

**Registered**

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Zurich/ 18.12.2023 / mesc

**Test Report TP001 228417.1**

**Application**

16. Renewal of certificate TPAO 054092 - based partly on materials already certified according to OEKO-TEX® STANDARD 100, Product Class I, Annex 4

**Test Material**

2 Delrin (POM) elements, dyed; 2 PES tapes with coil and 6 PES tapes, raw or dope-dyed in black or piece-dyed, with or without flame retardant; 4 zinc alloy sliders, raw or painted; 1 aluminum wire for top & bottom stopper in raw; 1 PA reinforcement film tape, for testing.

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**TESTEX AG**

Swiss Textile Testing Institute



**Faisal Rizal**

Ecology Team Leader



**Melanie Schmid**

Customer Service Officer

**Annex:**

Certificate TPAO 054092 valid to 15.11.2024

## 1 Summary

The results of this test report can be used as basis for an OEKO-TEX® certification.

## 2 Overview

p: tested and passed; x: tested and failed; ' ': not tested

	Sample									
	1	2	3	4	5	6	7	8	9	10
pH-Value OEKO-TEX® Method 1 (ISO 3071:2020 - KCl)	p		p		p		p		p	p
Formaldehyde OEKO-TEX® Method 2.2 - JIS L-1041		p		p	p	p		p		
Heavy Metals OEKO-TEX® Method 3.1 (Extract)	p		p			p	p	p		
Heavy Metals OEKO-TEX® Method 3.1 (Extract; inorganic accessories)										
Heavy Metals OEKO-TEX® Method 3.1 (incl. EN 12472)										
Heavy Metals OEKO-TEX® Method 3.2 (Digestion)		p		p						
Chlorinated Phenols and OPP OEKO-TEX® Method 5	p		p		p					
Organic Tin Compounds OEKO-TEX® Method 7	p		p			p	p			
Azo Dyes OEKO-TEX® Method 11.1 (direct)	p	p								
Azo Dyes OEKO-TEX® Method 11.1 (Extract)			p		p		p	p		
Allergenic and Carcinogenic Dyes & Quinoline OEKO-TEX® Method 11.3 & 18				p	p	p		p		
Chlorinated Benzenes & Toluenes OEKO-TEX® Method 12		p	p				p			
Polycyclic Aromatic Hydrocarbons (PAH) OEKO-TEX® Method 13	p								p	p
Phthalates & Siloxanes OEKO-TEX® Method 6 & 6.1		p								
Solvent Residues OEKO-TEX® Method 14		p		p						
Surfactants, Wetting Agent Residues OEKO-TEX® Method 20	p		p		p			p	p	p

Phenol OEKO-TEX® Method 24		p								
Bisphenols OEKO-TEX® Method 25	p			p		p				
Colour Fastness To Saliva And Perspiration OEKO-TEX® Method 26-A	p	p	p	p	p	p	p	p	p	
Colour Fastness To Perspiration OEKO-TEX® Method 26-B (EN ISO 105-E04)	p	p		p	p				p	
Colour Fastness To Water OEKO-TEX® Method 26-C (EN ISO 105-E01)	p	p		p	p				p	

- 1: Delrin POM teeth dyed A red
- 2: Delrin POM teeth dyed B forest
- 3: PES tape + coil dyed A grey
- 4: PES tape + coil dyed B brown
- 5: PES tape dyed C black
- 6: PES tape dyed D coffee
- 7: PES tape dyed E purple
- 8: PES tape dyed F violet
- 9: PES flame retar. tape dope-dyed black
- 10: PES flame retar. tape raw white

	Sample								
	11	12	13	14	15	16	17	18	19
pH-Value OEKO-TEX® Method 1 (ISO 3071:2020 - KCl)									p
Formaldehyde OEKO-TEX® Method 2.2 - JIS L-1041									p
Heavy Metals OEKO-TEX® Method 3.1 (Extract)									p
Heavy Metals OEKO-TEX® Method 3.1 (Extract; inorganic accessories)	p			p		p		p	
Heavy Metals OEKO-TEX® Method 3.1 (incl. EN 12472)				p		p			
Heavy Metals OEKO-TEX® Method 3.2 (Digestion)		p	p		p		p	p	p
Chlorinated Phenols and OPP OEKO-TEX® Method 5	p								
Organic Tin Compounds OEKO-TEX® Method 7	p			p		p			p

Azo Dyes OEKO-TEX® Method 11.1 (direct)				p		p			
Azo Dyes OEKO-TEX® Method 11.1 (Extract)									
Allergenic and Carcinogenic Dyes & Quinoline OEKO-TEX® Method 11.3 & 18									
Chlorinated Benzenes & Toluenes OEKO-TEX® Method 12	p								
Polycyclic Aromatic Hydrocarbons (PAH) OEKO-TEX® Method 13									p
Phthalates & Siloxanes OEKO-TEX® Method 6 & 6.1						p			
Solvent Residues OEKO-TEX® Method 14	p								p
Surfactants, Wetting Agent Residues OEKO-TEX® Method 20				p		p			
Phenol OEKO-TEX® Method 24	p								
Bisphenols OEKO-TEX® Method 25									p
Colour Fastness To Saliva And Perspiration OEKO-TEX® Method 26-A									
Colour Fastness To Perspiration OEKO-TEX® Method 26-B (EN ISO 105-E04)									
Colour Fastness To Water OEKO-TEX® Method 26-C (EN ISO 105-E01)									

