检测报告
TEST REPORT

报告编号/ Report No.	:	WTH25H02022180A1C
委托方/ Applicant	:	艾利丹尼森（中国）有限公司 Avery Dennison (China) Co., Ltd.
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样品名称/ Sample Name	:	Digital Synthetic Paper ITC
检测要求/ Test Requested	:	参见报告下页/ Refer to next page (s)
检测结论/ Test Conclusion	:	参见报告下页/ Refer to next page (s)
样品接收日期/ Date of Receipt sample	:	2025-02-14
检测周期/ Testing period	:	2025-02-14 ~ 2025-02-18, 2025-06-27 ~ 2025-06-30
报告日期/ Date of Issue	:	2025-06-30
检测结果/ Test Result	:	参见报告下页/ Refer to next page (s)

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授权签字人
Signed for and on behalf of
Waltek Testing Group HCT (Shenzhen) Co., Ltd.

王刚/Worf Wang

检测要求/ Test Requested	检测结论/ Test Conclusion
1. 参照欧盟 RoHS 指令 2011/65/EU 及其修订指令 EU 2015/863，检测样品中的铅、镉、汞、六价铬、多溴联苯、多溴二苯醚、DBP、BBP、DEHP、DIBP 的含量。/ Determine the Pb, Cd, Hg, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP content in the sample with reference to EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863.	合格/ PASS
2. 参照 IEC61249-2-21，检测样品中的氟(F)、氯(Cl)、溴(Br)、碘(I)的含量。/ Determine the Fluorine(F), Chlorine(Cl), Bromine(Br), Iodine(I) content in the sample with reference to IEC61249-2-21.	合格/ PASS
3. 参照持久性有机污染物(POPs)法规(EU) 2019/1021 及其修订法规，检测样品中的全氟辛烷磺酸及其衍生物(PFOS)、短链氯化石蜡(SCCPs)、六溴环十二烷、全氟辛酸(PFOA)，其盐、PFOA 相关化合物的含量。/ Determine the Perfluorooctane sulfonic acid and its derivatives (PFOS), Short Chain Chlorinated Paraffins (SCCPs), Hexabromocyclododecane(HBCDD), Perfluorooctanoic acid (PFOA), its salts, PFOA-related compounds content in the sample with reference to Regulation (EU) 2019/1021 on persistent organic pollutants (POPs) and its amendment Regulation.	合格/ PASS

检测结果/ Test Result(s)：

欧盟 RoHS－铅、镉、汞、六价铬、多溴联苯、多溴二苯醚、DBP、BBP、DEHP、DIBP 的含量/ EU RoHS－Pb, Cd, Hg, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP content

检测方法/仪器/ Test Method/Equipment：IEC 62321-5:2013,IEC 62321-4:2013+AMD1:2017,IEC 62321-7-2:2017, IEC 62321-6:2015,IEC 62321-8:2017; ICP-OES,UV-VIS,GC-MS

检测项目 Test Item(s)	单位 Unit	方法检出限 MDL	结果 Result(s)	限值 Limit
铅 Lead(Pb)	mg/kg	2	ND	1000
镉 Cadmium(Cd)	mg/kg	2	ND	100
汞 Mercury(Hg)	mg/kg	2	ND	1000
六价铬 Hexavalent Chromium(Cr(VI))	mg/kg	8	ND	1000
一溴联苯 Mono-bromobiphenyl	mg/kg	5	ND	—
二溴联苯 Di-bromobiphenyl	mg/kg	5	ND	—
三溴联苯 Tri-bromobiphenyl	mg/kg	5	ND	—
四溴联苯 Tetra-bromobiphenyl	mg/kg	5	ND	—
五溴联苯 Penta-bromobiphenyl	mg/kg	5	ND	—
六溴联苯 Hexa-bromobiphenyl	mg/kg	5	ND	—
七溴联苯 Hepta-bromobiphenyl	mg/kg	5	ND	—
八溴联苯 Octa-bromobiphenyl	mg/kg	5	ND	—
九溴联苯 Nona-bromobiphenyl	mg/kg	5	ND	—
十溴联苯 Deca-bromobiphenyl	mg/kg	5	ND	—
多溴联苯 Polybrominated Biphenyls(PBBs)	mg/kg	—	ND	1000
一溴二苯醚 Mono-bromodiphenyl ether	mg/kg	5	ND	—
二溴二苯醚 Di-bromodiphenyl ether	mg/kg	5	ND	—
三溴二苯醚 Tri-bromodiphenyl ether	mg/kg	5	ND	—
四溴二苯醚 Tetra-bromodiphenyl ether	mg/kg	5	ND	—
五溴二苯醚 Penta-bromodiphenyl ether	mg/kg	5	ND	—
六溴二苯醚 Hexa-bromodiphenyl ether	mg/kg	5	ND	—
七溴二苯醚 Hepta-bromodiphenyl ether	mg/kg	5	ND	—
八溴二苯醚 Octa-bromodiphenyl ether	mg/kg	5	ND	—
九溴二苯醚 Nona-bromodiphenyl ether	mg/kg	5	ND	—
十溴二苯醚 Deca-bromodiphenyl ether	mg/kg	5	ND	—
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)	mg/kg	—	ND	1000
邻苯二甲酸二正丁酯 Dibutyl phthalate(DBP)	mg/kg	30	ND	1000
邻苯二甲酸丁苄酯 Butylbenzyl phthalate(BBP)	mg/kg	30	ND	1000
邻苯二甲酸二(2-乙基己基)酯 Di-(2-ethylhexyl) phthalate(DEHP)	mg/kg	30	ND	1000
邻苯二甲酸二异丁酯 Di-iso-butyl phthalate(DIBP)	mg/kg	30	ND	1000

