2-Bis(bromomethyl)-1,3 -p ropanediol(BBMP) 二溴新戊二醇	3296-90-0	mg/kg	5	N.D.	250
Disodium octaborate 氧化硼钠	12008-41-2	mg/kg	100	N.D.	250
Disodium tetraborate,anhydrous 四硼酸钠(十水),无水四硼酸 钠	1303-96- 4/1330-43-4	mg/kg	100	N.D.	250
Hexabromodiphenyl ether (HexaBDE) 六溴二苯醚	36483-60-0	mg/kg	5	N.D.	250
Octabromobiphenyls (OctaBB) 八溴联苯	-	mg/kg	5	N.D.	250
Decabromobiphenyl (DecaBB) 十溴联苯	13654-09-6	mg/kg	5	N.D.	250
Dibromobiphenyls(DiBB) 二溴联苯	-	mg/kg	5	N.D.	250
Nonabromodiphenyl ether(NonaBDE) 九溴二苯醚	63936-56-1	mg/kg	5	N.D.	250

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Boric acid 硼酸	10043-35-3; 11113-50-1	mg/kg	100	N.D.	250
Tribromodiphenylethers (TriBDEs) 三溴二苯醚	-	mg/kg	5	N.D.	250
Heptabromodiphenyl ether(HeptaBDE) 七溴二苯醚	68928-80-3	mg/kg	5	N.D.	250
Monobromodiphenyl ethers(MonoBDEs) 一溴二苯醚	-	mg/kg	5	N.D.	250
Nonabromobiphenyls (NonaBB) 九溴联苯	-	mg/kg	5	N.D.	250
Tetrabromodiphenyl ether(TetraBDE) 四溴二苯醚	40088-47-9	mg/kg	5	N.D.	250
Monobromobiphenyls (MonoBB) 单溴联苯	-	mg/kg	5	N.D.	250
Tetraboron disodium heptaoxide, hydrate 水合七氧四硼酸二钠	12267-73-1	mg/kg	100	N.D.	250
Diboron trioxide 三氧化二硼	1303-86-2	mg/kg	100	N.D.	250
Tris-(2-chloro-1- methylethyl)phosphate (TCPP) 磷酸三(2-氯丙基)酯	13674-84-5	mg/kg	5	N.D.	250
Tris(1,3-dichloroisopropyl) phosphate(TDCP) 磷酸三(1,3-二氯异丙基)酯	13674-87-8	mg/kg	5	N.D.	250
Dibromopropylether 四溴双酚A-双-(2,3-二溴丙基)醚	21850-44-2	mg/kg	5	N.D.	250
Conclusion 结论	/	/	/	Pass 合格	/

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Note:

- N.D. = Not Detected or less than RL
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注释:

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- mg/kg = ppm

12. Glycols/Glycol Ethers Content

乙二醇/乙二醇醚含量

Test Method: Solvent extraction and analysis was performed by high-pressure liquid chromatography (HPLC) and liquid chromatography-quadrupole mass spectrometer (LC-MS/MS).

测试方法: 溶剂萃取, 采用高效液相色谱仪(HPLC)和液相色谱-质谱联用仪(LC-MS/MS)进行测定。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
2-Ethoxyethanol 乙二醇乙醚	110-80-5	mg/kg	10	N.D.	50
2-Ethoxyethylacetate 乙二醇乙醚醋酸酯	111-15-9	mg/kg	10	N.D.	50
2-Methoxyethanol 乙二醇甲醚	109-86-4	mg/kg	10	N.D.	50
2-Methoxyethylacetate 乙二醇甲醚醋酸酯	110-49-6	mg/kg	10	N.D.	50
2-Methoxypropylacetate 2-甲基丙醇乙醚	70657-70-4	mg/kg	10	N.D.	Textile: 50; leather: 1000
Bis(2-methoxyethyl)-ether 二甘醇二甲醚	111-96-6	mg/kg	10	N.D.	50
1,2-Dimethoxyethane 乙二醇二甲醚	110-71-4	mg/kg	10	N.D.	50
Triethylene glycol dimethyl ether 三甘醇二甲醚	112-49-2	mg/kg	10	N.D.	50
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