11: Zinc alloy slider painted in navy

12: Index 11 metal part

13: Index 11 painted part

14: Zinc alloy slider painted in green

15: Index 14 painted part

16: Zinc alloy slider painted in black

17: Zinc alloy slider raw

18: Aluminium wire for top+bottom stopper raw

19: PA reinforcement film with white PES tape

### 3 Scope Of Application

An application with the appropriate OEKO-TEX® forms was submitted for

**Zippers (assembled or in individual parts) consisting of:**

- Polyester tape and coil, piece-dyed (with disperse dyestuffs)
  - Polyester tape in raw white and dope-dyed in black (produced with fibres accepted by OEKO-TEX® having flame retardant properties)
  - Delrin (TEPCON® POM) teeth, pin & box, dyed (in a limited range of 6 pigments);
  - Zinc alloy slider, raw or painted (in a limited range of 8 pigments)
  - Aluminum top & bottom stopper, raw
  - Nylon reinforcement film in transparent for zipper tape, excluding dyed film
- (based on material partly pre-certified according to OEKO-TEX® STANDARD 100).**

The application is for the 16. Renewal of certificate TPAO 054092 - based partly on materials already certified according to OEKO-TEX® STANDARD 100, Product Class I, Annex 4.

### 4 Samples

No.	Receipt	Sample Identification
1	02.10.2023	Delrin POM, teeth, dyed A, red
2	02.10.2023	Delrin POM, teeth, dyed B, forest
3	02.10.2023	PES, tape + coil, dyed A, grey
4	02.10.2023	PES, tape + coil, dyed B, brown
5	02.10.2023	PES, tape, dyed C, black
6	02.10.2023	PES, tape, dyed D, coffee
7	02.10.2023	PES, tape, dyed E, purple
8	02.10.2023	PES, tape, dyed F, violet
9	02.10.2023	PES, flame retar. tape, dope-dyed, black
10	02.10.2023	PES, flame retar., tape, raw white
11	02.10.2023	Zinc alloy, slider, painted in, navy
12	02.10.2023	Index 11, metal part
13	02.10.2023	Index 11, painted part
14	02.10.2023	Zinc alloy, slider, painted in, green
15	02.10.2023	Index 14, painted part
16	02.10.2023	Zinc alloy, slider, painted in, black
17	02.10.2023	Zinc alloy, slider, raw
18	02.10.2023	Aluminium, wire, for top+bottom stopper, raw
19	02.10.2023	PA, reinforcement film, with white PES tape

(Unless otherwise stated samples are provided by the customer.)

## 5 Photo Overview

#1 Image 1



Delrin POM teeth dyed A red

#2 Image 1



Delrin POM teeth dyed B forest

#3 Image 1



PES tape + coil dyed A grey

#4 Image 1



PES tape + coil dyed B brown

#5 Image 1



PES tape dyed C black

#6 Image 1



PES tape dyed D coffee

#7 Image 1



PES tape dyed E purple

#8 Image 1



PES tape dyed F violet

#9 Image 1



PES flame retard. tape dope-dyed black

#10 Image 1



PES flame retar. tape raw white

#11 Image 1



Zinc alloy slider painted in navy

#12 Image 1



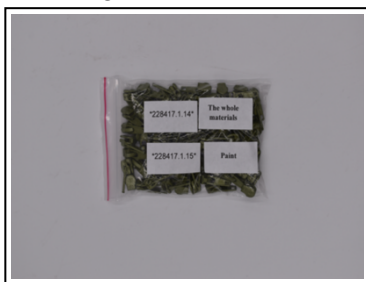
Index 11 metal part

#13 Image 1



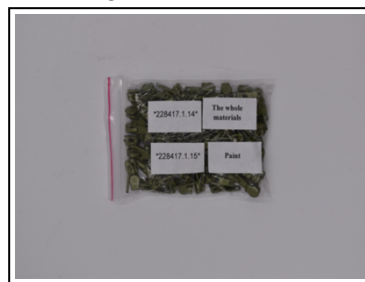
Index 11 painted part

#14 Image 1



Zinc alloy slider painted in green

#15 Image 1



Index 14 painted part

#16 Image 1



Zinc alloy slider painted in black

#17 Image 1



Zinc alloy slider raw

#18 Image 1



Aluminium wire for top+bottom stopper raw

#19 Image 1


 PA reinforcement film with  
 white PES tape

## 6 Tests Performed / Results

As required in the OEKO-TEX® STANDARD 100 the test program is decided by the institute based on the article group, the requested product class and on the technical information given in the application form. Required tests are carried out according to OEKO-TEX®STANDARD 100 and the testing procedure laid down in "OEKO-TEX® STANDARD 100-Testing Procedures".

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#3 PES tape + coil dyed A grey	#5 PES tape dyed C black	#7 PES tape dyed E purple
<b>pH-Value</b> OEKO-TEX® Method 1 (ISO 3071:2020 - KCl) * Number of Tests • Aqueous extract	[pH] >=4.0 <=7.5	2 6.3	2 6.3	2 6.4	2 6.4

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#9 PES flame retar. tape dope-dyed black	#10 PES flame retar. tape raw white	#19 PA reinforceme nt film with white PES tape
<b>pH-Value</b> OEKO-TEX® Method 1 (ISO 3071:2020 - KCl) * Number of Tests • Aqueous extract	[pH] >=4.0 <=7.5	2 6.2	2 5.9	2 6.3





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	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#2 Delrin POM teeth dyed B forest	#4 PES tape + coil dyed B brown	#5 PES tape dyed C black	#6 PES tape dyed D coffee
<b>Formaldehyde</b> OEKO-TEX® Method 2.2 - JIS L-1041 * Number of Tests • Free formaldehyde [mg/kg]	<16	1 <16	1 <16	1 <16	1 <16

