

Foshan Ruixin Nonwoven Co., Ltd.  
Rayson Industrial Zone, Huasha Road  
Shishan Town, Foshan High-Tech Zone  
528237 Foshan City, Guangdong Province  
CHINA, P.R.

## Hohenstein Textile Testing Institute GmbH & Co. KG

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### Certification Body Oeko-Tex®

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Business process	Contact person	Our ref.	Date
	Ortwin Rave	SC/ORa/kbo/AnH	3. December 2019

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## Report No. 19.0.92467

(= 15.HCN.70065 ZV4)

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**Applicant:** Foshan Ruixin Nonwoven Co., Ltd.  
Rayson Industrial Zone, Huasha Road  
Shishan Town, Foshan High-Tech Zone  
528237 Foshan City, Guangdong Province  
CHINA, P.R.

**Date of order:** 9/29/2019

**Contact person:** Ms Meiyou Amy Wu  
Tel: +86 7578 5806388  
Email: rayson@raysonchina.com

**Receipt of order:** 11/11/2019

**Receipt of material:** 11/11/2019

**Receipt of further information:** 11/7/2019      Payment in advance

**Details of order:** Renewal of the certificate for textile products with the label  
“OEKO-TEX® Confidence In Textiles – STANDARD 100 – Tested for harmful  
substances Annex 6”

**Master no.  
(First certification):** 15.HCN.70065

*The report comprises 9 pages.*

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Our terms of business shall apply:  
[www.hohenstein.de/pdf/agb\\_e.pdf](http://www.hohenstein.de/pdf/agb_e.pdf)

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VAT REG No. DE262079343
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Hohenstein Textile Testing Institute GmbH & Co. KG · County Court Stuttgart HRA 723464 Personally liable associate: Hohenstein Verwaltungs GmbH · County Court Stuttgart HRB 752904 CEO: Dr. Stefan Droste, Lutz Lehmann · Company Headquarter is Boennigheim
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For technical reasons, the Institute will allocate a new test number to each order for the renewal of a certificate. The renewed certificate will always be issued under the master number indicated in the first certification. The master number in brackets will be suffixed to the current test number of this expertise and will serve to identify the relevant product. The additional designation "ZV" with a number indicates the number of times the certificate has been renewed.

The application for renewal of the certificate was submitted using the relevant forms issued for this purpose.

The applicant enclosed the declaration of conformity and agreed to the terms of use.

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.

Information is provided regarding following changes:

Including: masterbatch dyed in black and grey.

A list of dyestuffs and finishing auxiliaries is appended to the documents.

The application was made for the following article group:

Nonwoven spunbond fabrics made of 100 % polypropylene in white, masterbatch dyed in black and grey.

The four product categories specified in STANDARD 100 by OEKO-TEX® 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.
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 I is applicable.

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	spunbond nonwoven fabric					white	PP

Serial No.	Description of article or material	Additional information					Material composition
		Quality	Article No.	Colour No.	Design	Colour	
2	spunbond nonwoven fabric	masterbatch dyed				black	PP
3	spunbond nonwoven fabric	masterbatch dyed				grey	PP

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

## TEST RESULT/S

Tests were carried out in accordance with STANDARD 100 by OEKO-TEX® Annex 6.

The test results are given in the charts below.

Note: n.d. = not detectable (below quantification limit); u.o. = under observation

sample	pH			
1 spunbond nonwoven fabric white	6,3			
<b>limit values acc. to STANDARD 100 by OEKO-TEX®</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)			
3 spunbond nonwoven fabric grey	n.d.			
<b>limit values acc. to STANDARD 100 by OEKO-TEX®</b>	product class I n.d.	product class II < 75	product class III < 150	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
2 spunbond nonwoven fabric black	< 4	< 0,1	< 0,1	< 0,05	< 0,1	< 0,1	< 4
<b>limit values acc. to STANDARD 100 by OEKO-TEX® Annex 6</b>							
<b>product class I</b>	< 30	< 0,2	< 0,2	< 0,1	< 1,0	< 1,0	< 25,0 <sup>2</sup>
<b>product class II - IV</b>	< 30	< 0,2	< 0,2 <sup>1</sup>	< 0,1	< 1,0	< 1,0	< 50,0 <sup>2</sup>

sample	extractable (heavy) metals in mg/kg (ppm)					
	Ni nickel	Hg mercury	Ba barium	Se selenium	Zn zinc	Mn manganese
2 spunbond nonwoven fabric black	< 0,1	< 0,01	< 4	< 4	< 4	< 4
<b>limit values acc. to STANDARD 100 by OEKO-TEX® Annex 6</b>						
<b>product class I</b>	< 1,0 <sup>3</sup>	< 0,02	< 1000	< 100	< 750	< 90
<b>product class II - IV</b>	< 1,0 <sup>4</sup>	< 0,02	< 1000	< 100	< 750	< 90

