

## 試驗報告



報告編號: HV-14-06483X-1

頁數: 1 OF 4

報告日期: 2015 年 09 月 23 日

委託單位: 百威靈有限公司  
 地址: 新北市淡水區行忠路 66 號  
 樣品名稱: BT-562-A 彈性防水斷熱塗料  
 送驗人員: 百威靈有限公司(吳坤海)  
 收件日期: 2014 年 10 月 22 日  
 試驗日期: 2014 年 10 月 22 日~2015 年 09 月 18 日  
 備註: 1. 以上資料由顧客提供(收件及試驗日期除外)  
 2. 除非另有說明, 此報告結果僅對測試之樣品負責  
 未經本公司事先書面同意, 此報告不可部分複製

## 試驗結果:

試驗項目	試驗方法	試驗結果
抗拉強度(kgf/cm <sup>2</sup> )	ASTM D412-06ae2	21.0
伸長率(%)	(Die C、V=500mm/min)	155
撕裂強度(kgf/cm)	ASTM D624-00(2007) (Die C、V=500mm/min)	9.46
耐酸性(5% H <sub>2</sub> SO <sub>4</sub> , 23°C, 96 小時)	ASTM D543-06& ASTM D412-06ae2 (Die C、V=500mm/min)	24.6
a. 抗拉強度(kgf/cm <sup>2</sup> )		125
b. 伸長率(%)		27.3
耐鹼性(5% NaOH, 23°C, 96 小時)		105
a. 抗拉強度(kgf/cm <sup>2</sup> )	ASTM D573-04(2010)& ASTM D412-06ae2 (Die C、V=500mm/min)	27.8
b. 伸長率(%)		162
老化試驗(100°C, 70 小時)	ASTM D3359-09e2 Method B	5B(註 2)
a. 抗拉強度(kgf/cm <sup>2</sup> )		浸漬試驗無異狀
b. 伸長率(%)	ASTM D1308-02(2007) (Immersion)	
耐鹽水性(5% NaCl, 23°C, 168 小時)	ASTM E96-10 Procedure B	0.16
水氣滲透率(g/24h · m <sup>2</sup> )	ASTM G155-05a CYCLE 1& ASTM D412-06ae2 (Die C、V=500mm/min)	24.5
耐 UV 性(168 小時)		109
a. 抗拉強度(kgf/cm <sup>2</sup> )		
b. 伸長率(%)	參考 ASTM D1894-14(C-Type) (摩擦介面: 橡膠 (Shore Type A55), 砵碼+試樣: 229.65g)	1.56 (標準差 = 1.084)
摩擦係數(耐磨性)(乾式)		

規範要求值僅供參考, 合格之判定以委託單位實際要求為準。

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## 試驗報告



報告編號：HV-14-06483X-1

頁數：2 OF 4

報告日期：2015 年 09 月 23 日

### 試驗結果：

試驗項目	試驗方法	試驗結果
耐藥品性(5%醋酸, 23°C, 168 小時)	ASTM D1308-02(2007) (Immersion)	浸漬試驗無異狀
耐洗刷性(2000 次)	ASTM D2486-06	可耐規定次數之洗淨試驗
耐冷熱反覆性 (-40°C, 1 小時→100°C, 1 小時, 6cycles) a. 抗拉強度(kgf/cm <sup>2</sup> ) b. 伸長率(%)	CNS 11607(1995) & ASTM D412-06ae2 (Die C、V=500mm/min)	20.6 135
熱傳導率(W/m·K)	ASTM C518-10(註 3)	0.0463
耐衝擊性(φ 15.9mm, 50cm, 1000g)	參考 ASTM D2794-93(2010)	無龜裂、剝落現象
磁磚拉拔強度(kgf/cm <sup>2</sup> )	ASTM D4541-09e1	20.3 (破壞在磁磚上)
加熱殘份(固體含量)(%)	CNS 10880-1(1994)	56.4
乾燥時間(23°C)(h)	CNS 10756-1(1994)	20 分鐘內(指觸) 50 分鐘內(堅結)

