

測試報告 Test Report

號碼(No.) : CE/2008/47623 日期(Date) : 2008/05/05 頁數(Page) : 1 of 5

崑琦工業股份有限公司

QUEN CHEER INDUSTRIAL CO., LTD.

桃園縣楊梅鎮富岡里富聯路194號

194, FU LIEN RD., YANG-MEI, TAOYUAN, 326 TAIWAN, R. O. C.



以下測試樣品係由客戶送樣，且由客戶聲稱並經客戶確認如下 (The following samples was/were submitted and identified by/on behalf of the client as) :

樣品名稱(Sample Description)	: SEAMLESS CuNi TUBE
樣品型號(Style/Item No.)	: CUPRO NICKEL CuNi30 Mn1 Fe
收件日期(Sample Receiving Date)	: 2008/04/25
測試期間(Testing Period)	: 2008/04/25 TO 2008/05/05

=====
測試結果(Test Results) : 請見下一頁 (Please refer to next pages).

Chenyu Kung / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory – Taipei

測試報告

Test Report

號碼(No.) : CE/2008/47623 日期(Date) : 2008/05/05 頁數(Page) : 2 of 5

崑琦工業股份有限公司



QUEN CHEER INDUSTRIAL CO., LTD.

桃園縣楊梅鎮富岡里富聯路194號

194, FU LIEN RD., YANG-MEI, TAOYUAN, 326 TAIWAN, R. O. C.

測試結果(Test Results)

測試部位(PART NAME) NO.1 : 鐵灰色金屬 (IRON-GRAY METAL)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				NO.1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321/2nd CDV (111/95/CDV) 方法, 用感應耦合電漿原子發射光譜儀 (ICP-AES) 檢測鎘含量. / With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.
鉛 / Lead (Pb)	mg/kg	參考IEC 62321/2nd CDV (111/95/CDV) 方法, 用感應耦合電漿原子發射光譜儀 (ICP-AES) 檢測鉛含量. / With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	13
汞 / Mercury (Hg)	mg/kg	參考IEC 62321/2nd CDV (111/95/CDV) 方法, 用感應耦合電漿原子發射光譜儀 (ICP-AES) 檢測汞含量. / With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.
六價鉻 / Hexavalent Chromium Cr(VI) by Spot test / boiling water extraction	**	針對金屬材質之樣品, 參考IEC 62321/2nd CDV (111/95/CDV)方法檢測, 用Spot test / boiling water extraction方法檢測六價鉻含量. / With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for metallic samples by Spot test / boiling water extraction Method. (See Note 7)	0.02mg/kg with 50 cm ² surface area	Negative

測試報告

Test Report

號碼(No.) : CE/2008/47623 日期(Date) : 2008/05/05 頁數(Page) : 3 of 5

崑琦工業股份有限公司



QUEN CHEER INDUSTRIAL CO., LTD.

桃園縣楊梅鎮富岡里富聯路194號

194, FU LIEN RD., YANG-MEI, TAOYUAN, 326 TAIWAN, R. O. C.

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result) NO.1
六價鉻 / Hexavalent Chromium Cr(VI)	µg/cm ²	針對金屬材質之樣品, 參考BS EN ISO 3613:2001方法, 用UV-VIS檢測六價鉻含量. / With reference to BS EN ISO 3613:2001 for Hexavalent Chromium for Metallic samples. Analysis was performed by UV-VIS Spectrometry.	0.02	n.d.
多氯聯苯 / Polychlorinated Biphenyls (PCBs) (CAS No.: 001336-36-3)	mg/kg	參考US EPA 3540C方法, 以氣相層析質譜儀(GC/MS)檢測. / With reference to US EPA 3540C method. Analysis was performed by GC/MS.	0.5	n.d.
多溴聯苯總和 / Sum of PBBs			-	n.d.
一溴聯苯 / Monobromobiphenyl			5	n.d.
二溴聯苯 / Dibromobiphenyl			5	n.d.
三溴聯苯 / Tribromobiphenyl			5	n.d.
四溴聯苯 / Tetrabromobiphenyl			5	n.d.
五溴聯苯 / Pentabromobiphenyl			5	n.d.
六溴聯苯 / Hexabromobiphenyl			5	n.d.
七溴聯苯 / Heptabromobiphenyl			5	n.d.
八溴聯苯 / Octabromobiphenyl			5	n.d.
九溴聯苯 / Nonabromobiphenyl			5	n.d.
十溴聯苯 / Decabromobiphenyl			5	n.d.
多溴聯苯醚總和 (一至九溴) / Sum of PBDEs (Mono to Nona) (Note 4)	mg/kg	參考IEC 62321/2nd CDV (111/95/CDV)方法, 以氣相層析儀/質譜儀檢測多溴聯苯和多溴聯苯醚含量. / With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of PBB and PBDE by GC/MS.	-	n.d.
一溴聯苯醚 / Monobromodiphenyl ether			5	n.d.
二溴聯苯醚 / Dibromodiphenyl ether			5	n.d.
三溴聯苯醚 / Tribromodiphenyl ether			5	n.d.
四溴聯苯醚 / Tetrabromodiphenyl ether			5	n.d.
五溴聯苯醚 / Pentabromodiphenyl ether			5	n.d.
六溴聯苯醚 / Hexabromodiphenyl ether			5	n.d.
七溴聯苯醚 / Heptabromodiphenyl ether			5	n.d.
八溴聯苯醚 / Octabromodiphenyl ether			5	n.d.
九溴聯苯醚 / Nonabromodiphenyl ether			5	n.d.
十溴聯苯醚 / Decabromodiphenyl ether			5	n.d.
多溴聯苯醚總和 (一至十溴) / Sum of PBDEs (Mono to Deca)			-	n.d.

測試報告 Test Report

號碼(No.) : CE/2008/47623 日期(Date) : 2008/05/05 頁數(Page) : 4 of 5

崑琦工業股份有限公司

QUEN CHEER INDUSTRIAL CO., LTD.

桃園縣楊梅鎮富岡里富聯路194號

194, FU LIEN RD., YANG-MEI, TAOYUAN, 326 TAIWAN, R. O. C.



備註(Note) :

1. mg/kg = ppm
2. n.d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
4. 根據2005年10月13日歐盟會議公佈2005/717/EC, 修訂2002/95/EC內容, 通過解除高分子材質中十溴聯苯醚之使用限制。(According to 2005/717/EC DecaBDE is exempt.)
5. "-" = Not Regulated (無規格值)
6. ** = Qualitative analysis (No Unit) 定性分析(無單位)
7. Spot-test:

Negative = Absence of Cr(VI) coating / surface layer(鍍層中偵測不到六價鉻),

Positive = Presence of Cr(VI) coating / surface layer(鍍層中偵測到六價鉻);

The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.

(當該測項無法確認時, 測試樣品可藉由boiling-water-extraction測試方法進一步確認)

Boiling-water-extraction:

Negative = Absence of Cr(VI) coating / surface layer(鍍層中偵測不到六價鉻),

Positive = Presence of Cr(VI) coating / surface layer(鍍層中偵測到六價鉻);

the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

該溶液濃度 ≥ 0.02 mg/kg with 50 cm² (sample surface area)

測試報告 Test Report

號碼(No.) : CE/2008/47623 日期(Date) : 2008/05/05 頁數(Page) : 5 of 5

崑琦工業股份有限公司

QUEN CHEER INDUSTRIAL CO., LTD.

桃園縣楊梅鎮富岡里富聯路194號

194, FU LIEN RD., YANG-MEI, TAOYUAN, 326 TAIWAN, R. O. C.



** 報告結尾 **