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- mg/kg = ppm

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13. Organostannic compounds content

有机锡化合物含量

Test Method: With reference to ISO/TS 16179:2012, analysis was performed by gas chromatographic-mass spectrometer (GC-MS)

测试方法: 参考ISO/TS 16179:2012, 采用气相色谱质谱联用仪(GC-MS)测定

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Dipropyltin(DPT) 二丙基锡	2406-60-2	mg/kg	0.1	N.D.	5
Monophenyltin(MPhT) 一苯基锡	2406-68-0	mg/kg	0.1	N.D.	5
Diphenyl tin(DPhT) 二苯基锡	1135-99-5	mg/kg	0.1	N.D.	5
Triphenyltin(TPhT) 三苯基锡	639-58-7	mg/kg	0.1	N.D.	5
Monobutyltin(MBT) 单丁基氧化锡	2273-43-0	mg/kg	0.1	N.D.	5
Tributyltin(TBT) 三丁基锡	1461-22-9	mg/kg	0.1	N.D.	5
Methyl tin(MeT) 一甲基锡	993-16-8	mg/kg	0.1	N.D.	5
Dimethyltin(DMT) 二甲基锡	753-73-1	mg/kg	0.1	N.D.	5
Trimethyltin(TMT) 三甲基锡	1066-45-1	mg/kg	0.1	N.D.	5
Dibutyltin(DBT) 二丁基锡	683-18-1	mg/kg	0.1	N.D.	20
n-Octyl tin(MOT) 单辛基锡	3091-25-6	mg/kg	0.1	N.D.	5
Diocetyl tin(DOT) 二辛基锡	3542-36-7	mg/kg	0.1	N.D.	5
Triocetyl tin(TOT) 三辛基锡	2587-76-0	mg/kg	0.1	N.D.	5
Tetrabutyl tin(TeBT) 四丁基锡	1461-25-2	mg/kg	0.1	N.D.	1
Tripropyltin(TPrT) 三丙基锡	2279-76-7	mg/kg	0.1	N.D.	1
Tetraocetyl tin(TeOT) 四辛基锡	3590-84-9	mg/kg	0.1	N.D.	1
Tricyclohexyltin(TCyHT) 三环己基锡	36580-86-6	mg/kg	0.1	N.D.	1

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Tetraethyltin(TeET) 四乙基锡	597-64-8	mg/kg	0.1	N.D.	1
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- mg/kg = ppm

14. Borate, zincsalt Content

硼酸锌盐含量

Test Method: Acid digestion, analysis was performed by Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES).

测试方法: 酸消解, 采用电感耦合等离子体发射光谱仪 (ICP-OES) 进行检测。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Borate, zincsalt 硼酸锌盐	12767-90-7	mg/kg	100	N.D.	1000
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

- N.D. = 未检出或低于检出限
- RL = 报告检出限
- mg/kg = ppm

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15. Bisphenol A (BPA) content

双酚A含量

Test Method: Solvent extraction , Analysis was performed by LC/MS/MS.

测试方法: 溶剂萃取, 然后采用LC/MS/MS分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit
				(1)	客户限量
Bisphenol A(BPA) 双酚A	80-05-7	mg/kg	10	N.D.	100
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

- N.D. = 未检出或低于检出限
- RL = 报告检出限
- mg/kg = ppm

16. AEEA (2-(2-aminoethylamino) ethanol) Content

AEAA(羟乙基乙二胺)含量

Test Method: Solvent extraction , Analysis was performed by LC/MS/MS.

测试方法: 溶剂萃取, 然后采用LC/MS/MS分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit
				(1)	客户限量
AEEA (2-(2- aminoethylamino) ethanol) AEAA(羟乙基乙二胺)	111-41-1	mg/kg	50	N.D.	100
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

- N.D. = 未检出或低于检出限
- RL = 报告检出限
- mg/kg = ppm

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17. Thiourea Content

硫脲含量

Test Method: Solvent extraction, Analysis was performed by LC/MS/MS.

