

Test Report

Testing institute : Product Technology Service (Ningbo) Co., Ltd.
5-7F, 59#, Huayu Road,
Yinzhou District, Ningbo 315192 P.R.China

Applicant : Suzhou Kying Industrial Materials Co.,Ltd
22Floor,Kings Tower,No.12, Shishan Road,SuZhou CHINA (215011),China.
Suzhou Kymler Industrial Materials Co.,Ltd
No.3 Building,Guangcheng Industrial Park,Mudu, Suzhou(215156),China.

Product name : Polyester film /polyester film HS

Model/Type : /

Sample Description : /

Material : /

Sample receive date : Apr.25,2019
Completes date : Apr.29,2019

Testing location : Product Technology Service (Ningbo) Co., Ltd.

Test specification(s)

EC Directive 2011/65/EU and Amending Directive (EU)2015/863 —The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment—— (RoHS)

Conclusion

Pass

Danyan Wang

Originator:
Danyan Wang

Jifei Xu

Report Verifier:
Jifei Xu

Meng Wei

Authorizer:
Meng Wei

Product Technology Service (Ningbo) Co., Ltd.



The test results exclusively refer to the samples examined. The test report is only used for scientific research, teaching or internal quality control. This report shall not be reproduced except in full without written approval and does not authorize the use of Product Technology Service (Ningbo) Co., Ltd. label. The report is invalid without signature and seal of Product Technology Service (Ningbo) Co., Ltd.

Test specification : EC Directive 2011/65/EU and Amending Directive (EU)2015/863 —The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment — (RoHS)

Test method : IEC 62321-5: 2013 Determination of Lead and Cadmium by ICP-OES
 IEC 62321-4: 2013 Determination of Mercury by ICP-OES
 IEC 62321-7-2:2017 Determination of ChromiumVI (CrVI) by UV-Vis
 IEC 62321-6: 2015 Determination of PBBs/ PBDEs by GC-MS
 IEC 62321-8: 2017 Determination of DEHP,DBP,BBP,DIBP by GC-MS

Requirement : 2011/65/EU and Amending Directive (EU)2015/863

| Product name: Polyester film /polyester film HS | | | | | |
|---|-------|-----------------|--------|-------|------------|
| Parameter: | Unit | Detection Limit | Result | Limit | Conclusion |
| Lead (Pb) | mg/kg | 10.0 | ND | 1000 | Pass |
| Cadmium (Cd) | mg/kg | 10.0 | ND | 100 | Pass |
| Mercury (Hg) | mg/kg | 10.0 | ND | 1000 | Pass |
| Chromium VI (Cr VI) | mg/kg | 10.0 | ND | 1000 | Pass |
| Polybrominated Biphenyls (PBBs) | | | | | |
| 1. Monobromobiphenyls | mg/kg | 10.0 | ND | -- | -- |
| 2. Dibromobiphenyls | mg/kg | 10.0 | ND | -- | -- |
| 3. Tribromobiphenyls | mg/kg | 10.0 | ND | -- | -- |
| 4. Tetrabromobiphenyls | mg/kg | 10.0 | ND | -- | -- |
| 5. Pentabromobiphenyls | mg/kg | 10.0 | ND | -- | -- |
| 6. Hexabromobiphenyls | mg/kg | 10.0 | ND | -- | -- |
| 7. Heptabromobiphenyls | mg/kg | 10.0 | ND | -- | -- |
| 8. Octabromobiphenyls | mg/kg | 10.0 | ND | -- | -- |
| 9. Nonabromobiphenyls | mg/kg | 10.0 | ND | -- | -- |
| 10.Decabromobiphenyl | mg/kg | 10.0 | ND | -- | -- |
| Group PBBs | mg/kg | -- | ND | 1000 | Pass |
| Polybrominated Diphenyl Ethers (PBDEs) | | | | | |
| 1. Monobromodiphenyl ethers | mg/kg | 10.0 | ND | -- | -- |
| 2. Dibromodiphenyl ethers | mg/kg | 10.0 | ND | -- | -- |
| 3. Tribromodiphenyl ethers | mg/kg | 10.0 | ND | -- | -- |
| 4. Tetrabromodiphenyl ethers | mg/kg | 10.0 | ND | -- | -- |
| 5. Pentabromodiphenyl ethers | mg/kg | 10.0 | ND | -- | -- |
| 6. Hexabromodiphenyl ethers | mg/kg | 10.0 | ND | -- | -- |
| 7. Heptabromodiphenyl ethers | mg/kg | 10.0 | ND | -- | -- |
| 8. Octabromodiphenyl ethers | mg/kg | 10.0 | ND | -- | -- |
| 9. Nonabromodiphenyl ethers | mg/kg | 10.0 | ND | -- | -- |
| 10. Decabromodiphenyl ether | mg/kg | 10.0 | ND | -- | -- |
| Group PBDEs | mg/kg | -- | ND | 1000 | Pass |
| Bis-(2-ethylhexyl) phthalate(DEHP) | % | 0.005 | ND | 0.1 | Pass |
| Dibutyl phthalate(DBP) | % | 0.005 | ND | 0.1 | Pass |
| Benzylbutyl phthalate(BBP) | % | 0.005 | ND | 0.1 | Pass |
| Diisobutyl phthalate(DIBP) | % | 0.005 | ND | 0.1 | Pass |

Remark:

ND = Not Detected(< Detection Limit)

