

Hohenstein Textile Testing Institute  
GmbH & Co. KG

Schloss Hohenstein  
74357 Bönningheim · Germany

18. July 2012

DAI/Ho/sm

## Test Report No. 12.0.05323/Rev.1

*This Test Report replaces the original Test Report No. 12.0.05323 dated 05.06.2012*

(=12.HVN.05323 ZN)

**Applicant** : Phong Phu International Joint-Stock Company  
No. 48, Tang Nhon Phu B Ward, Dist. 9  
Ho Chi Minh City  
VIETNAM

**Date of order** : 27/03/2012

**Reference no. or contact person** : Ms Thi Len Nguyen  
Tel: +84-8-37281853  
Email: ntlien@ppj-international.com

**Receipt of order** : 27/03/2012

**Receipt of material** : 27/03/2012  
30/05/2012 Retest sample 3NU1

**Receipt of further information** : 10/05/2012 Payment in advance

**Details of order** : Certification of textile products with the label "Confidence in textiles  
– Tested for harmful substances according to Oeko-Tex®  
Standard 100"

*This test report comprises 7 pages*

The test results relate only to the test samples submitted. This test report must only be reproduced in full and not in extract form. Use of the test report in advertising or the publication of free interpretations of the test results is only allowed with the express permission of Forschungsinstitut Hohenstein. Remaining test material will usually be destroyed after 3 months. Our terms of business shall apply, [www.hohenstein.de/pdf/agb\\_e.pdf](http://www.hohenstein.de/pdf/agb_e.pdf)

18. July 2012

The application for certification was submitted using the relevant forms issued for this purpose.

The applicant enclosed the declaration of conformity.

The originals of all necessary documents have been signed with a legally binding signature.

The orderer confirmed that no biological active product is used.

Further the orderer confirmed that no flame retardant product is used.

Copies of Oeko-Tex® certificates (HKYO 045551, 11-24395, 11.HVN.86144, 11.HSL.93807, HKLO 057739, 09.HVN.73245, SEMO 076867) for the products in use were enclosed with the application.

The following certificates are no longer valid: 11.HVN.86144

The orderer needs to contact his supplier in order to obtain a copy of the new and valid certificate.

The application was made for the following article group:

Jeans shorts made of 100 % cotton, white, pink, indigo dyed and washed, including accessories (sewing thread, zipper, buttons, rivets, pocket linings, woven, printed and paper labels), produced by using materials certified according to Oeko-Tex® Standard 100.

The four product categories specified in Oeko-Tex® Standard 100 are described as follows:

Product-class	Definition
I	<b>Products for babies</b> Products for babies in context with this standard are all articles, basic materials and accessories, which are provided for the production of articles for babies and children up to 36 months with the exception of leather clothing.
II	<b>Products with direct contact to skin</b> Skin contact articles are those which are worn with a large part of their surface in direct contact with the skin (e.g. blouses, shirts, underwear etc.).
III	<b>Products without direct contact to skin</b> No skin contact articles are those which are worn with only a little part of their surface in direct contact with the skin (e.g. Stuffings, linings etc.).
IV	<b>Decoration material</b> Decoration material in context with this standard are all articles including initial products and accessories which are used for decoration such as table clothes, wall coverings, furnishing fabrics and curtains, upholstery fabrics and floor coverings.

According to the information provided by the orderer and to the specified area of use, product class II is applicable.

18. July 2012

The test material named below was submitted for testing.

Serial No.	Description of article or material	Additional information					Material composition
		Quality	Article No.	Colour No.	Design	Colour	
1	woven fabric	denim	YF2610292			white	CO
2	woven fabric	linings	3303			white	PES/CO (65/35)
3	woven fabric	denim	A401M			indigo blue	CO
4	woven fabric	denim	HF511253			indigo blue	CO
5	Label				"Pink"	base: light brown, print: dark brown	

Serial No.	Description of article or material	Additional information					Material composition
		Quality	Article No.	Colour No.	Design	Colour	
3 NU1	woven fabric	denim	A401M			indigo blue	CO

If only parts of certain articles were included in the tests, only these parts are named in the list of materials.

After being informed about the results by advanced notice the orderer sent improved samples from the same finishing quality (NU) resp. improved samples from a comparable finishing quality (E).

## Test Result/s

Tests were carried out in accordance with Oeko-Tex® Standard 100.

The test results are given in the charts below.

Note: n.d. = not detectable (below quantification limit)

sample	pH			
1 woven fabric white	6,9			
3 woven fabric indigo blue	10,2			
6 ready made garment indigo blue	4,2			
limit values acc. to Oeko-Tex® Standard 100	product class I 4,0 – 7,5	product class II 4,0 – 7,5	product class III 4,0 – 9,0	product class IV 4,0 – 9,0

18. July 2012

sample	pH			
3NU1 woven fabric indigo blue	4,8			
<b>limit values acc. to Oeko-Tex® Standard 100</b>	product class I 4,0 – 7,5	product class II 4,0 – 7,5	product class III 4,0 – 9,0	product class IV 4,0 – 9,0

sample	formaldehyde in mg/kg (ppm)			
2 woven fabric white	n.d.			
4 woven fabric indigo blue	n.d.			
5 label base: light brown, print: dark brown	n.d.			
6 ready made garment indigo blue	n.d. (11)			
<b>limit values acc. to Oeko-Tex® Standard 100</b>	product class I n.d.	product class II 75	product class III 300	product class IV 300

Note:

According to Japanese Law 112 "n.d." corresponds with an absorption unit < 0,05 respectively < 16 ppm.