测试方法: 溶剂萃取, 然后采用LC/MS/MS分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Thiourea 硫脲	62-56-6	mg/kg	50	N.D.	1000
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

- N.D. = 未检出或低于检出限
- RL = 报告检出限
- mg/kg = ppm

18. Quinoline Content

喹啉含量

Test Method: With reference to DIN 54231:2005, analysis was performed by by liquid chromatography/quadrupole mass spectrometer(LC/MS/MS)

测试方法: 参考DIN54231:2005, 采用液相色谱-质谱联用仪 (LC-MS/MS)分析

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Quinoline 喹啉	91-22-5	mg/kg	10	N.D.	1000
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- mg/kg = ppm

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19. Perfluorinated and Polyfluorinated Chemicals (PFCs) content

全氟化和多氟化学品(PFCs)的含量

19.1 PFOS and Related Substances content

PFOS及相关物质含量

Test Method: With reference to CEN/TS 15968:2010, analysis was performed by LC/MS/MS

测试方法: 参考CEN/TS 15968:2010,采用LC/MS/MS分析

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Perfluorooctanesulfonic acid(PFOS) 全氟辛酸	1763-23-1	mg/kg	0.5	N.D.	-
Perfluorooctanesulfonic acid,potassium salt(PFOS-K) 全氟辛酸, 钾盐	2795-39-3	mg/kg	0.5	N.D.	-
Perfluorooctanesulfonic acid, lithium salt(PFOS-Li) 全氟辛酸, 锂盐	29457-72-5	mg/kg	0.5	N.D.	-
Perfluorooctanesulfonic acid, ammonium salt(PFOS-NH ₄) 全氟辛酸, 铵盐	29081-56-9	mg/kg	0.5	N.D.	-
Perfluorooctane sulfonate diethanolamine salt (PFOSNH(OH) ₂) 全氟辛烷磺酸二乙醇胺盐	70225-14-8	mg/kg	0.5	N.D.	-
Perfluorooctanesulfonic acid,tetraethylammonium salt(PFOS-N(C ₂ H ₅) ₄) 全氟辛酸, 四乙铵盐	56773-42-3	mg/kg	0.5	N.D.	-
N-Ethylperfluoro-1-octanesulfonamide(N-Et-FOSA) N-乙基全氟-1-辛烷磺酰胺	4151-50-2	mg/kg	0.5	N.D.	-
N-Methylperfluoro-1-octanesulfonamide(N-Me-FOSA) N-甲基全氟-1-辛烷磺酰胺	31506-32-8	mg/kg	0.5	N.D.	-
2-(N-Ethylperfluoro-1-octanesulfonamido)-ethanol(N-Et-FOSE) 2-(N-乙基全氟-1-辛烷磺酰胺基)-乙醇	1691-99-2	mg/kg	0.5	N.D.	-

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
2-(N-Methylperfluoro-1-octanesulfonamido)-ethanol(N-Me-FOSE) 2-(N-甲基全氟-1-辛烷磺酰胺基)-乙醇	24448-09-7	mg/kg	0.5	N.D.	-
Perfluoro-1-octanesulfonyl fluoride (POSF) 全氟辛基磺酰氟	307-35-7	mg/kg	0.5	N.D.	-
Perfluorooctane sulfonamide(PFOA) 全氟辛烷磺酰胺	754-91-6	mg/kg	0.5	N.D.	-
sum of all	-	mg/kg	-	N.D.	2
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
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注释:

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- 加和含量计算时未计入小于报告检出限的结果。

19.2 Perfluorooctanoic acid (PFOA) & its salts content

全氟辛酸 (PFOA)及其盐含量

Test Method: With reference to CEN/TS 15968:2010, analysis was performed by LC/MS/MS

测试方法: 参考CEN/TS 15968:2010,采用LC/MS/MS分析

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Perfluorooctanoic acid (PFOA) 全氟辛酸	335-67-1	ppb	15	N.D.	-
Sodium perfluorooctanoate(PFOA -Na) 全氟辛酸钠	335-95-5	ppb	15	N.D.	-
Potassium perfluorooctanoate(PFOA -K) 全氟辛酸钾	2395-00-8	ppb	15	N.D.	-

