

Report No. 報告號碼: 48245897g 001

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Client 客戶: SEN TECH CO., LTD./ 業達科技股份有限公司
No.18-4, Ln. 852, Tucheng Rd., Dali Dist., Taichung City 412, Taiwan, R.O.C./
台灣 412 台中市大里區塗城路852巷18-4號

Test item(s) 測試樣品: Electronic components/電子零件

Identification/Model No(s): NTC THERMISTOR/ IN&PM SERIES

樣品描述/規格:

Sample obtaining method: Sending by customer

樣品獲取方式:

Condition at delivery: Test item complete and undamaged.

樣品接收狀態:

Sample receiving date: 2024-04-08

收樣日期:

Testing period: 2024-04-08 – 2024-04-17

測試週期:

Place of testing: TÜV Rheinland Hong Kong Ltd.

測試地點:

Test specification 測試要求:

Test result 測試結果:

Testing according to customer's specification for the following parameters:

Total Content of Lead, Cadmium, Mercury, Chromium VI, Polybrominated Biphenyls, Polybrominated Diphenyl Ethers, Benzylbutyl phthalate (BBP), Dibutyl phthalate (DBP), Bis(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate (DIBP)/
鉛、鎘、汞、六價鉻、多溴聯苯、多溴二苯醚、鄰苯二甲酸苯基丁酯、
鄰苯二甲酸二丁酯、鄰苯二甲酸二(2-乙基己基)酯、鄰苯二甲酸二異丁酯之總含量,

Phthalates/鄰苯二甲酸(DIDP,DINP,DNOP), Halogen/鹵素, Hexabromocyclododecane (HBCDD)/六溴環十二烷, Perfluorooctane Sulfonate (PFOS)/全氟辛烷磺酸, Perfluorooctanoic Acid (PFOA)/全氟辛酸, Polychlorinated biphenyls (PCB)/多氯聯苯, Polychlorinated naphthalenes (PCN)/多氯化萘, Polychlorinated terphenyls (PCT)/多氯三聯苯

Refer to result page
參照測試報告

Other information: According to client's request, the sample(s) was/were analyzed as a combined mixed sample. The result(s) was/were serve as reference only.
其他信息:

For and on behalf of
TÜV Rheinland Taiwan Ltd.


Arthur Cheng/Project Manager
Name/Position 姓名/職位

2024-04-17
Date 日期



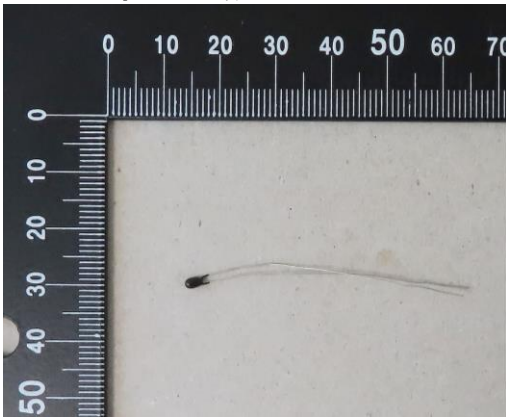
Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed. This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products. "Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.
樣品信息由客戶提供。測試結果根據所做測試的種類和範圍而得出。本測試報告僅對來樣負責。未經本測試中心許可，測試報告不得部分複製。不能根據此報告在上述產品或類似產品上使用任何安全標誌。本測試報告中，描述符合性聲明所應用的判定規則發佈在我司官網 <https://www.tuv.com/landingpage/en/qm-gcn/>。

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第2頁共8頁**Material list/材料清單**

Item: NTC THERMISTOR/ IN&PM SERIES

| Material No./ 材料編號 | Material/材質 | Color/顏色 | Location/位置 |
|-----------------------|----------------------------|--------------------------|------------------------|
| 1 | Electronic components/電子零件 | Black/Metallic 黑色/金屬色 | TCL240408-08 (整體混測) |