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#8 PES tape dyed F violet	#19 PA reinforceme nt film with white PES tape
<b>Formaldehyde</b> OEKO-TEX® Method 2.2 - JIS L-1041 * Number of Tests • Free formaldehyde [mg/kg]	<16	1 <16	1 <16

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#3 PES tape + coil dyed A grey	#6 PES tape dyed D coffee	#7 PES tape dyed E purple
<b>Heavy Metals</b> OEKO-TEX® Method 3.1 (Extract) * Number of Tests		1	1	1	1
• Antimony [mg/kg]	<30	0.13	<0.1	<0.1	<0.1
• Arsenic [mg/kg]	<0.20	<0.02	<0.02	<0.02	<0.02
• Lead [mg/kg]	<0.20	<0.02	<0.02	<0.02	<0.02
• Cadmium [mg/kg]	<0.10	<0.02	<0.02	<0.02	<0.02
• Chromium total [mg/kg]	<1.0	<0.02	<0.02	<0.02	<0.02
• Cobalt [mg/kg]	<1.0	<0.02	<0.02	<0.02	<0.02
• Copper [mg/kg]	<25	<1.0	<1.0	<1.0	<1.0
• Nickel [mg/kg]	<1.0	<0.10	<0.10	<0.10	<0.10
• Mercury [mg/kg]	<0.02	<0.006	<0.006	<0.006	<0.006
• Selenium [mg/kg]	<100	<0.40	<0.40	<0.40	<0.40
• Zinc [mg/kg]		<2.00	<2.00	<2.00	<2.00
• Manganese [mg/kg]		<0.40	<0.40	<0.40	<0.40
• Barium [mg/kg]	<1000	<2.00	<2.00	<2.00	<2.00

OEKO- TEX® STANDARD 100 Product Class I Annex 4	#8 PES tape dyed F violet	#19 PA reinforce ment film with white PES tape
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<b>Heavy Metals</b> OEKO-TEX® Method 3.1 (Extract) *				
Number of Tests			1	1
• Antimony	[mg/kg]	<30	<0.1	0.10
• Arsenic	[mg/kg]	<0.20	<0.02	<0.02
• Lead	[mg/kg]	<0.20	<0.02	<0.02
• Cadmium	[mg/kg]	<0.10	<0.02	<0.02
• Chromium total	[mg/kg]	<1.0	<0.02	<0.02
• Cobalt	[mg/kg]	<1.0	<0.02	<0.02
• Copper	[mg/kg]	<25	<1.0	<1.0
• Nickel	[mg/kg]	<1.0	<0.10	<0.10
• Mercury	[mg/kg]	<0.02	<0.006	<0.006
• Selenium	[mg/kg]	<100	<0.40	<0.40
• Zinc	[mg/kg]		<2.00	<2.00
• Manganese	[mg/kg]		<0.40	<0.40
• Barium	[mg/kg]	<1000	<2.00	<2.00

OEKO- TEX® STANDARD 100 Product Class I Annex 4	#11 Zinc alloy slider painted in navy	#14 Zinc alloy slider painted in green	#16 Zinc alloy slider painted in black	#18 Aluminium wire for top+bottom stopper raw
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<b>Heavy Metals</b> OEKO-TEX® Method 3.1 (Extract; inorganic accessories) *						
Number of Tests			1	1	1	1
• Antimony	[mg/kg]	<30	<0.1	<0.1	<0.1	<0.1
• Arsenic	[mg/kg]	<0.20	<0.02	<0.02	<0.02	<0.02
• Lead	[mg/kg]	<0.20	<0.02	<0.02	<0.02	<0.02
• Cadmium	[mg/kg]	<0.10	<0.02	<0.02	<0.02	<0.02
• Chromium total	[mg/kg]	<1.0	<0.02	<0.02	<0.02	<0.02
• Cobalt	[mg/kg]	<1.0	<0.02	<0.02	<0.02	<0.02
• Copper	[mg/kg]		<1.00	<1.00	<1.00	<1.00
• Nickel	[mg/kg]	<0.50	<0.10	<0.10	<0.10	<0.10
• Mercury	[mg/kg]	<0.02	<0.006	<0.006	<0.006	<0.006
• Selenium	[mg/kg]	<100	<0.40	<0.40	<0.40	<0.40
• Barium	[mg/kg]	<1000	<2.00	<2.00	<2.00	<2.00

OEKO- TEX® STANDARD 100 Product Class I Annex 4	#14 Zinc alloy slider painted in green	#16 Zinc alloy slider painted in black
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<b>Heavy Metals</b> OEKO-TEX® Method 3.1 (incl. EN 12472) *			
Number of Tests		1	1
• Nickel [mg/kg]	<0.50	<0.10	<0.10

OEKO- TEX® STANDARD 100 Product Class I Annex 4	#2 Delrin POM teeth dyed B forest	#4 PES tape + coil dyed B brown	#12 Index 11 metal part	#13 Index 11 painted part
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<b>Heavy Metals</b> OEKO-TEX® Method 3.2 (Digestion) *						
Number of Tests		1	1	1	1	1
• Lead [mg/kg]	<90	<4.0	<4.0	22	<4.0	<4.0
• Cadmium [mg/kg]	<40	<0.20	<0.20	3.9	<0.20	<0.20
• Mercury [mg/kg]	<0.5	<0.006	<0.006	0.310	<0.006	<0.006
• Arsenic [mg/kg]	<100	<0.20	<0.20	<0.20	<0.20	2.5