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Silver perfluorooctanoate (PFOA-Ag) 全氟辛酸银	335-93-3	ppb	15	N.D.	-
Perfluorooctanoyl fluoride (PFOA-F) 全氟辛酰氟	335-66-0	ppb	15	N.D.	-
Ammonium pentadecafluorooctanoate (APFO) 全氟辛酸铵	3825-26-1	ppb	15	N.D.	-
sum of all	-	ppb	-	N.D.	25
Conclusion 结论	/	/	/	Pass 合格	/

Note:

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注释：

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- 加和含量计算时未计入小于报告检出限的结果。

19.3 PFOA-related Substances content

PFOA相关物质含量

Test Method: With reference to CEN/TS 15968:2010, analysis was performed by LC/MS/MS

测试方法: 参考CEN/TS 15968:2010,采用LC/MS/MS分析

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
1H,1H,2H,2H- Perfluorodecanesulfonic acid(8:2 FTS) 1H,1H,2H,2H-全氟癸烷磺酸 钠盐	39108-34-4	ppb	1000	N.D.	-
Methyl perfluorooctanoate(Me- PFOA) 十五氟辛酸甲酯	376-27-2	ppb	1000	N.D.	-
Ethyl perfluorooctanoate (Et-PFOA) 全氟辛酸乙酯	3108-24-5	ppb	1000	N.D.	-

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
2-Perfluorooctylethanol (8:2 FTOH) 2-全氟辛基乙醇	678-39-7	ppb	1000	N.D.	-
1H,1H,2H,2H- Perfluorodecyl acrylate (8:2 FTA) 1H,1H,2H,2H-全氟癸基丙烯酸酯	27905-45-9	ppb	1000	N.D.	-
1H,1H,2H,2H- Perfluorodecyl methacrylate(8:2 FTMA) 1H,1H,2H,2H-全氟正癸基甲基丙烯酸酯	1996-88-9	ppb	1000	N.D.	-
sum of all	-	ppb	-	N.D.	1000
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
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注释：

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- 加和含量计算时未计入小于报告检出限的结果。

20. Phthalates content

邻苯二甲酸酯含量

Test Method: With reference to CPSC-CH-C1001-09.4(sample preparation for all materials),EN ISO 14389:2022(for textile:measurement), and analysis was performed by gas chromatographic-mass spectrometer (GC-MS).

测试方法: 参考CPSC-CH-C1001-09.4(针对所有材料的预处理), EN ISO 14389:2022 (针对纺织品测量),采用气相色谱质谱联用仪(GC-MS)分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Bis-(2-ethylhexyl) Phthalate(DEHP) 邻苯二甲酸二(2-乙基)己酯	117-81-7	mg/kg	50	N.D.	-
Bis(2-methoxyethyl) Phthalate(DMEP) 邻苯二甲酸二(2-甲氧基)乙酯	117-82-8	mg/kg	50	N.D.	-
Di-n-Octyl Phthalate (DNOP) 邻苯二甲酸二正辛酯	117-84-0	mg/kg	50	N.D.	-