Test Sample/測試樣品

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Material No./材料號碼

Mat.1

| Test Item/測試項目 | Test Method/ 測試方法 | Unit / 單位 | MDL | Result/結果 |
|--|--|--------------|------|-----------|
| Cadmium (Cd) / 鎘 | with ref. to IEC 62321-4:2013 / IEC 62321-5:2013 | mg/kg | 2 | n.d. |
| Lead (Pb) / 鉛 | | mg/kg | 2 | 13 |
| Mercury (Hg) / 汞 | | mg/kg | 2 | n.d. |
| Chromium VI (Cr VI) / 六價鉻 | with ref. to IEC 62321-7-2:2017 | mg/kg | 8 | n.d. |
| Sum of Polybrominated biphenyls (PBBs) / 多溴聯苯 | with ref. to IEC 62321-6:2015 | mg/kg | - | n.d. |
| Monobromobiphenyl | | mg/kg | 5 | n.d. |
| Dibromobiphenyl | | mg/kg | 5 | n.d. |
| Tribromobiphenyl | | mg/kg | 5 | n.d. |
| Tetrabromobiphenyl | | mg/kg | 5 | n.d. |
| Pentabromobiphenyl | | mg/kg | 5 | n.d. |
| Hexabromobiphenyl | | mg/kg | 5 | n.d. |
| Heptabromobiphenyl | | mg/kg | 5 | n.d. |
| Octabromobiphenyl | | mg/kg | 5 | n.d. |
| Nonabromobiphenyl | | mg/kg | 5 | n.d. |
| Decabromobiphenyl | | mg/kg | 5 | n.d. |
| Sum of Polybrominated diphenyl ethers (PBDEs) / 多溴二苯醚 | | mg/kg | - | n.d. |
| Monobromodiphenyl ether | | mg/kg | 5 | n.d. |
| Dibromodiphenyl ether | | mg/kg | 5 | n.d. |
| Tribromodiphenyl ether | | mg/kg | 5 | n.d. |
| Tetrabromodiphenyl ether | | mg/kg | 5 | n.d. |
| Pentabromodiphenyl ether | | mg/kg | 5 | n.d. |
| Hexabromodiphenyl ether | | mg/kg | 5 | n.d. |
| Heptabromodiphenyl ether | | mg/kg | 5 | n.d. |
| Octabromodiphenyl ether | mg/kg | 5 | n.d. | |
| Nonabromodiphenyl ether | mg/kg | 5 | n.d. | |
| Decabromodiphenyl ether | mg/kg | 5 | n.d. | |

Notes/ 註釋:

- MDL = Method Detection Limit/方法偵測極限值
- n.d. = Not Detected/未檢出 ; Less than MDL/小於 MDL
- mg/kg = milligram per kilogram/毫克每公斤

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Material No./材料號碼

Mat.1

| Test Item/測試項目 | Test Method/測試方法 | Unit / 單位 | MDL | Result/結果 |
|--|--------------------------------------|-----------|------|-----------|
| Benzylbutylphthalate (BBP) / 鄰苯二甲酸苯基丁酯 | with ref. to IEC 62321-8:2017 | mg/kg | 50 | n.d. |
| Dibutylphthalate (DBP) / 鄰苯二甲酸二丁酯 | | mg/kg | 50 | n.d. |
| Diethylhexylphthalate (DEHP) / 鄰苯二甲酸二(2-乙基己基)酯 | | mg/kg | 50 | n.d. |
| Diisobutylphthalate (DIBP) / 鄰苯二甲酸二異丁酯 | | mg/kg | 50 | n.d. |
| Diisodecylphthalate (DIDP) / 鄰苯二甲酸二異癸酯 | | mg/kg | 50 | n.d. |
| Diisononylphthalate (DINP) / 鄰苯二甲酸二異壬酯 | | mg/kg | 50 | n.d. |
| Di-n-octylphthalate (DNOP) / 鄰苯二甲酸二正辛酯 | | mg/kg | 50 | n.d. |
| Halogen / 鹵素 | | | | |
| Fluorine (F) / 氟 | with ref. to EN 14582, IC | mg/kg | 50 | n.d. |
| Chlorine (Cl) / 氯 | | mg/kg | 50 | 167 |
| Bromine (Br) / 溴 | | mg/kg | 50 | n.d. |
| Iodine (I) / 碘 | | mg/kg | 50 | n.d. |
| Perfluorooctane Sulfonate (PFOS) and its salts/全氟辛烷磺酸及其鹽類* | with ref. to CEN/TS 15968:2010 | mg/kg | 0.01 | n.d. |
| Perfluorooctanoic Acid (PFOA) and its salts/全氟辛酸及其鹽類** | with ref. to CEN/TS 15968:2010 | mg/kg | 0.01 | n.d. |
| Hexabromocyclododecane (HBCDD)/六溴環十二烷 | solvent extraction / GC-MS | mg/kg | 10 | n.d. |
| Polychlorinated Biphenyls (PCBs)/多氯聯苯 | with ref. to USEPA 3550C:2007, GC-MS | mg/kg | 0.05 | n.d. |
| Polychlorinated naphthalene (PCN)/多氯化萘 | | mg/kg | 100 | n.d. |
| Polychlorinated Terphenyls (PCTs)/多氯三聯苯 | | mg/kg | 50 | n.d. |

