

Test Report

Number: TWNC00141548 Date : Dec 09, 2009

Applicant 申請商:

Homytech Co., Ltd.

No 117 Yongsing St

Bade City Taoyuan county 33456

Taiwan R.O.C.

Sample Description 樣品敘述:

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 Description

: 石墨粉

樣品名稱

Supplier's Name

: 泓明

供應商名稱

Date Sample Received

: Dec 04, 2009

收件日期

Date Test Started

: Dec 07, 2009

開始測試日期

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

Taiwan Limited



K. Y. Liang Director

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Test Conducted

# (I) Test Result Summary 測試結果:

Togting Itom 州畔石口	Result 結果 (ppm) Black Powder	
Testing Item 測試項目		
Heavy Metal / 重金屬		
Cadmium (Cd) content / 鎘含量	ND	
Lead (Pb) content / 鉛含量	ND	
Mercury (Hg) content / 汞含量	ND	
Chromium VI (Cr <sup>6+</sup> ) content / 六價鉻含量	ND	
Halogen Content / 鹵素含量		
Chlorine (Cl) / 氯	194	
Bromine (Br) / 溴	ND	

Remarks: ppm = parts per million based on weight of tested sample = mg/kg

備註

= 百萬分之一,依據測試樣品重量計算

ND = Not Detected = 未檢測出

Responsibility Of Chemist 分析人員 : Irene Chiou / Kevin Liu / Cathy Chen

Date Sample Received 樣品收件日期 : Dec 04, 2009

Testing Period 樣品測試期間 : Dec 07, 2009 To Dec 08, 2009

#### (Ⅱ) RoHS Requirement 限値:

Restricted Substances 限用物質	Limits 限値
Cadmium (Cd) content / 鎘含量	0.01% (100ppm)
Lead (Pb) content / 鉛含量	0.1% (1000ppm)
Mercury (Hg) content / 汞含量	0.1% (1000ppm)
Chromium VI (Cr <sup>6+</sup> ) content / 六價鉻含量	0.1% (1000ppm)

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

本限值是依據歐盟指令 2002/95/EC 與其更新指令 2005/618/EC 針對均質材質所訂定。

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Test Conducted

## (Ⅲ) Test Method 測試方法:

Test Method 測試力法:		
Testing Item	Testing Method	Reporting Limit
測試項目	測試方法	報告極限
Cadmium (Cd) content 鍋含量	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.  参考IEC 62321, 2008年第一版第8/9/10章,以微波消化法測試樣品直到樣品完全溶解並用感應耦合電漿原子放射光譜儀分析。	2 ppm
Lead (Pb) content 鉛含量	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES. 参考IEC 62321, 2008年第一版第8/9/10章,以微波消化法測試樣品直到樣品完全溶解並用感應耦合電漿原子放射光譜儀分析。	2 ppm
Mercury (Hg) content 汞含量	With reference to IEC 62321 edition 1.0:2008 in clause 7, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES. 参考IEC 62321, 2008年第一版第7章,以微波消化法測試樣品直到樣品完全溶解並用感應耦合電漿原子放射光譜儀分析。	2 ppm
Chromium VI (Cr <sup>6+</sup> ) content 六價鉻含量	With reference to IEC 62321 edition 1.0:2008 in annex C, by alkaline digestion and determined by UV-Vis spectrophotometer. 参考IEC 62321, 2008年第一版附錄C,以鹼液消化並用紫外光-可見光分光光度計分析。	1 ppm
Halogen Content 鹵素含量	With reference to EN 14582:2007 by combustion flask with oxygen and determined by ion chromatography 參考EN 14582:2007,以氧氣燃燒瓶燃燒集氣法並用離子層析儀分析。	50 ppm

Remark: Reporting Limit = Quantitation limit of analyte in sample

備註 報告極限 = 測試樣品之定量偵測極限

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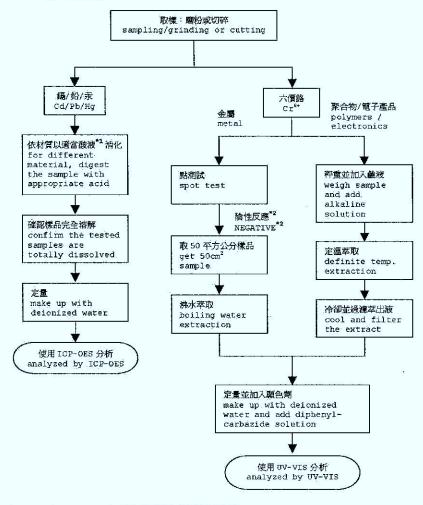
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### (IV) Measurement Flowchart 測試流程圖:

Test For Cd/Pb/Hg/Chromium (VI) RoHS四項測試流程圖 Reference Standard 參考方法:IEC 62321 edition 1.0:2008



### Remarks 備註:

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

	H 11/23/4/ZHR31/ZH 1/2
Material 樣品材質	Acid Added For Digestion 添加酸液種類
Polymers / 聚合物	HNO <sub>3</sub> , HC1, HF, H <sub>2</sub> O <sub>2</sub> , H <sub>3</sub> BO <sub>3</sub> 硝酸、鹽酸、氫氟酸、雙氧水、硼酸
Metals / 金屬	HNO3, HCl, HF 硝酸、鹽酸、氫氟酸
Electronics / 電子產品	HNO₃,HC1,H₂O₂,HBF₄硝酸、鹽酸、雙氧水、氟硼酸

\*2: If the result of spot test is positive, Chromium VI would be determined as detected.

若點測試的結果爲陽性反應,則直接判定爲含有六價鉻。

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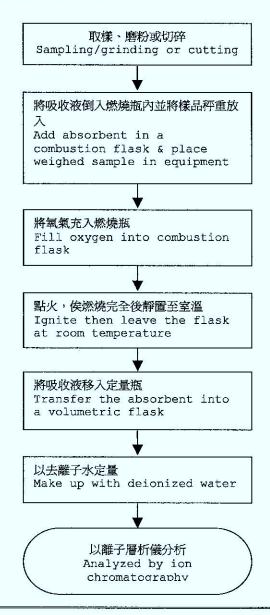
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(IV) Measurement Flowchart 測試流程圖:

Test For Halogen Content 鹵素測試流程圖 Reference Method 參考方法: EN 14582



End Of Report

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### Photo