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## 試驗結果：

## 反射率(%) (註 1.)

波長(nm)	反射率(%)	波長(nm)	反射率(%)	波長(nm)	反射率(%)	波長(nm)	反射率(%)	波長(nm)	反射率(%)
360	7.20	440	93.35	520	95.59	600	96.81	680	97.38
370	8.03	450	93.70	530	95.74	610	96.94	690	97.54
380	10.08	460	94.07	540	95.96	620	96.97	700	97.51
390	17.72	470	94.41	550	96.17	630	97.12	710	97.59
400	37.72	480	94.68	560	96.25	640	97.18	720	97.55
410	66.44	490	94.91	570	96.42	650	97.27	730	97.60
420	86.77	500	95.30	580	96.57	660	97.36	740	97.57
430	92.42	510	95.43	590	96.65	670	97.40	-	-

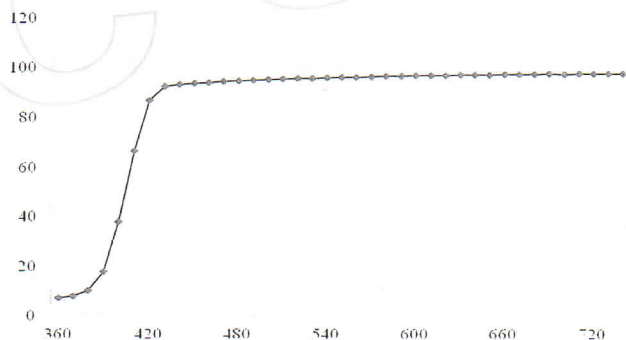
註:1. 反射率條件:

光源：CIE illuminant D<sub>65</sub>

量測孔徑：φ 25.4mm

波長範圍：360nm~740nm

## 反射率(%)



波長(nm)

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## 試驗結果：

試驗項目	單位	CAS NO.	試驗方法	檢測極限	試驗結果
甲醛	ppm (mg/kg)	---	本測試參考 CNS 9538 方法，以高效液相層析儀/二極體陣列偵測器(HPLC/DAD)檢測。	5.00	27.9
揮發性有機物(VOC)	g/L	---	本測試參考 ASTM D3960-02(2009)，計算 VOC 含量。	0.2	13.4

試驗項目	單位	試驗方法	方法偵測極限值	試驗結果
鉛	mg/kg	參考 US EPA 3052:1996 方法，以感應耦合電漿原子發射光譜儀(ICP-AES)檢測。	2	n.d.
溶出鎘	mg/kg	參考 ASTM F963-11 Clause 8.3 方法，以感應耦合電漿原子發射光譜儀(ICP-AES)檢測。	5	n.d.
溶出砷	mg/kg		2.5	n.d.
溶出銀	mg/kg		10	n.d.
溶出鎳	mg/kg		5	n.d.
溶出鉻	mg/kg		5	n.d.
溶出鉛	mg/kg		5	n.d.
溶出汞	mg/kg		5	n.d.
溶出硒	mg/kg		5	n.d.

註：2. 每一條割痕，兩邊平滑且細，割痕之交叉點以及正方形每一方格內無任何剝落現象。

3. 熱傳導率試驗條件如下

a. 測試時厚度：0.3187cm

b. 平均溫度：31.56°C

c. Delta T：19.90°C

d. 溫度梯度：6244.51°K/m

e. 試驗機廠牌：NETZSCH

f. 試驗機型號：HFM 436/3/1

4. mg/kg = ppm；0.1wt% = 1000ppm

5. n.d. = Not Detected / 未檢出

6. MDL = Method Detection Limit / 方法偵測極限值

7. 本試驗報告取代 HV-14-06483X，報告修改日期 2018 年 09 月 12 日。

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