

Report No. 報告號碼: 48254422c9 001

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Client 客戶: FORMOSA PLASTICS CORPORATION/台灣塑膠工業股份有限公司
No. 1, Formosa Industrial Complex, Mailiao, Yunlin 638, Taiwan, R.O.C./
台灣 雲林縣麥寮鄉638台塑工業園區1號

Test item(s) 測試樣品: 台塑烯丁烯薄膜、平膜級線性低密度聚乙烯/Taisox LLDPE C4 Blown Film & Cast Film Grade Resin

Identification/Model No(s): 3210, 3214, 3220, 3220E, 3224, 3224D, 3224L, 3224R, 3224S, 3225, 3225W,
樣品描述/規格: 3228

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: 2024-11-12
收樣日期:

Testing period: 2024-11-12 – 2024-12-09
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:

EN 71-3:2019+A1:2021 Migration of 19 Elements/19 項重金屬溶出量

Pass/合格

Other information: All the above models are the same chemical composition/color/manufacturing process
其他信息: according to client's declaration.

For and on behalf of
TÜV Rheinland Taiwan Ltd.


2025-01-02
Date 日期
Arthur Cheng/Project Manager
Name/Position 姓名/職位


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3頁**Material list/材料清單**

Mat. No./ 材料號碼	Material/材質	Color/顏色	Location/位置
1	Plastic/塑膠	White/白色	TCL241112-09

Test Method/測試方法 : Migration of 19 Elements/19項重金屬溶出量 - with reference to EN 71-3:2019+A1:2021,
analyzed by ICP-OES / ICP-MS / LC-ICP-MS/ IC-UV/ GC-MS.

Material No./材料號碼			Mat.1	Regulatory Requirement 法規要求 (Category 3)
Parameter / 測試項目	Unit / 單位	MDL	Result / 結果	
Aluminum (Al) / 鋁	mg/kg	10	n.d.	28,130
Antimony (Sb) / 銻	mg/kg	5	n.d.	560
Arsenic (As) / 砷	mg/kg	5	n.d.	47
Barium (Ba) / 鋇	mg/kg	2.5	n.d.	18,750
Boron (B) / 硼	mg/kg	10	n.d.	15,000
Cadmium (Cd) / 鎘	mg/kg	1	n.d.	17
Chromium III (CrIII) / 三價鉻	mg/kg	10	n.d.	460
Chromium VI (CrVI) / 六價鉻	mg/kg	0.045	n.d.	0.053
Cobalt (Co) / 鈷	mg/kg	2.5	n.d.	130
Copper (Cu) / 銅	mg/kg	2.5	n.d.	7,700
Lead (Pb) / 鉛	mg/kg	2.5	n.d.	23
Manganese (Mn) / 錳	mg/kg	2.5	n.d.	15,000
Mercury (Hg) / 汞	mg/kg	2.5	n.d.	94
Nickel (Ni) / 鎳	mg/kg	2.5	n.d.	930
Selenium (Se) / 硒	mg/kg	10	n.d.	460
Strontium (Sr) / 銦	mg/kg	2.5	n.d.	56,000
Tin (Sn) / 錫	mg/kg	1.0	n.d.	180,000
Organic Tin / 有機錫 ^	mg/kg	0.2	-	12
Zinc (Zn) / 鋅	mg/kg	10	n.d.	46,000

Abbreviation: 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

^ denotes Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (3.6 mg/kg) or the components were confirmed to be pure metal

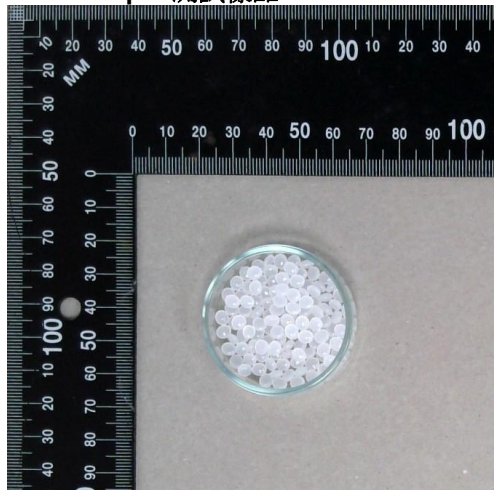
Remark :

- * Categorization of toys materials is based on the material texture. According to point H.11 of Annex H to EN 71-3:2019+A1:2021, cosmetic materials with dry, brittle, powder like or pliable texture such as lipstick and eyeshadow are considered as category I materials. However, as a reminder, it cannot preclude the possibility that some national enforcement authorities might take a more stringent action to treat cosmetic materials as sticky and evaluate according to category II requirement as they are intended to be applied on skin and retained for long time.
- ** For any test portion containing grease, oil, wax or similar material, such materials would have been removed with isooctane by using Soxhlet extraction.

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Test Sample/測試樣品



--- End of Test-Report / 此報告結束---