Notes/ 註釋:

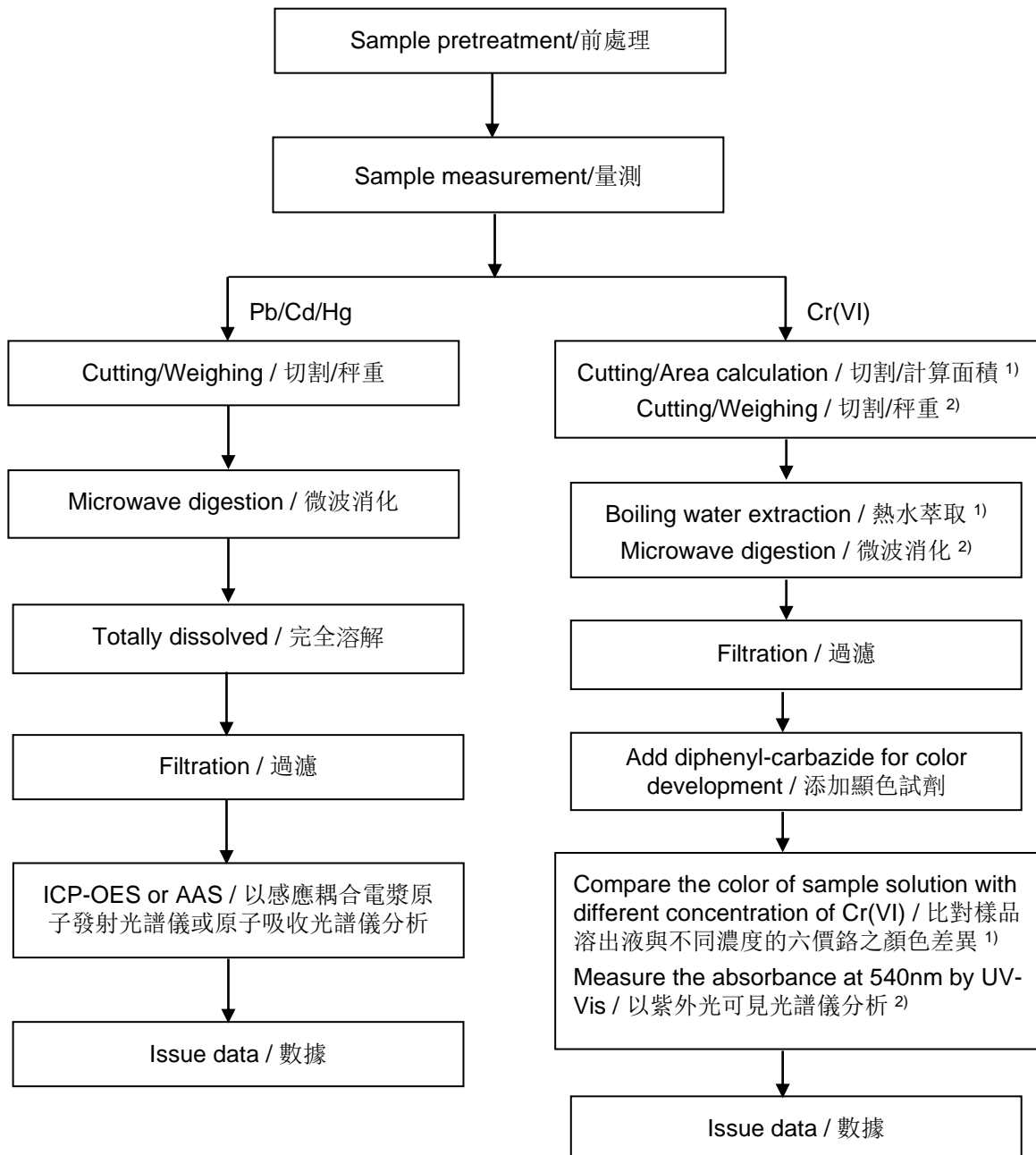
- MDL = Method Detection Limit/方法偵測極限值
- n.d. = Not Detected/未檢出 ; Less than MDL/小於 MDL
- mg/kg = milligram per kilogram/毫克每公斤

