

# KYNAR 500<sup>®</sup>

**KYNAR 500<sup>®</sup>** POLYVINYLIDENE FLUORIDE RESIN LICENSEE CERTIFICATE

**PPG COATINGS (TIANJIN) CO. LTD**

*Has successfully met all requirements set forth by*

*ATOFINA Chemicals, Inc.*

*and has been licensed to*

*supply coating formulations containing*

*KYNAR 500<sup>®</sup> Resin*



Chip Bisignaro  
Global Market Manager - KYNAR 500<sup>®</sup>



**ATOFINA**



Kynar is a registered trademark of ATOFINA Chemicals, Inc. and coating formulations based on Kynar 500<sup>®</sup> PVDF resin can only be supplied by Atofina Licensees.

# **HYLAR 5000®**

***Presented to***

***FULL SUN CHEMICAL INDUSTRIES (Dongguan), Co. Ltd.***

***Hereby authorized to manufacture, promote, and sell***

***HYLAR 5000® PVDF Coatings.***

***Presented 2004***



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*James Stiles, Global Marketing Manager*



**HYLAR 5000®**

*Hylar 5000® is a product of Solvay Solexis, S.p.A.*

Solvay  
Solexis



# TEST REPORT

No. : SJ060900047

Date : Sep.29,2006

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No.	Test Item	Test Method	Condition	Result
12	Muriatic acid resistance	With reference to AAMA 2605-05	Chip 10 drops of 37% HCl (m/m) on the sample and expose for 15min	Appearance: Visible change
	Mortar resistance		lay mortar on the sample. Condition it at 38°C, 100%RH for 24hrs.	Appearance: No visible change Adhesion scale: 5B
	Nitric acid resistance		Fill the bottle one half full with 70% HNO <sub>3</sub> (m/m), then cover the bottle with the sample and stay for 30min	$\Delta E^*_{ab}=1.02$
	Detergent resistance		Immerse the sample into 3% (m/m) solution of detergent and condition them at 38°C for 72hrs.	Appearance: No visible change. Adhesion scale: 5B
	Window cleaner resistance		Drip 10 drops of window cleaner to the sample and condition it for 24hrs.	Appearance: No visible change. Adhesion scale: 5B

- Note: 1.In ASTM D3359 method B, 5B is the best, and 0B is the worst.  
 2.In ASTM D3363, 6H is the hardest and 6B is the softest.  
 3.The mortar composition is as follow: 75g building lime,225g dry sand and 100g water.  
 4. $\Delta E^*_{ab}$  value were measured by sphere spectrophotometer. Use D65 standard light source with 10° observer.  
 5.The detergent composition is as follow: 53.0%Na<sub>4</sub>P<sub>2</sub>O<sub>7</sub>, 19.0% Na<sub>4</sub>SO<sub>4</sub>, 7.0%Na<sub>4</sub>SiO<sub>3</sub>, 1.0%Na<sub>2</sub>CO<sub>3</sub>, 20.0%Sodium salt of a linear alkylarylsulfonate.

\*\*\*\*\*End of report\*\*\*\*\*

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# Certificate of Approval

Awarded to

**Jiangyin Hongmao Finishing Material Co., Ltd.**

East District, Industrial Park, Huashi Town, Jiangyin City, Jiangsu Province (East Side of Huandong Road)

*Ever Win Quality Certification Center(EWC) certify that the Quality Management System of the above organization has been assessed and found to be in accordance with the requirements of the standard:*

**ISO 9001:2000**

SCOPE OF CERTIFICATION / REGISTRATION

## Manufacture and Service of Color-wash Aluminium Plastic Composite Panel

*(The applicability requirement of ISO9001:2000 involved in scope of this certificate can be clarified in further through consulting with the organization)*

*Subject to operation conditions in consistent conformity with quality standard requirement of the supplier's quality management system, this Certification is valid for three years only, date from: Sep. 4, 2006 To: Sep. 3, 2009*

*The effectiveness of this Certificate shall be validated by periodic surveillance audit of EWC for maintenance. This Certificate will not be in force unless qualified identification is stuck thereunder by EWC within appropriate time limit*

May. 2007	Stuck
To	
Jan. 2008	

Feb. 2008	Stuck
To	
Oct. 2008	

Nov. 2008	Stuck
To	
Sep. 3, 2009	

Conditions on effectiveness of certificate see <http://www.ewqcc.org>

Certificate No.: EWC084506Q

EWC:



CNAB039-Q



# CERTIFICATE OF CONFORMITY

The logo for UKTC (UK Product Safety Test Center) features the letters 'UKTC' in a bold, serif font, centered within a dark rectangular box with a thin horizontal line below the text.