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Diisodecyl Phthalate (DIDP) 邻苯二甲酸二异癸酯	26761-40-0/68515-49-1	mg/kg	50	N.D.	-
Diisononyl Phthalate (DINP) 邻苯二甲酸二异壬酯	28553-12-0/68515-48-0	mg/kg	50	N.D.	-
Di-n-hexyl Phthalate (DHEXP/DnHP) 邻苯二甲酸二正己酯	84-75-3	mg/kg	50	N.D.	-
Dibutyl Phthalate(DBP) 邻苯二甲酸二丁酯	84-74-2	mg/kg	50	N.D.	-
Benzyl Butyl Phthalate (BBP) 邻苯二甲酸丁基苄基酯	85-68-7	mg/kg	50	N.D.	-
Di-n-nonyl Phthalate (DNP) 邻苯二甲酸二正壬酯	84-76-4	mg/kg	50	N.D.	-
Diethyl Phthalate(DEP) 邻苯二甲酸二乙酯	84-66-2	mg/kg	50	N.D.	-
Di-n-propyl Phthalate (DPRP) 邻苯二甲酸二正丙酯	131-16-8	mg/kg	50	N.D.	-
Diisobutyl phthalate (DIBP) 邻苯二甲酸二异丁酯	84-69-5	mg/kg	50	N.D.	-
Dicyclohexyl Phthalate (DCHP) 邻苯二甲酸二环己酯	84-61-7	mg/kg	50	N.D.	-
Di-iso-octyl Phthalate (DIOP) 邻苯二甲酸二异辛酯	27554-26-3	mg/kg	50	N.D.	-
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) 1,2-苯二酸-二(C7-11 支链与直链)烷基(醇)酯	68515-42-4	mg/kg	50	N.D.	-
1,2-Benzendicarboxylic acid, mixed decyl and hexyl and octyl diesters (癸基、己基、辛基)酯与1,2-苯二甲酸的复合物	68648-93-1	mg/kg	50	N.D.	-

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit
				(1)	客户限量
Di-iso-pentyl Phthalate (DIPP) 邻苯二甲酸二异戊酯	605-50-5	mg/kg	50	N.D.	-
Di-n-pentyl Phthalate (DPENP) 邻苯二甲酸二正戊酯	131-18-0	mg/kg	50	N.D.	-
sum of all	-	mg/kg	-	N.D.	250
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm
- The results less than RL are not taken into account while calculating the sum contents.

注释：

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- mg/kg = ppm
- 加和含量计算时未计入小于报告检出限的结果。

21. Polycyclic-aromatic hydrocarbons (PAHs) content

多环芳烃含量

Test Method: With reference to AfPS GS 2019:01 PAK, extraction in toluene and analysis was performed by gas chromatographic-mass spectrometer (GC-MS).

测试方法: 参考AfPS GS 2019:01 PAK, 用甲苯萃取气相色谱质谱联用仪 (GC-MS) 分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit
				(1)	客户限量
Benzo[a]pyrene (BaP) 苯并[a]芘	50-32-8	mg/kg	0.2	N.D.	20
Acenaphthylene(ANY) 芴烯	208-96-8	mg/kg	0.2	N.D.	-
Acenaphthene (ANA) 芴	83-32-9	mg/kg	0.2	N.D.	-
Fluorene (FLU) 芴	86-73-7	mg/kg	0.2	N.D.	-
Phenanthrene (PHE) 菲	85-01-8	mg/kg	0.2	N.D.	-
Anthracene(ANT) 蒽	120-12-7	mg/kg	0.2	N.D.	-
Fluoranthene (FLT) 荧蒽	206-44-0	mg/kg	0.2	N.D.	-

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Pyrene (PYR) 芘	129-00-0	mg/kg	0.2	N.D.	-
Indeno[1,2,3-c,d]pyrene (IPY) 茚并[1,2,3-cd]芘	193-39-5	mg/kg	0.2	N.D.	-
Benzo[g,h,i]perylene (BPE) 苯并[g,h,i]芘	191-24-2	mg/kg	0.2	N.D.	-
Benzo[a]anthracene(BaA) 1,2-苯并[a]蒽	56-55-3	mg/kg	0.2	N.D.	-
Chrysene(CHR) 屈	218-01-9	mg/kg	0.2	N.D.	-
Benzo[b]fluoranthene (BbFA) 苯并[b]荧蒽	205-99-2	mg/kg	0.2	N.D.	-
Benzo[k]fluoranthene (BkFA) 苯并[k]荧蒽	207-08-9	mg/kg	0.2	N.D.	-
Dibenzo[a,h]anthracene (DBA) 二苯蒽	53-70-3	mg/kg	0.2	N.D.	-
Benzo[e]pyrene (BeP) 苯并[e]芘	192-97-2	mg/kg	0.2	N.D.	-
Benzo[j]fluoranthene (BjFA) 苯并[j]荧蒽	205-82-3	mg/kg	0.2	N.D.	-
Naphthalene(NAP) 萘	91-20-3	mg/kg	0.2	0.2	Leather/ polymer: 300
sum of all	-	mg/kg	-	0.2	200
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm
- The results less than RL are not taken into account while calculating the sum contents.
- Because of the Naphthalene (NAP) is a volatile substance, results reported on the submitted sample as received.