OEKO- TEX® STANDARD 100 Product Class I Annex 4	#15 Index 14 painted part	#17 Zinc alloy slider raw	#18 Aluminium wire for top+bottom stopper raw	#19 PA reinforce- ment film with white PES tape
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<b>Heavy Metals</b> OEKO-TEX® Method 3.2 (Digestion) *						
Number of Tests		1	1	1	1	1
• Lead [mg/kg]	<90	<4.0	21	8.9	<4.0	<4.0
• Cadmium [mg/kg]	<40	<0.20	3.3	<0.20	<0.20	<0.20
• Mercury [mg/kg]	<0.5	<0.006	0.150	<0.006	<0.006	<0.006
• Arsenic [mg/kg]	<100	2.5	<0.20	<0.20	<0.20	<0.20



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		OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#3 PES tape + coil dyed A grey	#5 PES tape dyed C black	#11 Zinc alloy slider painted in navy
<b>Chlorinated Phenols and OPP</b>						
OEKO-TEX® Method 5 *						
Number of Tests						
• OPP (Orthophenylphenol)	[mg/kg]	<10	1	1	1	1
• Pentachlorophenol (PCP)	[mg/kg]	<0.05	<0.01	<0.01	<0.01	<0.01
• 2,3,5,6-TeCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3,4,6-TeCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3,4,5-TeCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• Tetrachlorophenols (TeCP, Sum)	[mg/kg]	<0.05	<0.01	<0.01	<0.01	<0.01
• 2,3,4-TrCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3,5-TrCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3,6-TrCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,4,5-TrCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,4,6-TrCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 3,4,5-TrCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• Trichlorophenols (TrCP, Sum)	[mg/kg]	<0.20	<0.01	<0.01	<0.01	<0.01
• 2,4/2,5-DCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,6-DCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3-DCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 3,4-DCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 3,5-DCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• Dichlorophenols (DCP, Sum)	[mg/kg]	<0.50	<0.01	<0.01	<0.01	<0.01
• 2-MCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 3-MCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• 4-MCP	[mg/kg]		<0.01	<0.01	<0.01	<0.01
• Monochlorophenols (MCP, Sum)	[mg/kg]	<0.50	<0.01	<0.01	<0.01	<0.01



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		OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#3 PES tape + coil dyed A grey	#6 PES tape dyed D coffee	#7 PES tape dyed E purple
<b>Organic Tin Compounds</b>						
OEKO-TEX® Method 7						
Number of Tests						
• Trimethyltin (TMT)	[mg/kg]	<1.0	1 <0.05	1 <0.05	1 <0.05	1 <0.05
• Dimethyltin (DMT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Monomethyltin (MMT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tetraethyltin (TeET)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Dipropyltin (DPT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Monobutyltin (MBT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tripropyltin (TPT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Dibutyltin (DBT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Monophenyltin (MPhT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tributyltin (TBT)	[mg/kg]	<0.50	<0.05	<0.05	<0.05	<0.05
• Mono-octyltin (MOT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tetra-butyltin (TeBT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Diphenyltin (DPhT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Dioctyltin (DOT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tricyclohexyltin (TCT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Triphenyltin (TPhT)	[mg/kg]	<0.50	<0.05	<0.05	<0.05	<0.05
• Tetra-octyltin (TeOT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Trioctyltin (TOT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05



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OEKO- TEX® STANDARD 100 Product Class I Annex 4	#11 Zinc alloy slider painted in navy	#14 Zinc alloy slider painted in green	#16 Zinc alloy slider painted in black	#19 PA reinforce- ment film with white PES tape
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<b>Organic Tin Compounds</b>						
OEKO-TEX® Method 7						
Number of Tests			1	1	1	1
• Trimethyltin (TMT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Dimethyltin (DMT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Monomethyltin (MMT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tetraethyltin (TeET)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Dipropyltin (DPT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Monobutyltin (MBT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tripropyltin (TPT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Dibutyltin (DBT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Monophenyltin (MPhT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tributyltin (TBT)	[mg/kg]	<0.50	<0.05	<0.05	<0.05	<0.05
• Monoctyltin (MOT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tetrabutyltin (TeBT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Diphenyltin (DPhT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Dioctyltin (DOT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Tricyclohexyltin (TCT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Triphenyltin (TPhT)	[mg/kg]	<0.50	<0.05	<0.05	<0.05	<0.05
• Tetraoctyltin (TeOT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05
• Trioctyltin (TOT)	[mg/kg]	<1.0	<0.05	<0.05	<0.05	<0.05



