



Material & Engineering Laboratory-Taichung

TEST REPORT



REPORT NO. TV-15-00939XA-1
PAGE NO. 1 OF 3
DATE May 27, 2015

Applicant HUNG GENG ENTERPRISE CO., LTD
 Address 1F, NO. 143, Sec 2, Jhong-Hua Rd., Jhong-Zheng District, Taipei city 10068, Taiwan
 Product Description HG Natural Effect Coating
 Product Type The sikkens coating for timber constructions
 Manufacturer AKZO Nobel
 Supplier HUNG GENG ENTERPRISE CO., LTD.
 Product Submitted By HUNG GENG ENTERPRISE CO., LTD.
 Received Date Mar. 27, 2015
 Tested Date Mar. 27, 2015~May 27, 2015
 Remark The information mentioned in the above section is provided by Client
 (Exclude Date of Sample Received and Date of Testing)

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Test Result:

Test Item	Test Method	Result
Humidity Resistance(50°C,95%RH ,24h)	CNS 11607(1995)	No Effect
Acid Resistance(5%H ₂ SO ₄ ,24h at Room Temp.)	CNS10757(1995)	No Effect
Alkali Resistance (5%Na ₂ CO ₃ , 24h at Room Temp.)	CNS10757(1995)	No Effect
Number of Rotation of Abrasion Resistance	CNS 11367(1985)	55 Rotation

Test Item	Test Method	Result	Specified		
			Anti-Flaming Grade 1	Anti-Flaming Grade 2	Anti-Flaming Grade 3
Flammability Test	CNS 7614(1994) Method A	-----	-----	-----	-----
Flame heating time (sec)		10	-----	-----	-----
Remaining Flame(sec)		0.0	≤1	≤5	≤5
Afterglow(sec)		0.0	≤60	≤60	≤60
Length of Carbonization(cm)		4.5	≤5	≤10	≤15

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The required specification(s) offered in this test report is/are for reference only.
The conformity judgment is at the Applicant's final verdict.


 Signed for and on behalf of
SGS TAIWAN Ltd.

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TEST REPORT



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Test Result:

Test Item : Fungi Resistance Test

Test Method : ASTM G21-96 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.

Incubation time: After incubation at 28~30°C for 28 days, antifungal activity was evaluated by visually rating the degree of fungal growth on the sample(s).

The degree of fungal growth on the sample:

Rating	Observed Growth
0	No Growth
1	Traces of Growth (less than 10% coverage)
2	Light Growth (10 to 30% coverage)
3	Moderate Growth (30 to 60% coverage)
4	Heavy Growth (60% to complete coverage)

Organisms used :

<i>Aspergillus niger</i>	ATCC 9642
<i>Penicillium pinophilium</i>	ATCC 11797
<i>Chaetomium globosum</i>	ATCC 6205
<i>Aureobasidium pullulans</i>	ATCC 15233
<i>Gliocladium virens</i>	ATCC 9645

Test Result:

The degree of fungal growth on the sample	Rating
No Growth	0

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Test Result:

Test Item	Unit	Test Method	Result	MDL
Formaldehyde	mg/kg	With reference to CNS 9538(1999), Analysis was performed by spectrophotometer	n.d.	5
Migration of certain elements	---		---	---
Soluble Antimony (Sb)	mg/kg	With reference to EN 71 PART 3 : 1994 (A1:2000) (EN 71& BS 5665 are identical) Analysis was performed by ICP-AES	n.d.	5
Soluble Arsenic (As)	mg/kg		n.d.	2.5
Soluble Barium (Ba)	mg/kg		n.d.	10
Soluble Cadmium (Cd)	mg/kg		n.d.	5
Soluble Chromium (Cr)	mg/kg		n.d.	5
Soluble Lead (Pb)	mg/kg		n.d.	5
Soluble Mercury (Hg)	mg/kg		n.d.	5
Soluble Selenium (Se)	mg/kg		n.d.	5

- Note : 1. Formaldehyde and Migration of certain elements Test is subcontracted to SGS Chemical Laboratory-Taipei.
 2. Experimental conditions are described below
 2.1. mg/kg = ppm ; 0.1wt% = 1000ppm
 2.2. n.d. = Not Detected
 2.3. MDL = Method Detection Limit
 3. The Fungi Resistance Test is subcontracted to SGS FOOD Laboratory-Kaohsiung.
 4. Flammability Test specimen average thickness:2.9mm
 5. This Test Report cancels and supersedes the Test Report No. TV-15-00939X, TV-15-00939XA.,
 Revised date: Jun.18.2015.
 6. This Test Report is an additional original report of TV-15-00939X-1. Issued date : Jun.18.2015.

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TWB 5481940