氟、氯、溴、碘的含量/ Fluorine(F), Chlorine(Cl), Bromine(Br), Iodine(I) content

检测方法/仪器/ Test Method/Equipment：EN 14582:2016; IC

检测项目 Test Item(s)	单位 Unit	方法检出限 MDL	结果 Result(s)	限值 Limit
氟 Fluorine(F)	mg/kg	20	ND	—
氯 Chlorine(Cl)	mg/kg	50	ND	900
溴 Bromine(Br)	mg/kg	50	ND	900
碘 Iodine(I)	mg/kg	50	ND	—
总计(氯+溴) Total(Cl+Br)	mg/kg	—	ND	1500

全氟辛烷磺酸及其衍生物(PFOS)、短链氯化石蜡(SCCPs)、六溴环十二烷、全氟辛酸(PFOA)，其盐、PFOA 相关化合物 的含量/ Perfluorooctane sulfonic acid and its derivatives (PFOS), Short Chain Chlorinated Paraffins (SCCPs), Hexabromocyclododecane(HBCDD), Perfluorooctanoic acid (PFOA), its salts, PFOA-related compounds content

检测方法/仪器/ Test Method/Equipment：EN 17681-1:2022,US EPA 3550C:2007,IEC 62321-9:2021; LC-MS/MS,GC-MS

检测项目 Test Item(s)	单位 Unit	方法 检出限 MDL	结果 Result(s)	限值 Limit
全氟辛烷磺酸及其衍生物 Perfluorooctane sulfonic acid and its derivatives (PFOS)[n]	mg/kg	0.025	ND	-物质/混合物中 (in Substances/ Mixtures) ≤10； -半成品/部件中 (semi-finishedProducts/ Articles)＜1000
短链氯化石蜡 Short-chain chlorinated paraffins(SCCPs)[n]	mg/kg	50	ND	-物质/混合物中 (in Substances/ Mixtures) ≤10000； -物品(Articles) ＜1500
六溴环十二烷 Hexabromocyclododecane(HBCDD)	mg/kg	5	ND	75
全氟辛酸，其盐 Perfluorooctanoic acid (PFOA), its salts[n]	mg/kg	0.025	ND	0.025
PFOA 相关化合物 PFOA related compounds[n]	mg/kg	0.025	ND	1

备注/ Note：

对于检测铅，镉，汞，样品已完全消解。/ The sample(s) had been dissolved totally tested for Lead,Cadmium,Mercury.

mg/kg (毫克每千克) = ppm (百万分之)/ mg/kg (milligram per kilogram) = ppm (parts per million)

ND=未检出/ ND=Not Detected

MDL=Method Detection Limit

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

检测的铬(Cr)含量是“ND”，则六价铬(Cr(VI))含量也是“ND”，不需要进行六价铬(Cr(VI))的确认性测试。若铬(Cr)含量超过六价铬(Cr(VI))方法检出限，需要进行六价铬(Cr(VI))的确认性测试。/ The detected Chromium (Cr) content is "ND", therefore, the Hexavalent Chromium (Cr (VI)) content is "ND", No need for validation test of the Hexavalent Chromium (Cr (VI)). If Chromium (Cr) content exceeds Hexavalent Chromium (Cr (VI)) method detection limit, Validation test of the Hexavalent Chromium (Cr (VI)) is required.