注释:

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- mg/kg = ppm
- 加和含量计算时未计入小于报告检出限的结果。
- 由于萘(NAP)是一种易挥发物质, 测试结果基于实际收到样品。

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22. Solvents/ Residuals Content

溶剂/残留物含量

Test Method/测试方法: DIN CEN ISO/TS 16189:2013

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Dimethyl formamide (DMFa) 二甲基甲酰胺	68-12-2	mg/kg	50	470	1000
N,N-Dimethylacetamide (DMAC) N, N-二甲基乙酰胺	127-19-5	mg/kg	50	N.D.	1000
N-Methyl-2-pyrrolidone (NMP) N-甲基-2-吡咯烷酮	872-50-4	mg/kg	50	N.D.	1000
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

注释:

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- RL = 报告检出限
- mg/kg = ppm

23. Total Heavy Metals Content

重金属总量

Test Method: Chromium VI: Solvent extraction, Analysis was performed by UV-visible spectrophotometer (UV-Vis) ;
Other heavy metals : acid digestion, analysis was performed by Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES).

测试方法: 六价铬: 溶剂萃取, 采用紫外-可见分光光度计(UV-Vis)进行检测。

其它重金属: 酸消解, 采用电感耦合等离子体发射光谱仪 (ICP-OES) 进行检测。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
Arsenic(As) 砷	7440-38-2	mg/kg	10	N.D.	50
Chromium VI(CrVI) 六价铬	18540-29-9	mg/kg	3	N.D.	10
Lead(Pb) 铅	7439-92-1	mg/kg	10	N.D.	100
Mercury(Hg) 汞	7439-97-6	mg/kg	1.0	N.D.	4; Pigment : 25

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Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit
				(1)	客户限量
Cadmium(Cd) 镉	7440-43-9	mg/kg	5	N.D.	20; Pigment : 50
Barium(Ba) 钡	7440-39-3	mg/kg	10	N.D.	Dyes & Pigment : 100
Chromium(Cr) 铬	7440-47-3	mg/kg	10	N.D.	Dyes & Pigment : 100
Nickel(Ni) 镍	7440-02-0	mg/kg	10	N.D.	Dyes: 250
argentum(Ag) 银	7440-22-4	mg/kg	10	N.D.	Dyes: 100
Tin(Sn) 锡	7440-31-5	mg/kg	10	N.D.	Dyes: 250
Cobalt(Co) 钴	7440-48-4	mg/kg	10	N.D.	Dyes: 500
Selenium(Se) 硒	7782-49-2	mg/kg	10	N.D.	Dyes:20; Pigment : 100
Copper(Cu) 铜	7440-50-8	mg/kg	10	N.D.	Dyes: 250
Antimony(Sb) 锑	7440-36-0	mg/kg	10	N.D.	Dyes:50; Pigment : 250
Conclusion 结论	/	/	/	Pass 合格	/

Note:

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注释：

- N.D. = 未检出或低于报告检出限
- RL = 报告检出限
- mg/kg = ppm
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24. UV Absorbers/ Stabilizers Content

紫外线吸收剂/稳定剂含量

Test Method: With reference to DIN EN 62321-6:2016-05, analysis was performed by GC-MS.