* PFOS and its salts including: CAS no. 1763-23-1, 2795-39-3, 29457-72-5, 29081-56-9, 70225-14-8, 56773-42-3, 251099-16-8, 307-35-7, 91036-71-4, 4021-47-0.

** PFOA and its salts including: CAS no. 335-67-1, 335-95-5, 2395-00-8, 335-93-3, 335-66-0, 3825-26-1.

Testing procedure / 測試流程圖 :

Pb/鉛, Cd/鎘, Hg/汞, Cr(VI)/六價鉻



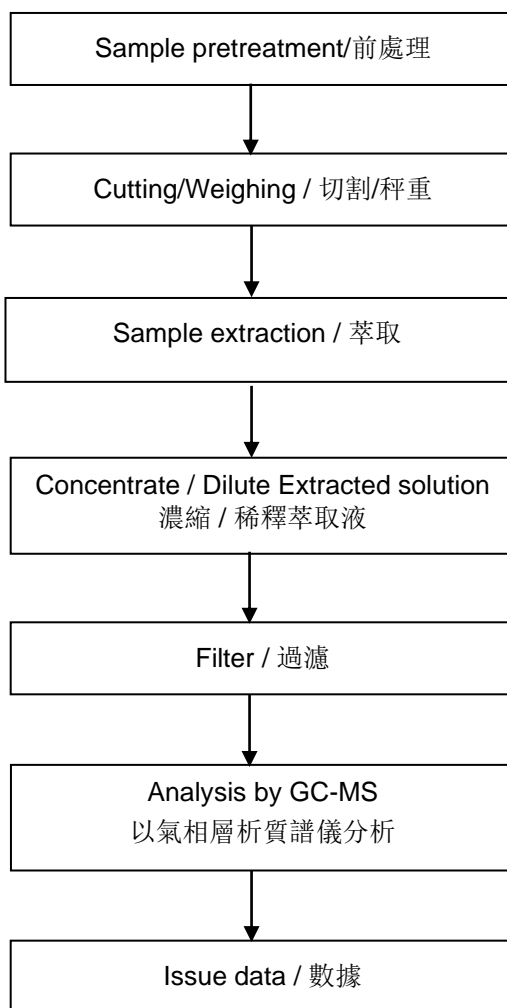
Notes/註釋: ¹⁾ For metallic material / 用於金屬物質
²⁾ For non-metallic material / 用於非金屬物質

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Testing procedure / 測試流程圖 :

PBBs/多溴聯苯, PBDEs/多溴二苯醚, BBP/鄰苯二甲酸苯基丁酯, DBP/鄰苯二甲酸二丁酯, DEHP/鄰苯二甲酸二(2-乙基己基)酯, DIBP/鄰苯二甲酸二異丁酯; Phthalates/鄰苯二甲酸酯類, HBCDD/六溴環十二烷, PCB/多氯聯苯, PCN/多氯化萘, PCT/多氯三聯苯