TESTEX®

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#2 Delrin POM teeth dyed B forest	#14 Zinc alloy slider painted in green	#16 Zinc alloy slider painted in black
<b>Azo Dyes</b>					
OEKO-TEX® Method 11.1 (direct) *					
Number of Tests		1	1	1	1
• Aniline [mg/kg]	<20	<5.0	<5.0	<5.0	<5.0
• o-Toluidine [mg/kg]	<20	<10	<10	<10	<10
• 2,4-Xylidine [mg/kg]	<20	<10	<10	<10	<10
• 2,6-Xylidine [mg/kg]	<20	<10	<10	<10	<10
• o-Anisidine [mg/kg]	<20	<10	<10	<10	<10
• p-Chloraniline [mg/kg]	<20	<10	<10	<10	<10
• p-Cresidine [mg/kg]	<20	<10	<10	<10	<10
• 2,4,5-Trimethylaniline [mg/kg]	<20	<10	<10	<10	<10
• 4-Chloro-o-toluidine [mg/kg]	<20	<10	<10	<10	<10
• 2,4-Toluylenediamine [mg/kg]	<20	<10	<10	<10	<10
• 2,4-Diaminoanisole [mg/kg]	<20	<10	<10	<10	<10
• 2-Naphthylamine [mg/kg]	<20	<10	<10	<10	<10
• 2-Amino-4-nitrotoluene [mg/kg]	<20	<10	<10	<10	<10
• 4-Aminodiphenyl [mg/kg]	<20	<10	<10	<10	<10
• 4,4'-Oxydianiline [mg/kg]	<20	<10	<10	<10	<10
• Benzidine [mg/kg]	<20	<10	<10	<10	<10
• 4,4'-Diaminodiphenylmethane [mg/kg]	<20	<10	<10	<10	<10
• o-Aminoazotoluene [mg/kg]	<20	<10	<10	<10	<10
• 3,3'-Dimethyl-4,4'-diaminodiphenylmethane [mg/kg]	<20	<10	<10	<10	<10
• 3,3'-Dimethylbenzidine [mg/kg]	<20	<10	<10	<10	<10
• 4,4'-Thiodianiline [mg/kg]	<20	<10	<10	<10	<10
• 3,3'-Dichlorobenzidine [mg/kg]	<20	<10	<10	<10	<10
• 4,4'-Methylene-bis-(2-chloraniline) [mg/kg]	<20	<10	<10	<10	<10
• 3,3'-Dimethoxybenzidine [mg/kg]	<20	<10	<10	<10	<10
• 1,4-Phenylenediamine [mg/kg]		<10	<10	<10	<10
• N-Methylaniline [mg/kg]		<10	<10	<10	<10
• 3,3-Diaminobenzidin [mg/kg]	<20	<10	<10	<10	<10
• 2-Amino-5-nitrothiazole [mg/kg]		<10	<10	<10	<10
• 4-Ethoxyaniline [mg/kg]	<20	<10	<10	<10	<10
• 2,5-Diaminotoluene [mg/kg]	<20	<10	<10	<10	<10



TESTEX®

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#3 PES tape + coil dyed A grey	#5 PES tape dyed C black	#7 PES tape dyed E purple	#8 PES tape dyed F violet
<b>Azo Dyes</b>					
OEKO-TEX® Method 11.1 (Extract) *					
Number of Tests		1	1	1	1
• Aniline [mg/kg]	<20	<5.0	<5.0	<5.0	<5.0
• o-Toluidine [mg/kg]	<20	<10	<10	<10	<10
• 2,4-Xylidine [mg/kg]	<20	<10	<10	<10	<10
• 2,6-Xylidine [mg/kg]	<20	<10	<10	<10	<10
• o-Anisidine [mg/kg]	<20	<10	<10	<10	<10
• p-Chloraniline [mg/kg]	<20	<10	<10	<10	<10
• p-Cresidine [mg/kg]	<20	<10	<10	<10	<10
• 2,4,5-Trimethylaniline [mg/kg]	<20	<10	<10	<10	<10
• 4-Chloro-o-toluidine [mg/kg]	<20	<10	<10	<10	<10
• 2,4-Toluylenediamine [mg/kg]	<20	<10	<10	<10	<10
• 2,4-Diaminoanisole [mg/kg]	<20	<10	<10	<10	<10
• 2-Naphthylamine [mg/kg]	<20	<10	<10	<10	<10
• 2-Amino-4-nitrotoluene [mg/kg]	<20	<10	<10	<10	<10
• 4-Aminodiphenyl [mg/kg]	<20	<10	<10	<10	<10
• 4,4'-Oxydianiline [mg/kg]	<20	<10	<10	<10	<10
• Benzidine [mg/kg]	<20	<10	<10	<10	<10
• 4,4'-Diaminodiphenylmethane [mg/kg]	<20	<10	<10	<10	<10
• o-Aminoazotoluene [mg/kg]	<20	<10	<10	<10	<10
• 3,3'-Dimethyl-4,4'-diaminodiphenylmethane [mg/kg]	<20	<10	<10	<10	<10
• 3,3'-Dimethylbenzidine [mg/kg]	<20	<10	<10	<10	<10
• 4,4'-Thiodianiline [mg/kg]	<20	<10	<10	<10	<10
• 3,3'-Dichlorobenzidine [mg/kg]	<20	<10	<10	<10	<10
• 4,4'-Methylene-bis-(2-chloraniline) [mg/kg]	<20	<10	<10	<10	<10
• 3,3'-Dimethoxybenzidine [mg/kg]	<20	<10	<10	<10	<10
• 1,4-Phenylenediamine [mg/kg]		<5	<5	<5	<5
• N-Methylaniline [mg/kg]		<10	<10	<10	<10
• 3,3-Diaminobenzidin [mg/kg]	<20	<10	<10	<10	<10
• 2-Amino-5-nitrothiazole [mg/kg]		<10	<10	<10	<10
• 4-Ethoxyaniline [mg/kg]	<20	<10	<10	<10	<10
• 2,5-Diaminotoluene [mg/kg]	<20	<10	<10	<10	<10





