測試報告
Test Report

號碼(No.) : HY/2020/20149　日期(Date) : 2020/02/26　頁數(Page) : 1 of 4

龍興塑膠科技股份有限公司
DRAGON SHING ROTOCASTING CO., LTD.
彰化縣伸港鄉全興村全興路1-15號
No. 1-15 Chuan Shing Road, ShenKang Shiang, Chang Hua Hsien, Taiwan R.O.C.

以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as)：

送樣廠商(Sample Submitted By)	:	龍興塑膠科技股份有限公司 (DRAGON SHING ROTOCASTING CO., LTD.)
樣品名稱(Sample Description)	:	塑膠筆頭 (PLASTIC PEN NIB)
原產國(Country of Origin)	:	台灣
收件日期(Sample Receiving Date)	:	2020/02/17
測試期間(Testing Period)	:	2020/02/17 TO 2020/02/26

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測試方法及結果
(Test Method & Results)　: 請參閱下一頁 (Please refer to following pages).

Troy Chang / Manager - Tec
Signed for and behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei

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測試結果(Test Results)

指令2009/48/EC及其理事會修正指令 (EU) 2017/738, 委員會指令 (EU) 2018/725 - EN71-3：2019 - 特定元素遷移. / Directive 2009/48/EC and its Amendment Council Directive (EU) 2017/738, Commission Directive (EU) 2018/725 - EN71-3：2019 - Migration of certain elements.

第三類：可刮取的玩具材料. / Category III: Scrapped-off toy material.

測試部位(PART NAME) No.1 : 白色塑膠 (WHITE PLASTIC)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	RL	結果 (Result) No.1	限值 (Limit)
溶出鋁 / Soluble Aluminum (Al)	mg/kg	參考 EN 71-3：2019，以感應耦合電漿放射光譜儀檢測. / With reference to EN 71-3：2019. Analysis was performed by ICP-OES.	50	n.d.	70000
溶出銻 / Soluble Antimony (Sb)	mg/kg		10	n.d.	560
溶出砷 / Soluble Arsenic (As)	mg/kg		10	n.d.	47
溶出鋇 / Soluble Barium (Ba)	mg/kg		50	n.d.	18750
溶出硼 / Soluble Boron (B)	mg/kg		50	n.d.	15000
溶出鎘 / Soluble Cadmium (Cd)	mg/kg		5	n.d.	17
溶出鈷 / Soluble Cobalt (Co)	mg/kg		10	n.d.	130
溶出銅 / Soluble Copper (Cu)	mg/kg		50	n.d.	7700
溶出鉛 / Soluble Lead (Pb)	mg/kg		10	n.d.	23
溶出錳 / Soluble Manganese (Mn)	mg/kg		50	n.d.	15000
溶出汞 / Soluble Mercury (Hg)	mg/kg		10	n.d.	94
溶出鎳 / Soluble Nickel (Ni)	mg/kg		10	n.d.	930
溶出硒 / Soluble Selenium (Se)	mg/kg		10	n.d.	460
溶出鍶 / Soluble Strontium (Sr)	mg/kg		50	n.d.	56000
溶出錫 / Soluble Tin (Sn)	mg/kg		4.9	n.d.	180000
溶出鋅 / Soluble Zinc (Zn)	mg/kg		50	n.d.	46000
溶出鉻 / Soluble Chromium (Cr)	mg/kg		5	n.d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	RL	結果 (Result) No.1	限值 (Limit)
溶出三價鉻 / Soluble Chromium (III) (Cr (III))	mg/kg	參考 EN 71-3：2019，溶出三價鉻由計算求得 / With reference to EN 71-3：2019. Soluble Chromium (III) was obtained by calculation.	5	n.d.	460
溶出六價鉻 / Soluble Chromium (VI) (Cr (VI))	mg/kg	參考 EN 71-3：2019，以液相層析感應耦合電漿質譜儀檢測. / With reference to EN 71-3：2019. Analysis was performed by LC-ICP-MS.	0.02	n.d.	0.053
甲基錫 / Methyl Tin (MeT)	mg/kg	參考 EN 71-3：2019，以氣相層析質譜儀檢測. / With reference to EN 71-3：2019. Analysis was performed by GC/MS.	1.8	n.d.	-
二丙基錫 / Di-n-propyl Tin (DProT)	mg/kg		1.8	n.d.	-
單丁基錫 / Butyl Tin (BuT)	mg/kg		1.8	n.d.	-
二丁基錫 / Dibutyl Tin (DBT)	mg/kg		1.8	n.d.	-
三丁基錫 / Tributyl Tin (TBT)	mg/kg		1.8	n.d.	-
單辛基錫 / n-Octyl Tin (MOT)	mg/kg		1.8	n.d.	-
四丁基錫 / Tetrabutyl Tin (TeBT)	mg/kg		1.8	n.d.	-
二苯基錫 / Diphenyl Tin (DphT)	mg/kg		1.8	n.d.	-
二辛基錫 / Di-n-octyl Tin (DOT)	mg/kg		1.8	n.d.	-
三苯基錫 / Triphenyl Tin (TphT)	mg/kg		1.8	n.d.	-
二甲基錫 / Dimethyl Tin (DMT)	mg/kg		1.8	n.d.	-
溶出有機錫 / Soluble Organic Tin	mg/kg		-	n.d.	12

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備註(Note)：

1. mg/kg = ppm；0.1wt% = 1000ppm
2. RL = Reporting Limit（報告極限值）
3. n.d. = Not Detected = below RL（未檢出 / 低於RL）
4. "-" = Not Regulated（無規格值）
5. 本報告不得分離，分離使用無效。
   (The content of this report is invalid if it is not presented as the entire report.)

*** 照片中如有箭頭標示，則表示為實際檢測之樣品/部位. ***
(The tested sample / part is marked by an arrow if it's shown on the photo.)

HY/2020/20149

** 報告結尾(End of Report) **

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