Notes:

A Test after mechanical ageing (EN 12472)

<sup>1</sup> No requirement for accessories made from glass

<sup>2</sup> No requirement for accessories and yarns made from inorganic materials, respecting the requirements regarding biological active products.

<sup>3</sup> For metallic accessories and metallized surfaces: < 0,5 mg/kg

<sup>4</sup> For metallic accessories and metallized surfaces: < 1,0 mg/kg

sample	phenol and chlorinated phenols in mg/kg (ppm)	
	product class I	product class II-IV
1 spunbond nonwoven fabric white	n.d.	
3 spunbond nonwoven fabric grey	n.d.	
<b>limit values acc. to STANDARD 100 by OEKO-TEX® Annex 6</b>		
	Pentachlorophenol (PCP)	< 0,05
	Tetrachlorophenols (TeCP)	< 0,05 <sup>1</sup>
	Trichlorophenols (TrCP)	< 0,20 <sup>1</sup>
	Dichlorophenols (DCP)	< 0,50 <sup>1</sup>
	Monochlorophenols (MCP)	< 0,50 <sup>1</sup>
	o-Phenylphenol (OPP)	< 10
	Phenol	< 20
		< 0,25
		< 0,25 <sup>1</sup>
		< 1,00 <sup>1</sup>
		< 1,00 <sup>1</sup>
		< 1,00 <sup>1</sup>
		< 10
		< 50

Notes:

<sup>1</sup> sum of isomers

sample	free and cleavable cancerogenic arylamines, free and cleavable aniline in mg/kg (ppm)
composite sample 2 spunbond nonwoven fabric black 3 spunbond nonwoven fabric grey	n.d.
<b>limit value acc. to STANDARD 100 by OEKO-TEX® Annex 6 product class I - IV</b>	<b>each &lt; 20 aniline &lt; 20</b>

sample	colour fastness						to dry rubbing <sup>1</sup>
	to water		to perspiration				
			alkaline		acid		
2 spunbond nonwoven fabric black	PES 4	CO 4					4-5
3 spunbond nonwoven fabric grey			PES 4-5	CO 4-5	PES 4-5	CO 4-5	
<b>limit values acc. to STANDARD 100 by OEKO-TEX® product class I product class II - IV</b>	<b>3-4 3</b>		<b>3-4 3-4</b>		<b>3-4 3-4</b>		<b>4 (3<sup>2</sup>) 4 (3<sup>2</sup>)</b>

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.

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	colour fastness to saliva and perspiration
2 spunbond nonwoven fabric black	fast
3 spunbond nonwoven fabric grey	fast
<b>limit value acc. to STANDARD 100 by OEKO-TEX®</b>	<b>product class I fast</b>

sample		organo tin compounds in mg/kg (ppm)
1	spunbond nonwoven fabric white	n.d.
2	spunbond nonwoven fabric black	n.d.
limit values acc. to STANDARD 100 by OEKO-TEX® Annex 6 product class I - IV		< 0,5 <sup>1</sup>

Notes:

<sup>1</sup>Compilation of the individual substances are listed in STANDARD 100 by OEKO-TEX® Annex 6

sample		polycyclic aromatic hydrocarbons (PAH) in mg/kg (ppm)	
composite sample		sum 0,95	
2	spunbond nonwoven fabric black	Pyrene 0,33	
3	spunbond nonwoven fabric grey	Benzo(ghi)perylene 0,25 Cyclopenta(c,d)pyrene 0,37	
limit values acc. to STANDARD 100 by OEKO-TEX® Annex 6		product class I	product class II-IV
		Benzo[a]pyrene	< 0,5
		Benzo[e]pyrene	< 0,5
		Benzo[a]anthracene	< 0,5
		Chrysene	< 0,5
		Benzo[b]fluoranthene	< 0,5
		Benzo[j]fluoranthene	< 0,5
		Benzo[k]fluoranthene	< 0,5
		Dibenzo[a,h]anthracene	< 0,5
		Naphthalene	< 2,0
	and sum of all 24 PAH:	< 5,0	< 10,0

