

# CERTIFICATE

Hohenstein  
Textile Testing Institute  
GmbH & Co. KG

**HOHENSTEIN** ●

Schloss Hohenstein · 74357 Boennigheim · Germany

Institute of the International Association for Research and Testing in the Field of Textile Ecology

The company

**Taihua Hi-Tech Dyeing & Finishing (Jiaxing) Co., Ltd.**  
**Wangdian Development Zone, Xiuzhou District**  
**Jiaxing, Zhejiang Province, CHINA**

is granted authorization according to Oeko-Tex® Standard 100 to use the Oeko-Tex® mark, based on our **test report 10.0.79774**



**Tested for harmful substances**

according to Oeko-Tex® Standard 100

**07.RA.52367**

**Hohenstein**

for the following articles:

**White and dyed woven fabrics made of 100 % polyamide, partly with transparent polyurethane coating (layer) and 100 % polyester, as well as woven fabrics made of polyamide/polyester in white.**

The results of the inspection made according to Oeko-Tex® Standard 100, **product class I** have shown that the above mentioned goods meet the human-ecological requirements of the standard presently established for baby articles.

The certified articles fulfil the requirements of Annex XVII of REACH (incl. the use of azo-dyes, nickel, etc.) as well as the American requirement regarding total content of lead in children's articles (CPSIA; with the exception of accessories made from glass).

The holder of the certificate, who has issued a conformity declaration according to ISO 17050-1, is under an obligation to use the Oeko-Tex® mark only in conjunction with products that conform with the sample initially tested.

**This authorisation is valid until 30.06.2011**



Boennigheim, 16.09.2010

Prof. Dr. Stefan Mecheels  
Managing Director

Dipl.-Ing. (FH) Elisabeth Weisheit  
Head of Test Centre  
Oeko-Tex® Standard 100

# TEST REPORT

Reference No. : TRHZ1203334\_R1

Date : Mar. 23, 2012

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Client : HAINING JINMAO WARP KNITTING CO.,LTD.  
Address : NO.15 10<sup>TH</sup> JINGBIAN ROAD WARP KNITTING INDUSTRY PARK HAINING CITY  
ZHEJIANG

The following merchandise was (were) submitted and identified by the client as:

Name of Product : FLAG FABRIC  
Test Model : /  
Model May Cover : /  
Color : White  
Sample Received : Mar. 13, 2012  
Test Period : Mar. 13, 2012 – Mar. 19, 2012  
Test Request : As the client required, to do the flammability requirements of the sample according to DIN 4102 B1 ( 1998 )  
Test Method : DIN 4102-1 (May 1998) Fire behavior of building materials and elements Part 1: Classification of building materials, Requirements and testing  
Test Results : Please refer to next page(s).  
Conclusion : When tested as specified, the test results of the submitted samples **not exceed** the requirement of DIN 4102.

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THIS REPORT IS TO SUPERSEDE TEST REPORT TRHZ1203334.

Issued by:



TÜV NORD (Hang Zhou)  
Green Product Service Centre Manager



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## TEST RESULTS:

### I. Test conducted

This test was conducted as per DIN 4102-15:1990, DIN 4102-16:1998 and DIN 4102-1:1998 Clause 6.2. Classification in according to DIN 4102-1 (May 1998) Clause 6.1-Class B1 materials

### II. Sample details

General description	Polyester
Color / Density	White
Size of sample	----

### Conditioning

Prior to testing, the sample was conditioned at least 14 days to constant mass at a temperature of  $22 \pm 2$  °C, and a relative humidity of  $50 \pm 5$  %.

### III. Test results

#### 1) "Brandschacht" Test according to DIN 4102-15 & 16

Orientation: Product direction, Exposed surface: Face of the sample

Results of "Brandschacht" Test (part 1)

Line No.	-----	Unit	Test assemblies No.			
			A	B	C	D
1	Specimen fixings according to DIN 4102 part 15, table	/	1			
2	Max. flame height above lower sample edge**;	cm	51			
3	Time <sup>1)</sup>	min:s	2:27			
	Melting/burning through		/			
4	Time <sup>1)</sup>	min:s	0:20			
	Back of specimen					
5	Flaming/glowing, Time <sup>1)</sup>	min:s	/			
6	Discolouring, Time <sup>1)</sup>	min:s	0:04			
	Burning droplets		No			
7	Begin 1)	min:s	/			
	Amount		/			

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8	Specimen material falling off in separate droplets		/			
9	Specimen material falling off continuously		/			

## Results of "Brandschacht" Test (part 2)

Line No.	Unit	Test assemblies No.			
		A	B	C	D
	Burning parts				
10	Begin 1)	min:s	1:10		
11	Parts of sample falling off separately		√		
12	Parts of sample falling off continuously		/		
13	Duration of continued combustion on mesh base (max.)	min:s	2:20		
	Burner flame impairment by dripping/falling material		No		
14	Time <sup>1)</sup>	min:s	/		
	Premature ending of test		No		
15	End of burning at specimen <sup>1)</sup>	min:s	/		
16	Time when test terminated (if applicable) <sup>1)</sup>	min:s	/		
	Burning after end of test		No		
17	Duration	min:s	/		
18	Number of specimens		/		
19	Front of specimen		/		
20	Back of specimen		/		
21	Height of flame	cm	/		
	Glowing after end of test		No		
22	Duration	min:s	/		
23	Number of specimens		/		
24	Front of specimen		/		
25	Back of specimen		/		
26	Top half of specimen		/		
27	Bottom half of specimen		/		

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

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Results of "Brandschacht" Test (part 3)						
Line No.	Unit	Test assemblies No.				
		A	B	C	D	
	Residual length	/				
28	Single results	cm	50	51		
			51	51		
29	Average of the single results	cm	51			
	Smoke temperature	/				
30	Max. of average	°C	101			
31	Time <sup>1)</sup>	min:s	3.12			

Note: <sup>1)</sup> time from start of testing

## 2) Normal Flammability Test according to DIN 4102-1 Clause 6.2

Flame application: bottom edge ignition

Specimen No.	1	2	3	4	5
Reaching the measuring mark within 20 seconds	No	No	No	No	No
Self extinguishing of the flame (s)	16	17	17	16	16
Max. flame height (cm)	7	6	7	7	6
End of afterflaming (s)	15	15	15	15	14
End of afterglowing (s)	/	/	/	/	/
Molten dripping	No	No	No	No	No
Smoke developments (visual impression)	Slight				

All timings are from start of testing

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

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## Comments:

DIN 4102-B1

## Criteria for classification for Class B1 (DIN 4102-1 Clause 6.1.2)

All materials, except flooring, may be classed as B1 materials if they met,

a) Pass DIN 4102-16 "brandschacht" test if

- 1) The mean value for the residual length of each specimen is at least 15 cm, and no individual values are lower than 0 cm;
- 2) The mean effluent temperature does not exceed 200°C in any test;
- 3) The requirement for the residual length of each specimen is met even where there is afterflame, afterglow, or smouldering.

b) Pass DIN 4102-1 Clause 6.2.3 Ignitability Test if,

For each specimen, flaming doesn't reach the gage mark within 20s after flame application.

## Statements:

This test report does not replace any mandatory certification of the product that may be required.

The test results relate to the behavior of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire and smoke hazard of the product in use.

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



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## SAMPLE PHOTO



\*\*\*\*\* END OF REPORT \*\*\*\*\*

TUV



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