Certificate NO.TC 07/00034

**Applicant:** Jiangyin Hongmao Decoration Material Co., Ltd.  
**Applicant Address:** Huashi Town Industrial Park, Jiangyin City, Jiangsu Prov. China  
**Manufacturer:** Jiangyin Hongmao Decoration Material Co., Ltd.  
**Manufacturing Site:** Huashi Town Industrial Park, Jiangyin City, Jiangsu Prov. China  
**Product Name:** aluminum composite panel  
**Model No. :** aluminum composite panel- (PVDF-coating)  
aluminum composite panel- (PE-coating)

## THE TEST REPORT

**Technical Construction File:** TR071200034

**Reference NO./Rev:**

**Codes/Standards Applied:** EN 438:2005

**Date of Issuance:** Dec, 17, 2007

### Remarks:

This Certificate Is Only Valid For The Equipment And Configuration Described, And In Conjunction With The Test Data Detailed Above.

### Conclusion Of Assessment:

We Hereby Confirm That the Technical Construction File And Manufacturing, Inspection And Testing processes For Above Mentioned Equipment Comply With The Essential Safety Requirements Of Construction Products Directive 89/106/EEC Applied Codes And Standards.

**Chief Assessor:**

A handwritten signature in black ink, appearing to read 'Alan', is written over a faint circular watermark.The CE mark, consisting of the letters 'C' and 'E' in a stylized, bold font, is positioned to the right of the signature.

UK Product Safety Test Center Limited  
Room B, 1/F, LA BLDG, 66 CORPORATION ROAD  
GRANGETOWN, CARDIFF, WALES, UK, CF11 7AW  
info@scteu.org

## TEST REPORT

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JIANGYIN HONGMAO DECORATION MATERIAL CO., LTD  
EAST AREA, INDUSTRIAL ZONE, HUASHI TOWN, JIANGYIN CITY, JIANGSU PROVINCE

The following sample(s) was/ were submitted and identified on behalf of the client as:  
Sample Name : Aluminum Composite Panel

Test Required and Test Method:

	Test Required	Test Method
1	Coefficient of Linear Thermal Expansion	ASTM D696-03
2	Thermal Deformation temperature	ASTM D648-04
3	Flexural rigidity	ASTM D790-03
4	Impact resistance	ASTM D732-02
5	Adhesive strength	ASTM D903-98(2004)
6	Tensile strength	ASTM D638-03
7	Gloss	ASTM D523-89
8	Coating Thickness	ISO 2360
9	Adhesion	ASTM D3359-02
10	Pencil hardness	ASTM D3363-00
11	Rapid Deformation (Impact)	ASTM D2794-93(1999)
12	Resistance of Chemical Reagents	AAMA 2605-05

Date of Receipt : Sep.12,2006

Test Period : Sep .13,2006 to Sep.29,2006

Test result(s) : Please refer to next page

\*\*\*\*\* To be continued\*\*\*\*\*

Signed for SGS-CSTC Standards  
Technical Services Co., Ltd



Stanley Zhou  
Lab Testing Supervisor

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SHML 010719

## TEST REPORT

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Test Result(s):

Sample description: Aluminum-plastic Composite Panel

No.	Test Item	Test Method	Condition	Result
1	Coefficient of Linear Thermal Expansion	With reference to ASTM D696-03	---	$7.5 \times 10^{-4} \text{ } ^\circ\text{C}^{-1}$
2	Heat deflection temperature	With reference to ASTM D648-04 Method B	Width:13.75mm Depth:4.0mm Heating rate:120 °C/h Load:1.82MPa	98.5°C
3	Flexural strength	With reference to ASTM D790-03	Procedure A 127×13.70×4.0mm speed: 1.3mm/min span: 64mm	104.6MPa
4	Impact resistance	With reference to ASTM D732-02	---	9.0kN
5	Peel strength	With reference to ASTM D903-98(2004)	Speed: 152.4mm/min	0.8kg/mm
6	Tensile strength	With reference to ASTM D638-03	Specimen: Type I Speed: 5mm/min	39.6 MPa
7	Gloss	With reference to ASTM D523-89	60° geometry	27
8	Coating thickness	With reference to ISO 2360: 2003	---	24.5µm
9	Adhesion	With reference to ASTM D3359-02 Method B	Space: 1mm Tape: Permacel 99	5B
10	Pencil Hardness	With reference to ASTM D3363-05	Pencil: Mitsubishi®	Scratch hardness: H
11	Rapid Deformation (Impact)	With reference to ASTM D2794-93	---	No

\*\*\*\*\* To be continued\*\*\*\*\*

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