TESTEX®

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#4 PES tape + coil dyed B brown	#5 PES tape dyed C black	#6 PES tape dyed D coffee	#8 PES tape dyed F violet
<b>Allergenic and Carcinogenic Dyes &amp; Quinoline</b>					
OEKO-TEX® Method 11.3 & 18 *					
Number of Tests					
• C.I. Disperse Blue 1*	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Blue 3	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Blue 7	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Blue 26	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Blue 35	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Blue 102	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Blue 106	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Blue 124	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Orange 1	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Orange 3	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Orange 11*	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Orange 37/76	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Orange 149	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Red 1	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Red 11	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Red 17	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Yellow 1	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Yellow 3*	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Yellow 9	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Yellow 23°	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Yellow 39S	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Yellow 49	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Brown 1	[mg/kg]	<50	<10	<10	<10
• C.I. Disperse Yellow 39	[mg/kg]	<50	<10	<10	<10
• Quinoline	[mg/kg]	<50	<10	<10	<10
• C.I. Basic Green 4	[mg/kg]	<50	<10	<10	<10
• C.I. Solvent Yellow 34	[mg/kg]	<50	<10	<10	<10
• C.I. Basic Red 9	[mg/kg]	<50	<10	<10	<10
• C.I. Solvent Yellow 2	[mg/kg]	<50	<10	<10	<10
• C.I. Solvent Yellow 3	[mg/kg]	<50	<10	<10	<10
• C.I. Solvent Yellow 14	[mg/kg]	<50	<10	<10	<10
• C.I. Basic Violet 3	[mg/kg]	<50	<10	<10	<10
• C.I. Basic Violet 14	[mg/kg]	<50	<10	<10	<10
• C.I. Acid Violet 49	[mg/kg]	<50	<10	<10	<10
• C.I. Basic Violet 1	[mg/kg]	<50	<10	<10	<10
• C.I. Basic Blue 26	[mg/kg]	<50	<10	<10	<10
• Michler's Ketone	[mg/kg]		<10	<10	<10
• Michler's Base	[mg/kg]		<10	<10	<10



TESTEX®

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#2 Delrin POM teeth dyed B forest	#3 PES tape + coil dyed A grey	#7 PES tape dyed E purple	#11 Zinc alloy slider painted in navy
<b>Chlorinated Benzenes &amp; Toluenes</b>					
OEKO-TEX® Method 12 *					
Number of Tests		1	1	1	1
• Chlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2-Chlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 3-Chlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 4-Chlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 1,3-Dichlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• Benzylchloride [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 1,4-Dichlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 1,2-Dichlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,4-Dichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,5-/ 2,6-Dichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 1,3,5-Trichlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• α,α-Dichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3-/ 3,4-Dichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 1,2,4-Trichlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 1,2,3-Trichlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• α,α,α-Trichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,4,5-Trichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3,6-Trichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 3,4,5-Trichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3,4-Trichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,4,6-Trichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 1,2,3,5-Tetrachlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 1,2,4,5-Tetrachlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• α,2,6-Trichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• α,2,4-Trichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 1,2,3,4-Tetrachlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3,4,5-Tetrachlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3,4,6-TeCT / 2,3,5,6-TeCT [mg/kg]		<0.01	<0.01	<0.01	<0.01
• α,3,4-Trichlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• α,α,α,2-Tetrachlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• Pentachlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• 2,3,4,5,6-Pentachlorotoluene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• Hexachlorobenzene [mg/kg]		<0.01	<0.01	<0.01	<0.01
• Sum [mg/kg]	<1.0	<0.01	<0.01	<0.01	<0.01



TESTEX®

OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#9 PES flame retar. tape dope-dyed black	#10 PES flame retar. tape raw white	#19 PA reinforceme nt film with white PES tape
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<b>Polycyclic Aromatic Hydrocarbons (PAH)</b>					
OEKO-TEX® Method 13 *					
Number of Tests			1	1	1
• Naphthalene	[mg/kg]		<0.01	<0.01	<0.01
• Acenaphthylene	[mg/kg]		<0.01	<0.01	<0.01
• Acenaphthene	[mg/kg]		<0.01	<0.01	<0.01
• Fluorene	[mg/kg]		<0.01	<0.01	<0.01
• Phenanthrene	[mg/kg]		<0.01	<0.01	<0.01
• Anthracene	[mg/kg]		<0.01	<0.01	<0.01
• Fluoranthene	[mg/kg]		<0.01	<0.01	<0.01
• Pyrene	[mg/kg]		<0.01	<0.01	<0.01
• 1-Methylpyrene	[mg/kg]		<0.01	<0.01	<0.01
• Cyclopenta[cd]pyrene	[mg/kg]		<0.01	<0.01	<0.01
• Benzo[a]anthracene	[mg/kg]	<0.50	<0.01	<0.01	<0.01
• Chrysene	[mg/kg]	<0.50	<0.01	<0.01	<0.01
• Benzo[b]fluoranthene	[mg/kg]	<0.50	<0.01	<0.01	<0.01
• Benzo[k]fluoranthene	[mg/kg]	<0.50	<0.01	<0.01	<0.01
• Benzo[j]fluoranthene	[mg/kg]	<0.50	<0.01	<0.01	<0.01
• Benzo[e]pyrene	[mg/kg]	<0.50	<0.01	<0.01	<0.01
• Benzo[a]pyrene	[mg/kg]	<0.50	<0.01	<0.01	<0.01
• Dibenzo[ah]anthracene	[mg/kg]	<0.50	<0.01	<0.01	<0.01
• Indeno[1,2,3-cd]pyrene	[mg/kg]		<0.01	<0.01	<0.01
• Benzo[ghi]perylene	[mg/kg]		<0.01	<0.01	<0.01
• Dibenzo[ae]pyrene	[mg/kg]		<0.01	<0.01	<0.01
• Dibenzo[al]pyrene	[mg/kg]		<0.01	<0.01	<0.01
• Dibenzo[ai]pyrene	[mg/kg]		<0.01	<0.01	<0.01
• Dibenzo[ah]pyrene	[mg/kg]		<0.01	<0.01	<0.01
• Sum	[mg/kg]	<5.0	<0.01	<0.01	<0.01