样品描述/ Sample Description：

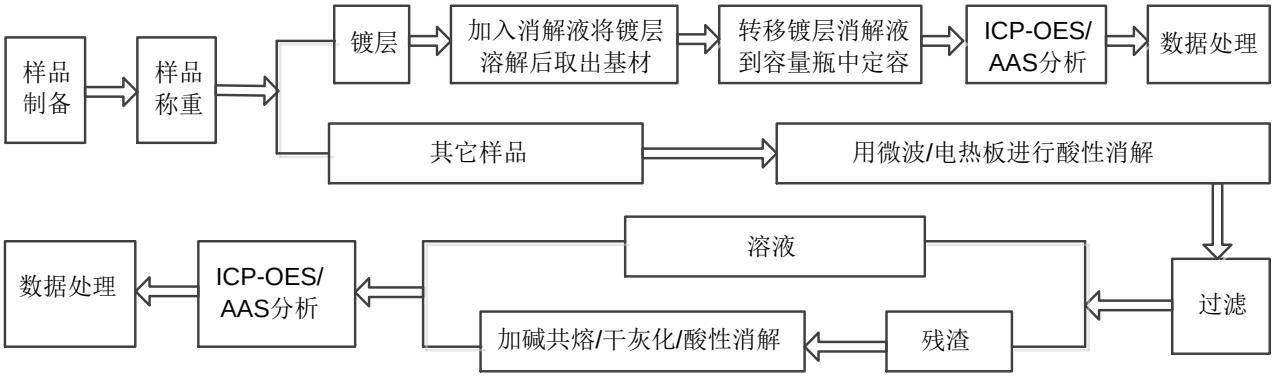
序号 No.	HCT 样品 ID HCT Sample ID	检测点描述 Test Part Description			备注 Note
2	WTH25H02022179C~2180C.2	2	白色塑胶膜	White plastic film	●

备注/ Note:

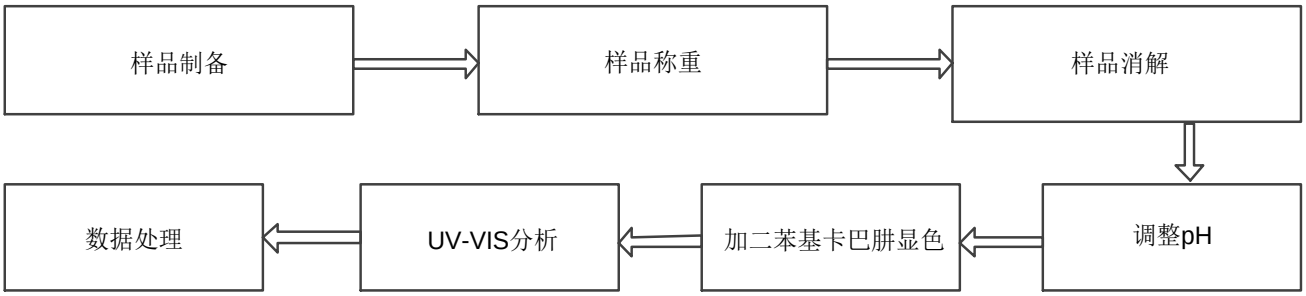
●=实际检测样品/●=Actual tested sample

检测流程图/ Test Flow Chart：

铅(Pb)、镉(Cd)、汞(Hg)、铬(Cr)



六价铬(Cr(VI))



多溴联苯(PBBs)、多溴二苯醚(PBDEs)、邻苯二甲酸二正丁酯(DBP)、邻苯二甲酸丁苄酯(BBP)、邻苯二甲酸二(2-乙基己基)酯(DEHP)、邻苯二甲酸二异丁酯(DIBP)、六溴环十二烷(HBCDD)



