

Test Report

				Number	:	TWNC00548078	
No. 11, G			ibber Industries Co., Ltd. gye N. 2nd Rd., Nantou County 54066, .C.	Date	:	Sep 26, 2016	
Sample Description: One (1) group of submitted samples said to be: 以下測試樣品乃供應商所提供及確認:							
Sample Desc 樣品名稱	cription	:	Rubber Granules (Made from Recycled Tyre)				
Country of C 原產地	rigin	:	Taiwan 台灣				
Date Sample Received 收件日期		:	Sep 09, 2016				
Date Test St 開始測試日期		:	Sep 09, 2016				
Tect Conducted 测导动行,							

Test Conducted 測試執行:

As requested by the applicant, for details please refer to attached pages. 依申請商之要求,細節請參考附頁.

Authorized by: On Behalf of Intertek Testing Services Taiwary Limited

all

K. Y. Liang Director

> Intertek Testing Services Taiwan Ltd. 8F., No. 423, Ruiguang Rd., Neihu District, Taipei 11492, Taiwan, R.O.C. 全國公證檢驗股份有限公司 11492 台北市內湖區瑞光路 423 號 8 樓 Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2410

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Number : TWNC00548078

Test Conducted :

Test Result Summary 測試結果:

Test Item U		Test Method	<u>Result</u> 結果	RL
	單位	測試方法	<u>Black soft plastic</u>	<u></u>
Heavy Metal <u>重金</u> 屬	1			
Cadmium (Cd) Content 鎘含量	ppm	With reference to IEC 62321- 5: 2013, by microwave or acid digestion and determined by ICP-OES. 參考 IEC 62321-5: 2013,以微 波或酸液消化法消化樣品並用 感應耦合電漿原子發射光譜儀 分析。	ND	2
Lead (Pb) Content 鉛含量	ppm	With reference to IEC 62321- 5: 2013, by microwave or acid digestion and determined by ICP-OES. 參考 IEC 62321-5: 2013,以微 波或酸液消化法消化樣品並用 感應耦合電漿原子發射光譜儀 分析。	22	2
Mercury (Hg) Content 汞含量	ppm	With reference to IEC 62321- 4: 2013, by microwave or acid digestion and determined by ICP-OES. 參考 IEC 62321-4: 2013,以微 波或酸液消化法消化樣品並用 感應耦合電漿原子發射光譜儀 分析。	ND	2
Chromium VI (Cr ⁶⁺) Content 六價鉻含量	ppm	With reference to IEC 62321: 2008, by alkaline digestion and determined by UV-Vis Spectrophotometer. 参考 IEC 62321:2008,以鹼液 消化並用紫外光-可見光分光光 度計分析。	ND	1

Intertek Testing Services Taiwan Ltd. 8F., No. 423, Ruiguang Rd., Neihu District, Taipei 11492, Taiwan, R.O.C. 全國公證檢驗股份有限公司 11492 台北市內湖區瑞光路 423 號 8 樓 Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2410

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Test Conducted :