测试方法: 参考DIN EN 62321-6:2016-05, 气相色谱质谱联用仪 (GC-MS) 分析。

Item 项目	CAS No	Unit 单位	RL	Result 测试结果	Client's Limit 客户限量
				(1)	
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol(UV-350) 2-(2'-羟基-3'-异丁基-5'-叔丁基苯基)苯并三唑	36437-37-3	mg/kg	100	N.D.	1000
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol(UV-328) 2-(2'-羟基-3',5'-二叔戊基苯基)苯并三唑	25973-55-1	mg/kg	100	N.D.	1000
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol(UV-327) 2,4-二叔丁基-6-(5-氯-2H-苯并三唑-2-基)苯酚	3864-99-1	mg/kg	100	N.D.	1000
2-benzotriazol-2-yl-4,6-di-tert-butylphenol(UV-320) 2-(2'-羟基-3'-异丁基-5'-叔丁基苯基)苯并三唑	3846-71-7	mg/kg	100	N.D.	1000
Conclusion 结论	/	/	/	Pass 合格	/

Note:

- N.D. = Not Detected or less than RL

- RL = Report Limit

- mg/kg = ppm

注释:

- N.D. = 未检出或低于报告检出限

- RL = 报告检出限

- mg/kg = ppm

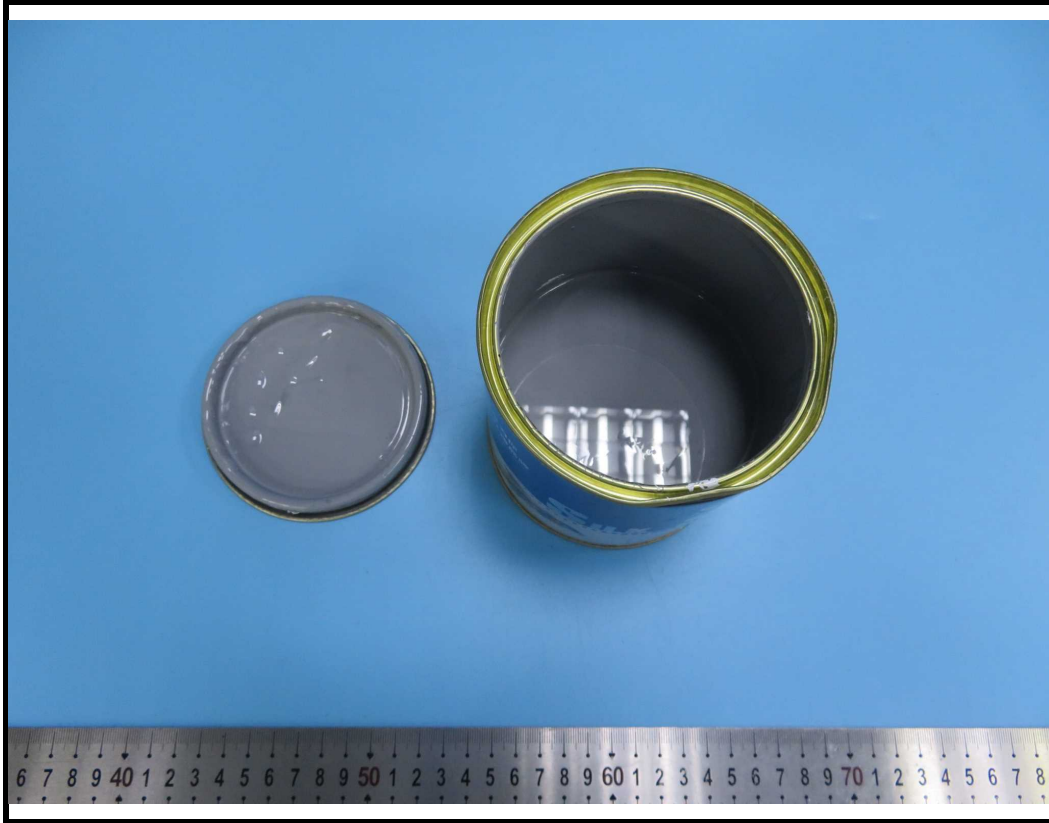
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Photograph of Sample
样品照片



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 - 6.The test samples were in good condition before testing.
在进行测试前，测试样品已确认状态完好。
 - 7.The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
本报告给出的扩展不确定度是由合成标准不确定度乘以包含概率约为95%时对应的包含因子k得到的。
 - 8.本报告中的数据结果用于学习、研究、内部质量控制、产品研发、科研，教学等目的。

*** End of Report ***

*** 报告结束***