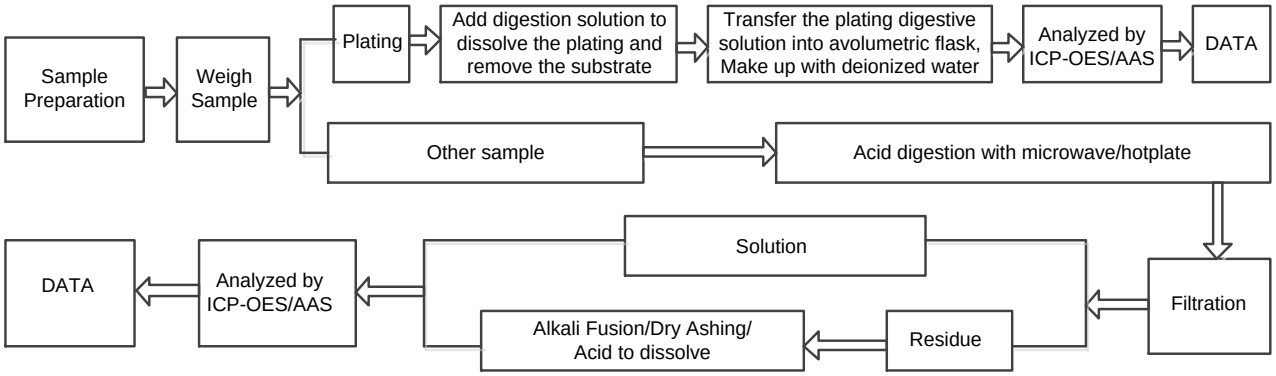
氟(F)、氯(Cl)、溴(Br)、碘(I)



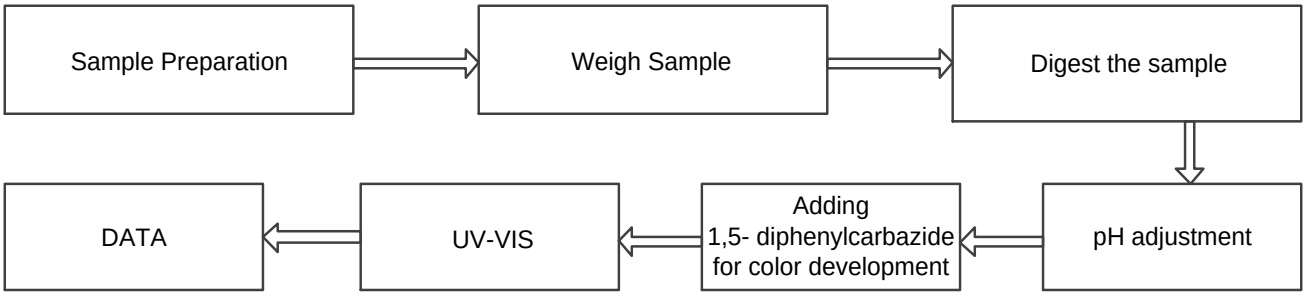
全氟辛烷磺酸及其衍生物(PFOS)、短链氯化石蜡(SCCPs)、全氟辛酸(PFOA)，其盐、PFOA 相关化合物



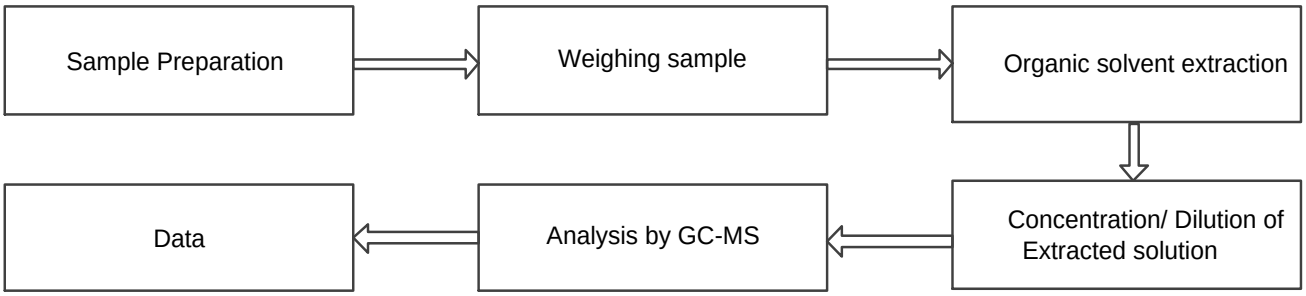
Lead(Pb), Cadmium(Cd), Mercury(Hg), Chromium(Cr)



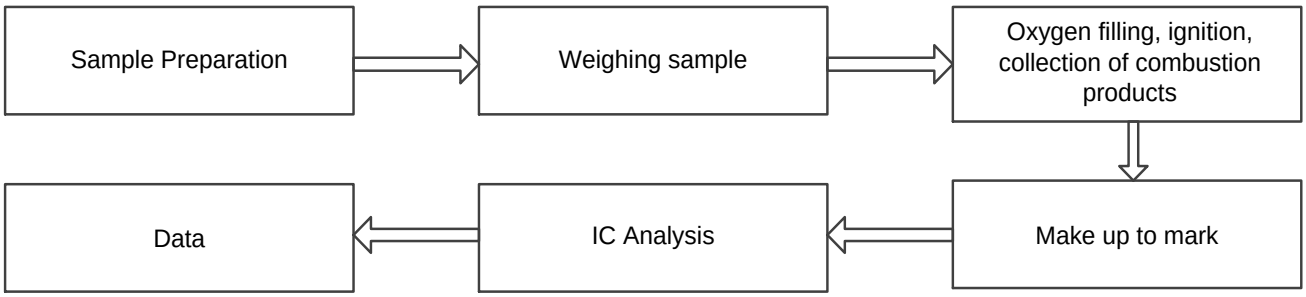
Hexavalent Chromium(Cr(VI))