Number : TWNC00548078

測試力法图ack soft plasticPolybrominated Biphenyls (PBBs) 多溴聯苯Monobrominated Biphenyls (MonoBB) 單溴聯苯ppmDibrominated Biphenyls (DIBB) 二溴聯苯ppmTribrominated Biphenyls (TriBB) 三溴聯苯ppmTribrominated Biphenyls (TriBB) 三溴聯苯ppmTribrominated Biphenyls (PetraBB) 四溴聯苯ppmPentabrominated Biphenyls (PetraBB) 五溴聯苯ppmPentabrominated Biphenyls (PetraBB) 五溴聯苯ppmPentabrominated Biphenyls (PetraBB) 五溴聯苯ppmHexabrominated Biphenyls (PetraBB) 六溴聯苯ppmHexabrominated Biphenyls (PetraBB) 六溴聯苯ppmHeptabrominated Biphenyls (PetraBB) 七溴聯苯ppmNonabrominated Biphenyls (CotaBB) 八溴聯苯ppmNonabrominated Biphenyls (PetraBB) 七溴聯苯ppmNonabrominated Biphenyls (PetraBB) 七溴聯苯ppmNonabrominated Biphenyls (PetraBB) 七溴聯苯ppmNonabrominated Biphenyls (PetraBB) 七溴聯苯ppmNonabrominated Biphenyls (PetraBB) 九溴聯苯ppmNonabrominated Biphenyls (PetraBB) 九溴聯苯ppmND <t< th=""><th><u>測試項目</u> minated Biphenyls (PBBs minated Biphenyls 8) 單溴聯苯</th><th></th><th></th><th></th><th></th></t<>	<u>測試項目</u> minated Biphenyls (PBBs minated Biphenyls 8) 單溴聯苯								
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(Decabb) 十溴聯本		0.000		ND	г				
Delubrominated Dinberry (DDDEe) 女语酸甘酸) 十溴聯苯			ND	5				
	minated Diphenyl Ethers	6 (PBDE	s) 多溴聯苯醚						
Monobrominated Diphenyl Ethers ppm ND		nnm		ND	5				
(MonoBDE) 單溴聯本醚		ppm		ND	5				
Dibrominated Diphenyl Ethers ppm ND				ND	5				
(DIBDE)		PPIII							
Tribrominated Diphenyl Ethers ppm N/the reference to IEC 62221 ND		ppm		ND	5				
(TIBDE) 三溴聯本醚 With reference to IEC 62321-	二溴聯本醚	1-1-							
Tetrabrominated Diphenyl Ethers ppm 6: 2015, by solvent extraction ND		ppm		ND	5				
(TetraBDE) 四溴聯苯醚 Pprint and determined by GC-MS and ND Pentabrominated Diphenyl Ethers nnm further HPLC-DAD confirmation ND									
(PentaBDE) 五溴聯苯醚 ppm when necessary. ND		ppm		ND	5				
Heyabrominated Dipbenyl Ethers									
(HexaBDE) 六溴聯苯醚 ppm		ppm		ND	5				
Hentabrominated Dinbenyl Ethers 析,以要時會以高效液相屬析									
(HeptaBDE) 七溴聯苯醚 ppm 儀光二極體陣列偵測儀進行確 ND		ppm		ND	5				
Octabrominated Dinbenyl Ethers	DDC) 心夜咖本睑 ominated Dinbenyl Ethers			ND	-				
(OctaBDE) 八溴聯苯醚 ppm ND ND				ND	5				
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(NonaBDE) 九溴聯苯醚 ppm	E) 九溴聯苯醚	ppm		NU	5				
Decabrominated Diphenyl Ether ppm ND		nnm		ND	5				
(DecaBDE) 十溴聯苯醚 Ppin ND	E) 十溴聯苯醚	Phili			5				

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Number : TWNC00548078

Test Conducted :

<u>Test Item</u> 測試項目	<u>Unit</u> 單位	<u>Test Method</u> 測試方法	<u>Result 結果</u> Black soft plastic	<u>RL</u>
Halogen Content 鹵素含量				
Fluorine (F) 氟	ppm	With reference to EN 14582:2007 by combustion	207	50
Chlorine (CI) 氯	ppm	bomb with oxygen and determined by Ion	701	50
Bromine (Br) 溴	ppm	Chromatography. 參考 EN 14582:2007,以氧彈	ND	50
Iodine (I) 碘	ppm	燃燒集氣法並用離子層析儀分 析。	ND	50

Remarks: 備註 ppm = Parts per million based on weight of tested sample = mg/kg 百萬分之一,依據測試樣品重量計算 = 毫克/公斤

ND = Not detected 未檢測出

RL = Reporting limit, quantitation limit of analyte in sample 報告極限,測試樣品之定量偵測極限

Responsibility of Chemist 分析人員 : Pelny Hsiao/ Vita Fu

Date Sample Received 樣品收件日期	:	Sep 09, 2016
Test Period 樣品測試期間	:	Sep 09, 2016 to Sep 23, 2016