OEKO- TEX® STANDARD 100 Product Class I Annex 4	#2 Delrin POM teeth dyed B forest	#16 Zinc alloy slider painted in black
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<b>Phthalates &amp; Siloxanes</b>			
OEKO-TEX® Method 6 & 6.1 *			
Number of Tests		1	1
• DMP	[mg/kg]	<10	<10
• DEP	[mg/kg]	<10	<10
• DPrP	[mg/kg]	<10	<10
• DIBP	[mg/kg]	<10	<10
• DBP	[mg/kg]	<10	<10
• DMEP	[mg/kg]	<10	<10
• DIPP	[mg/kg]	<10	<10
• NPIP	[mg/kg]	<10	<10
• DPP	[mg/kg]	<10	<10
• DIHxP	[mg/kg]	<10	<10
• DHxP	[mg/kg]	<10	<10
• BBP	[mg/kg]	<10	<10
• DIHP*	[mg/kg]	<10	<10
• DIOP	[mg/kg]	<10	<10
• DCHP	[mg/kg]	<10	<10
• DEHP	[mg/kg]	<10	<10
• DNOP	[mg/kg]	<10	<10
• DINP*	[mg/kg]	<10	<10
• DNP*	[mg/kg]	<10	<10
• DIDP	[mg/kg]	<10	<10
• DUP*	[mg/kg]	<10	<10
• Sum w/ DINP	[mg/kg]	<500	<10
• Sum w/o DINP	[mg/kg]	<10	<10
• * Components of DHNUP	[mg/kg]		
• D4 (Octamethylcyclotetrasiloxane)	[mg/kg]	<1000	<100
• D5 (Decamethylcyclopentasiloxane)	[mg/kg]	<1000	<100
• D6 (Dodecamethylcyclohexasiloxane)	[mg/kg]	<1000	<100
• Tris(2-methoxyethoxy)vinylsilane	[mg/kg]	<1000	<100



TESTEX®

OEKO- TEX® STANDARD 100 Product Class I Annex 4	#2 Delrin POM teeth dyed B forest	#4 PES tape + coil dyed B brown	#11 Zinc alloy slider painted in navy	#19 PA reinforce ment film with white PES tape
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<b>Solvent Residues</b> OEKO-TEX® Method 14 *						
Number of Tests			1	1	1	1
• Benzene	[mg/kg]	<5.00	<0.10	<0.10	<0.10	<0.10
• Formamide	[mg/kg]	<200	<20.0	<20.0	<20.0	<20.0
• Dimethylformamide (DMF)	[mg/kg]	<500	<20.0	<20.0	<20.0	<20.0
• N,N-dimethylacetamide (DMAc)	[mg/kg]	<500	<20.0	<20.0	<20.0	<20.0
• N-Methylpyrrolidone (NMP)	[mg/kg]	<500	<20.0	<20.0	<20.0	<20.0
• N-ethyl-2-pyrrolidone (NEP)	[mg/kg]		<20.0	<20.0	<20.0	<20.0

OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#3 PES tape + coil dyed A grey	#5 PES tape dyed C black	#8 PES tape dyed F violet
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<b>Surfactants, Wetting Agent Residues</b> OEKO-TEX® Method 20						
Number of Tests			1	1	1	1
• 4-tert-butylphenol	[mg/kg]		<2.0	<2.0	<2.0	<2.0
• Pentyphenol (PeP)	[mg/kg]		<2.0	<2.0	<2.0	<2.0
• Heptylphenol (HpP)	[mg/kg]		<2.0	<2.0	<2.0	<2.0
• Octylphenol (OP)	[mg/kg]		<2.0	<2.0	<2.0	<2.0
• Nonylphenol (NP)	[mg/kg]		<2.0	<2.0	<2.0	<2.0
• Sum AP	[mg/kg]	<10	<2.0	<2.0	<2.0	<2.0
• Octylphenoethoxylate (OPEO)	[mg/kg]		<2.0	<2.0	<2.0	<2.0
• Nonylphenoethoxylate (NPEO)	[mg/kg]		<2.0	<2.0	<2.0	<2.0
• Sum AP & APEO	[mg/kg]	<100	<2.0	<2.0	<2.0	<2.0



TESTEX®

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#9 PES flame retar. tape dope-dyed black	#10 PES flame retar. tape raw white	#14 Zinc alloy slider painted in green	#16 Zinc alloy slider painted in black
<b>Surfactants, Wetting Agent Residues</b>					
OEKO-TEX® Method 20					
Number of Tests		1	1	1	1
• 4-tert-butylphenol [mg/kg]		<2.0	<2.0	<2.0	<2.0
• Pentylphenol (PeP) [mg/kg]		<2.0	<2.0	<2.0	<2.0
• Heptylphenol (HpP) [mg/kg]		<2.0	<2.0	<2.0	<2.0
• Octylphenol (OP) [mg/kg]		<2.0	<2.0	<2.0	<2.0
• Nonylphenol (NP) [mg/kg]		<2.0	<2.0	<2.0	<2.0
• Sum AP [mg/kg]	<10	<2.0	<2.0	<2.0	<2.0
• Octylphenoethoxylate (OPEO) [mg/kg]		<2.0	<2.0	<2.0	<2.0
• Nonylphenoethoxylate (NPEO) [mg/kg]		<2.0	<2.0	<2.0	<2.0
• Sum AP & APEO [mg/kg]	<100	<2.0	<2.0	<2.0	<2.0