sample		surfactant, wetting agent residues in mg/kg (ppm)	
		NP / OP / HpP / PeP	NP / OP / HpP / PeP / NP (EO) / OP (EO)
3	spunbond nonwoven fabric grey	n.d.	n.d.
limit values acc. to STANDARD 100 by OEKO-TEX® Annex 6 product class I - IV		sum < 5,0	sum < 50,0

sample	Solvent residues			
	in %			
	NMP (1-Methyl-2-pyrrolidone)	DMAc (N,N-Dimethyl-acetamide)	DMF (Dimethyl-formamide)	Formamide
2 spunbond nonwoven fabric black	n.d.	n.d.	n.d.	n.d.
3 spunbond nonwoven fabric grey	n.d.	n.d.	n.d.	n.d.
<b>limit values acc. to STANDARD 100 by OEKO-TEX® product class I - IV</b>	<b>&lt; 0,05 / &lt; 0,10<sup>1</sup></b>	<b>&lt; 0,05 / &lt; 0,10<sup>1</sup></b>	<b>&lt; 0,05 / &lt; 0,10<sup>1</sup></b>	<b>&lt; 0,02</b>

Notes:

<sup>1</sup> For materials made of acrylic (PAN), elastane (EL)/polyurethane and aramides as well as coated (PU-, PVC-, PVC-plastisol-, PVDC-, PVC-copolymer) textiles.

sample	chlorinated solvents in mg/kg (ppm)
2 spunbond nonwoven fabric black	n.d.
3 spunbond nonwoven fabric grey	n.d.
<b>limit values acc. to STANDARD 100 by OEKO-TEX® Annex 6 product class I - IV</b>	<b>&lt; 1,0<sup>1</sup> sum &lt; 5,0</b>

Notes:

<sup>1</sup> Compilation of the individual substances are listed in STANDARD 100 by OEKO-TEX® Annex 6

sample	other VOCs and glycols in mg/kg (ppm)
2 spunbond nonwoven fabric black	n.d.
3 spunbond nonwoven fabric grey	n.d.
<b>limit values acc. to STANDARD 100 by OEKO-TEX® Annex 6 product class I - IV</b>	<b>&lt; 1,0<sup>1</sup> / &lt; 10,0<sup>1</sup></b>

Notes:

<sup>1</sup> Compilation of the individual substances are listed in STANDARD 100 by OEKO-TEX® Annex 6

sample	cresols in mg/kg (ppm)
2 spunbond nonwoven fabric black	n.d.
3 spunbond nonwoven fabric grey	n.d.
<b>limit values acc. to STANDARD 100 by OEKO-TEX® Annex 6 product class I - IV</b>	<b>&lt; 10,0<sup>1</sup></b>

Notes:

<sup>1</sup> Compilation of the individual substances are listed in STANDARD 100 by OEKO-TEX® Annex 6

sample	odour test
1 - 3	n.d.
<b>limit value acc. to STANDARD 100 by OEKO-TEX®</b>	<b>product class I-IV no abnormal odour</b>

sample	UV stabilizers in %			
	UV 320	UV 327	UV 328	UV 350
2 spunbond nonwoven fabric black	n.d.	n.d.	n.d.	n.d.
<b>limit values acc to STANDARD 100 by OEKO-TEX® product class I - IV</b>	<b>&lt; 0,1</b>	<b>&lt; 0,1</b>	<b>&lt; 0,1</b>	<b>&lt; 0,1</b>

## CONCLUSION

The material for which the certification was applied fulfils the specific requirements for product class I of STANDARD 100 by OEKO-TEX® Annex 6.

The certification of the following article group is approved:

Nonwoven spunbond fabrics made of 100 % polypropylene in white, masterbatch dyed in black and grey.

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. 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 current version of STANDARD 100 by OEKO-TEX® is edition 02/2019. It can be downloaded directly from the Oeko-Tex® Homepage (<http://www.oeko-tex.com>).

Division Manager Oeko-Tex®



Dipl.-Ing. (FH) Ivonne Schramm



Deputy Division Manager Oeko-Tex®



B.Eng. Kathrin Romer

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