RoHS Limit RoHS 限值

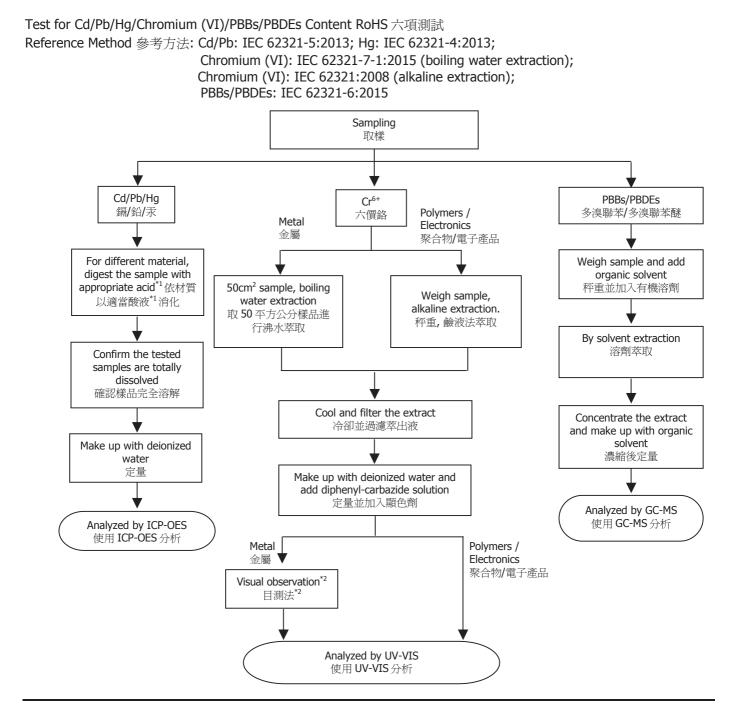
<u>Limits</u> 限值
0.01% (100ppm)
0.1% (1000ppm)

The limits were quoted from Annex II of 2011/65/EU for homogeneous material. 本限值是依據歐盟指令 2011/65/EU 附錄二針對均質材質所訂定。

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Test Conducted :



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Number : TWNC00548078

Test Conducted :

Remark 備註:

*1: List of Appropriate Acid 各材質添加酸液如下表:

Material 材質	Acid Added for Digestion 添加酸液種類
Polymers 聚合物	HNO ₃ ,HCl,HF,H ₂ O ₂ ,H ₃ BO ₃ 硝酸、鹽酸、氫氟酸、雙氧水、硼酸
Metals 金屬	HNO ₃ ,HCl,HF 硝酸、鹽酸、氫氟酸
Electronics 電子產品	HNO ₃ ,HCl,H ₂ O ₂ ,HBF ₄ 硝酸、鹽酸、雙氧水、氟硼酸

*2: If sample solution is significantly more intense than 0.13 µg/cm² equivalent comparison standard, Chromium VI would be determined as detected, the result of visual observation is positive. 當待測樣品溶液顏色明顯比 0.13 µg/cm² 深,採用目測法判定六價銘結果為陽性。

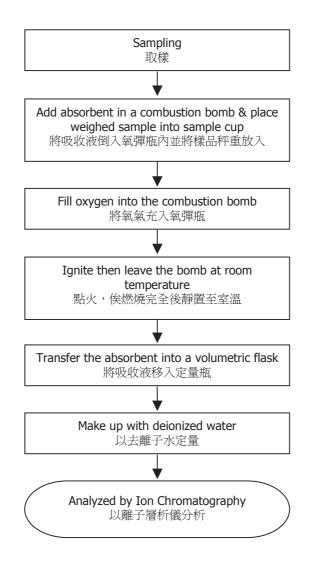


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Test Conducted :

Measurement Flowchart 測試流程圖:

Test for Halogen Content 鹵素測試 Reference Method 參考方法: EN 14582



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Intertek

Number : TWNC00548078



End of Report

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