sample	extractable heavy metals in mg/kg (ppm)								
	Sb antimony	As arsenic	Pb lead	Cd cadmium	Cr chromium	Co cobalt	Cu copper	Ni nickel	Hg mercury
2 woven fabric white	< 4	< 0,05	< 0,05	< 0,05	< 0,1	< 0,1	7,24	< 0,1	< 0,01
3 woven fabric indigo blue	< 4	< 0,05	< 0,05	< 0,05	0,11	< 0,1	< 4	< 0,1	< 0,01
<b>limit values acc. to Oeko-Tex® Standard 100</b>									
<b>product class I</b>	30	0,2	0,2	0,1	1,0	1,0	25,0 <sup>1</sup>	1,0	0,02
<b>product class II</b>	30	1,0	1,0 <sup>1</sup>	0,1	2,0	4,0	50,0 <sup>1</sup>	4,0	0,02
<b>product class III</b>	30	1,0	1,0 <sup>1</sup>	0,1	2,0	4,0	50,0 <sup>1</sup>	4,0	0,02
<b>product class IV</b>	--	1,0	1,0 <sup>1</sup>	0,1	2,0	4,0	50,0 <sup>1</sup>	4,0	0,02

Notes:

<sup>1</sup> No requirement for accessories made from inorganic materials

A Test after mechanical ageing (EN 12472)

sample	pesticides sum in mg/kg (ppm)
1 woven fabric white	n.d.
2 woven fabric white	n.d.

18. July 2012

sample	pesticides sum in mg/kg (ppm)			
4 woven fabric indigo blue	n.d.			
limit values acc. to Oeko-Tex® Standard 100	product class I sum 0,5	product class II sum 1,0	product class III sum 1,0	product class IV sum 1,0

sample	phenols in mg/kg (ppm)		
	pentachlorophenol (PCP)	tetrachlorophenols (TeCP) 2,3,5,6- / 2,3,4,6- / 2,3,4,5-	o-phenylphenol (OPP)
3 woven fabric indigo blue	n.d.	n.d.	n.d.
limit values acc. to Oeko-Tex® Standard 100			
product class I	0,05	sum 0,05	50
product class II - IV	0,50	sum 0,50	100

sample	forbidden AZO-colorants cleavable arylamines of MAK-list III (category 1 or 2) in mg/kg (ppm)
composite sample	n.d.
3 woven fabric indigo blue	
4 woven fabric indigo blue	
5 Label base: light brown, print: dark brown	n.d.
limit value acc. to Oeko-Tex® Standard 100	product class I – IV n.d.

sample	colour fastness						to dry rubbing <sup>1</sup>
	to water		to perspiration				
			alkaline		acid		
3 woven fabric indigo blue	CO 3-4	WO 3-4	CO 3-4	WO 3-4	CO 4	WO 4	
4 woven fabric indigo blue	CO 4-5	WO 4	CO 4	WO 4	CO 4-5	WO 4	
5 Label base: light brown, print: dark brown	CO 4	WO 4					
limit values acc. to Oeko-Tex® Standard 100							
product class I - IV	3		3-4		3-4		4 (3 <sup>2</sup> )

Notes:

<sup>1</sup> No requirements for "wash-out" articles.

<sup>2</sup> For pigment, vat or sulphurous colorants a minimum grade of colour fastness to rubbing of 3 is acceptable.

18. July 2012

Evaluation of colour fastness (in accordance with the fastness scale prescribed under ISO 105):

5 = best result, 1 = worst result

CO = cotton, WO = wool, CV = viscose, SE = silk, PES = polyester, PA = polyamide,  
PAN = polyacrylonitrile (acrylic), CA = acetate

sample	organo tin compounds in mg/kg (ppm)			
	TBT	TPhT	DBT	DOT
composite sample 2 woven fabric white 4 woven fabric indigo blue	n.d.	n.d.	n.d.	n.d.
limit values acc. to Oeko-Tex® Standard 100 product class I product class II - IV	0,5 1,0	0,5 1,0	1,0 2,0	1,0 2,0

sample	odour test
1 - 5	n.d.
limit value acc. to Oeko-Tex® Standard 100	product class I – IV no abnormal odour

## Conclusion

The material for which the certification was applied fulfils the specific requirements for product class II of Oeko-Tex® Standard 100.

It is representative of the article group for which an application for certification was made.

The certification of the following article group is approved:

Jeans shorts made of 100 % cotton, white, pink, indigo dyed and washed, including accessories (sewing thread, zipper, buttons, rivets, pocket linings, woven, printed and paper labels), produced by using materials certified according to Oeko-Tex® Standard 100.

Each holder of certificate has signed for the quality of his articles on his own responsibility. This is in accordance with the given declaration of conformity. He is committed to ensure this by suitable and sufficient spot checks.

18. July 2012

This commitment includes the quality of bought materials, too. In the case of delegating parts of this quality assurance to others the certifying body must be fully acquainted (see point 4 "Conformity declaration").

Oeko-Tex® is authorized to carry out spot checks in order to inspect the certified goods. The certificate holder will receive a separate test report with the results of these inspections.

If the spot checks reveal a deviation from the limit values, additional tests will have to be carried out. The relevant costs will be charged to the certificate holder.

The actual version of Oeko-Tex® Standard 100 is edition 04/2012. It can be downloaded directly from the Oeko-Tex® Homepage (<http://www.oeko-tex.com>).

Managing Director



Prof. Dr. Stefan Mecheels



Head of Test Centre  
Oeko-Tex® Standard 100



Dipl.-Ing. (FH) Elisabeth Weisheit

(This document carries an electronic signature. The electronic signatures in this report are equal to a personal signature and therefore legally binding)