"--" =Not Regulated

Main test instruments used for this method:

| Parameter | Instrument | Manufactory | Model / Type |
|-------------------|------------|----------------------|---------------------|
| Pb & Cd& Hg | ICP-OES | PerkinElmer | Optima 5300 DV |
| Cr VI | UV-Vis | LabTech | BlueStar plus |
| PBBs & PBDEs | GC-MS | Agilent Technologies | GC (6890)-MS (5975) |
| DEHP&BBP&DBP&DIBP | GC-MS | Agilent Technologies | GC (7890)-MS (5975) |

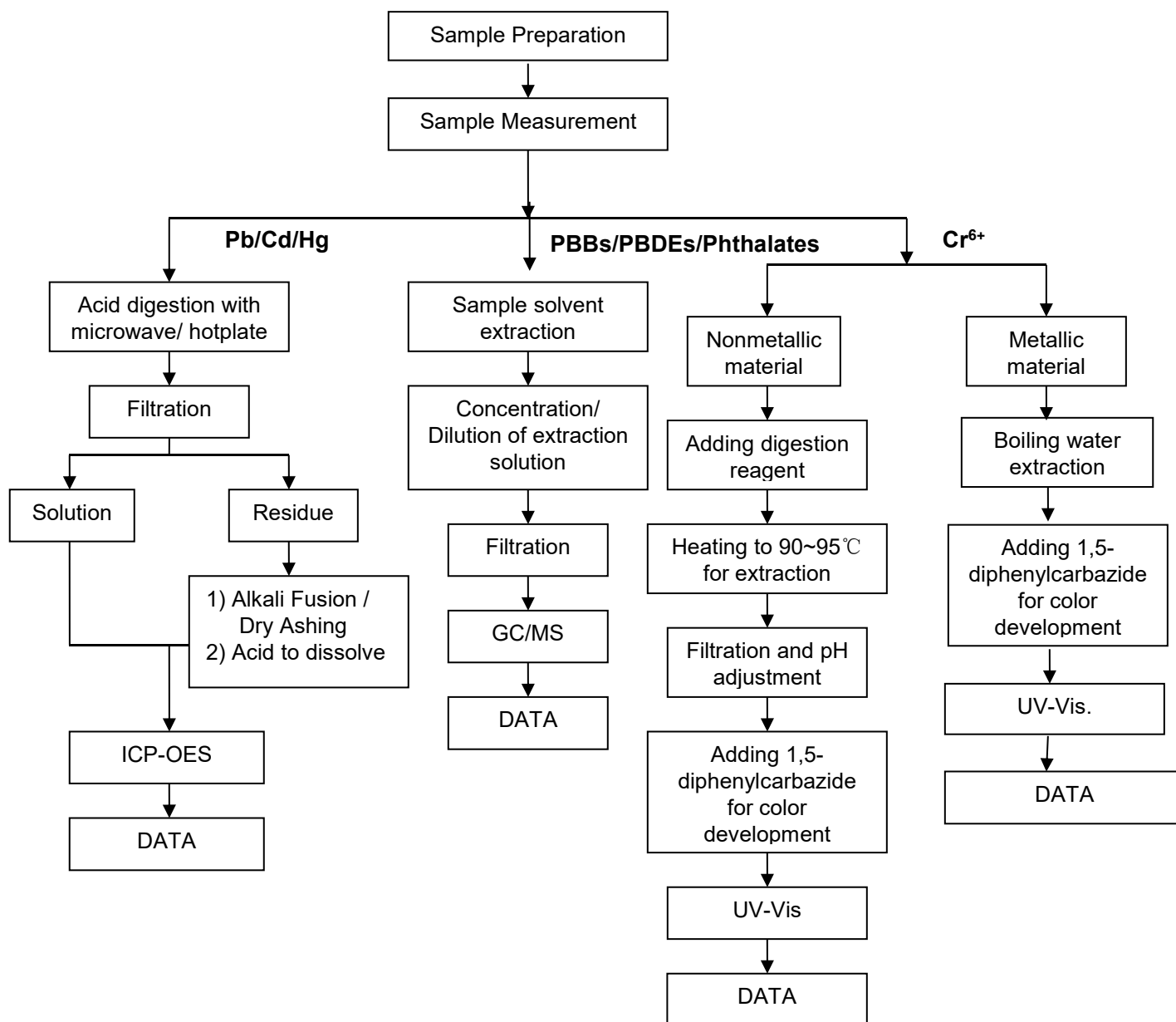
Sample photo(s), see annex2

---End---

ANNEX 1

RoHS Testing Flow Chart

These samples were dissolved totally by pre-conditioning method according to below flow chart.



Product Technology Service

Report No.:NB2019042526-1

ANNEX 2

Sample photo(s), consists of 1 page



Page 5 of 5



Polyester film /polyester film HS

Product Technology Service (Ningbo) Co., Ltd.

5 - 7F, Huayu Road, 59#

Yinzhou District

Ningbo 315192 P.R.China

<http://www.pts-lab.com>

NO: RC-SCNB-R041/02E

Tel: 86-574-83036506

Fax: 86-574-83036508

P.R.:315192

E-mail: info@pts-lab.com

宁波中普检测技术服务有限公司

浙江省宁波市

鄞州中心区华裕路

59号5-7楼

<http://www.pts-lab.com>

电话: 86-574-83036506

传真: 86-574-83036508

邮编: 315192

邮箱: info@pts-lab.com