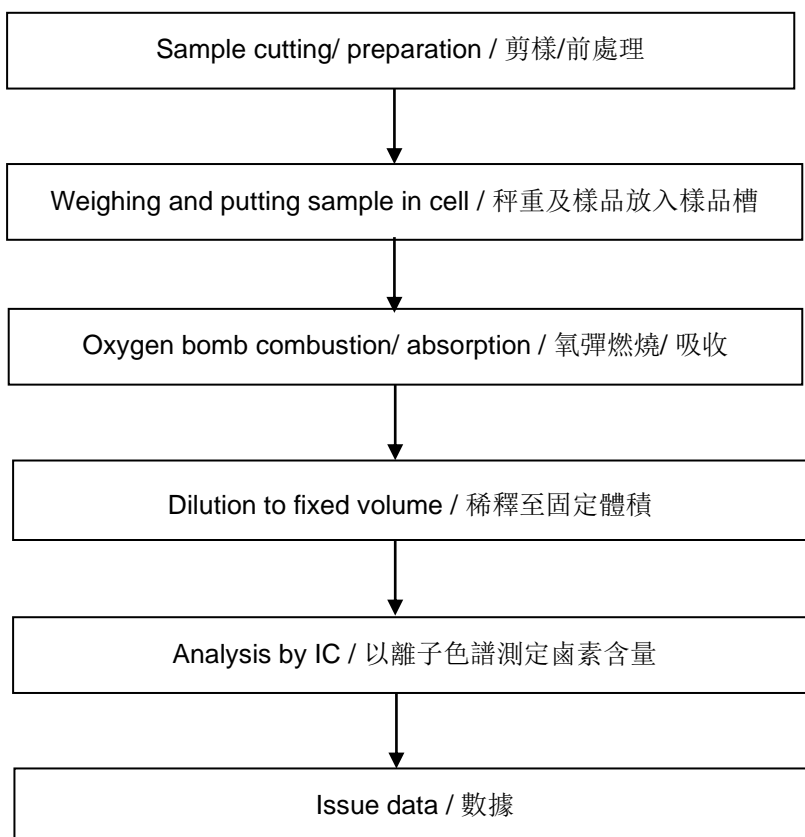


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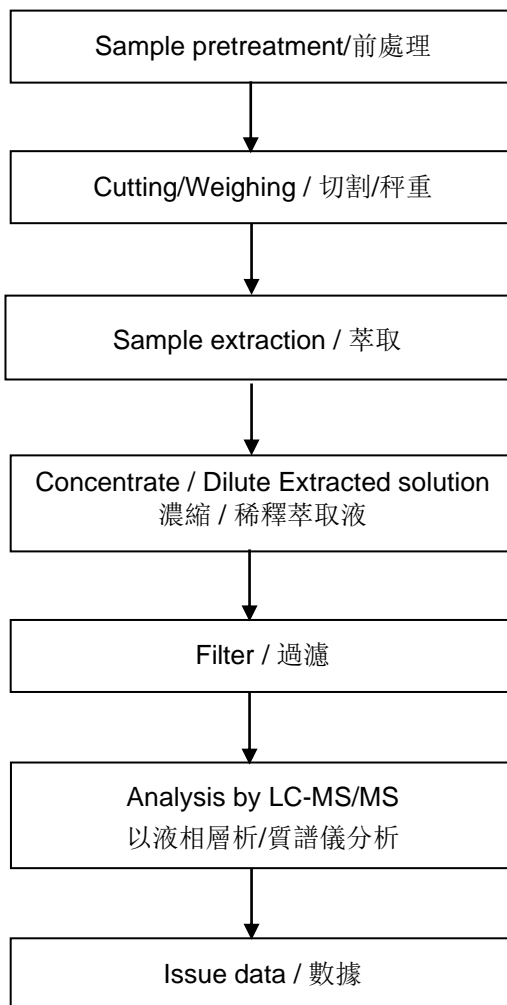
Testing procedure / 測試流程圖 :

Halogen/鹵素



Testing procedure / 測試流程圖 :

PFOS/全氟辛烷磺酸, PFOA/全氟辛酸



--- End of Test-Report / 此報告結束---