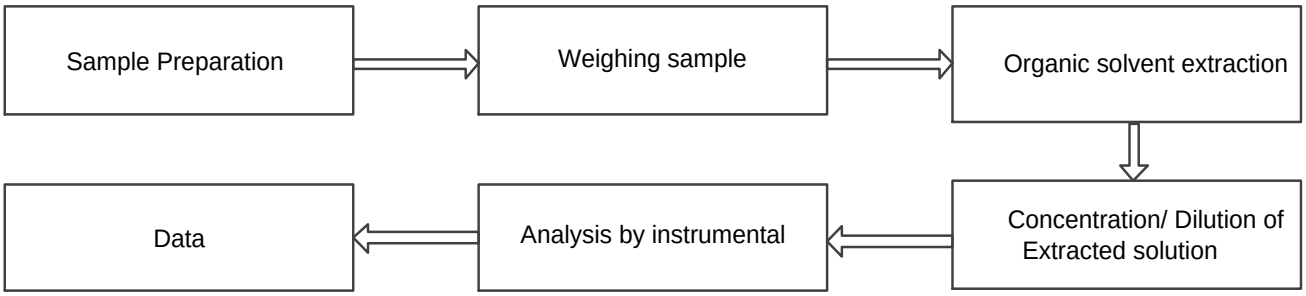
Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs), Dibutyl phthalate(DBP), Butylbenzyl phthalate(BBP), Di-(2-ethylhexyl) Phthalate(DEHP), Di-iso-butyl phthalate(DIBP), Hexabromocyclododecane(HBCDD)



Fluorine(F), Chlorine(Cl), Bromine(Br), Iodine(I)



Perfluorooctane sulfonic acid and its derivatives (PFOS), Short-chain chlorinated paraffins(SCCPs), Perfluorooctanoic acid (PFOA), its salts, PFOA related compounds



样 品 附 图/ The photo of the sample



WTH25H02022179C~2180C.2

声明/ Statement：

1. 检测报告无批准人签字和专用章无效。
   This report is considered invalid without approved signature and special seal.
2. 委托单位及地址，样品和样品信息由委托方提供，委托方应对其真实性负责，HCT 未核实其真实性。
   The Applicant name and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which HCT hasn't verified.
3. 本报告检测结果（结论）仅对受测样品负责。
   The result(s)(conclusion) shown in this report refer(s) only to the sample(s) tested.
4. 未经 HCT 书面同意，不得部分复制本报告。
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5. 无 CMA 标识报告中的结果仅用于客户科研、教学、内部质量控制、产品研发等目的，仅供内部参考。
   The result(s) in no CMA logo report shall only be used for client's scientific research, teaching, internal quality control, product research and development, etc..and just for internal reference.
6. 有 CNAS 标识报告中的“ⁿ”代表该检测项目暂未申请 CNAS 认可。
   The “ⁿ” in CNAS logo report means that the test item(s) was (were) currently not applying for CNAS accreditation.
7. 本报告使用的判定规则：
   Decision rules used in this report:
   (1)按照检测要求列的法规/标准中规定的判定规则；
   (2)如果检测要求列的法规中没有规定判定规则的话，则按照《CNAS-GL015 判定规则和符合性声明指南》6.2.1 简单接受(w=0)的二元判定规则：

合格(接受)--测得值位于容许区间以内。

不合格(拒绝)--测得值位于容许区间以外。

(1)According to the Decision rules in the regulations/standards listed in the Test Requested;

(2)If there is no Decision rules specified in the regulations listed in the Test Requested, then according to CNAS-GL015 Guidelines on Decision Rules and Statements of Conformity, 6.2.1, Simple Acceptance (*w*=0) of The binary Decision rule:

PASS (Accepted) - The measured value is within the tolerance interval.

FAIL (Rejected) - The measured value is outside the tolerance interval.

======报告结束/ End of Report ======