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#2 Delrin POM teeth dyed B forest	#11 Zinc alloy slider painted in navy
<b>Phenol</b>			
OEKO-TEX® Method 24 *			
Number of Tests		1	1
• Phenol [mg/kg]	<20	<5.0	<5.0

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#4 PES tape + coil dyed B brown	#6 PES tape dyed D coffee	#19 PA reinforceme nt film with white PES tape
<b>Bisphenols</b>					
OEKO-TEX® Method 25 *					
Number of Tests		1	1	1	1
• Bisphenol A [mg/kg]	<100	<10	<10	<10	<10
• Bisphenol AF [mg/kg]		<10	<10	<10	<10
• Bisphenol B [mg/kg]	<1000	<10	<10	<10	<10
• Bisphenol F [mg/kg]		<10	<10	<10	<10
• Bisphenol S [mg/kg]	<1000	<10	<10	<10	<10
• 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (Vulkanox) [mg/kg]	<1000	<10	<10	<10	<10

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#2 Delrin POM teeth dyed B forest	#3 PES tape + coil dyed A grey	#4 PES tape + coil dyed B brown
<b>Colour Fastness To Saliva And Perspiration</b> OEKO-TEX® Method 26-A *					
Number of Tests		1	1	1	1
• Colour fastness (saliva) [yes/no]	yes	yes	yes	yes	yes
• Colour fastness (perspiration) [yes/no]	yes	yes	yes	yes	yes
• Remarks		none	none	none	none

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#5 PES tape dyed C black	#6 PES tape dyed D coffee	#7 PES tape dyed E purple	#8 PES tape dyed F violet
<b>Colour Fastness To Saliva And Perspiration</b> OEKO-TEX® Method 26-A *					
Number of Tests		1	1	1	1
• Colour fastness (saliva) [yes/no]	yes	yes	yes	yes	yes
• Colour fastness (perspiration) [yes/no]	yes	yes	yes	yes	yes
• Remarks		none	none	none	none

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#9 PES flame retar. tape dope-dyed black
<b>Colour Fastness To Saliva And Perspiration</b> OEKO-TEX® Method 26-A *		
Number of Tests		1
• Colour fastness (saliva) [yes/no]	yes	yes
• Colour fastness (perspiration) [yes/no]	yes	yes
• Remarks		none

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#2 Delrin POM teeth dyed B forest	#4 PES tape + coil dyed B brown	#5 PES tape dyed C black
<b>Colour Fastness To Perspiration</b> OEKO-TEX® Method 26-B (EN ISO 105-E04)					
Number of Tests		1	1	1	1
• Fastness to acid solution					
• Change in colour (acid) [grade]		5	5	5	5
• Staining (acid) [grade]	>=3-4	5	5	4-5	4-5
• Fastness to alkaline solution					
• Change in colour (alkaline) [grade]		5	5	5	5
• Staining (alkaline) [grade]	>=3-4	5	5	4-5	4-5
• Remarks		none	none	none	none

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#9 PES flame retar. tape dope-dyed black
<b>Colour Fastness To Perspiration</b> OEKO-TEX® Method 26-B (EN ISO 105-E04)		
Number of Tests		1
• Fastness to acid solution		
• Change in colour (acid) [grade]		5
• Staining (acid) [grade]	>=3-4	4-5
• Fastness to alkaline solution		
• Change in colour (alkaline) [grade]		5
• Staining (alkaline) [grade]	>=3-4	4-5
• Remarks		none

	OEKO- TEX® STANDARD 100 Product Class I Annex 4	#1 Delrin POM teeth dyed A red	#2 Delrin POM teeth dyed B forest	#4 PES tape + coil dyed B brown	#5 PES tape dyed C black
<b>Colour Fastness To Water</b> OEKO-TEX® Method 26-C (EN ISO 105-E01)					
Number of Tests		1	1	1	1
• Change in colour [grade]		5	5	5	5
• Staining [grade]	>=3-4	5	5	4-5	4-5
• Remarks		none	none	none	none



OEKO-  
TEX®  
STANDARD  
100 Product  
Class I  
Annex 4

#9  
PES  
flame retar.  
tape  
dope-dyed  
black

<b>Colour Fastness To Water</b> OEKO-TEX® Method 26-C (EN ISO 105-E01)		
Number of Tests		1
• Change in colour [grade]		5
• Staining [grade]	>=3-4	4-5
• Remarks		none

A determination of general odour has been carried out on all submitted samples. No abnormal odour has been detected.

## 7 Base Certificates List

Active Base Certificates for TPAO 054092 (Kuang Suo Company Ltd.)

18.12.2023

Certificate holder	Certificate	Product class / Annex	Expiry date	Certificate state
Far Eastern New Century Corporation	TPFO 042351-TESTEX AG	I / 6	30.04.2024	Valid
Hung Chou Fiber Industrial Co., Ltd.	TPYO 073313-TESTEX AG	I / 6	31.01.2024	Valid

## 8 Remarks

### Period of Validity

There are no regulations concerning duration of validity in the individual test standards. As the results of the examinations refer only to the submitted and examined samples, the report is valid for these for an unlimited period. A period of validity specified as part of an expert evaluation is in the discretion of the consultant or TESTEX. The applicability of results and expert evaluations for materials not tested is in the responsibility of the applicant. Whereby an apportionment of results as well as any specified period of validity can only be done for identically constructed products and only as long as the product is produced unchanged. Possible national or international restrictions concerning the terms of usability of test and classification reports have to be considered; this is not the responsibility of the test laboratory.

### Sample Material

Results of performed tests only refer to the sample material provided. Without explicit written other agreement testing is destructive and the sample material is transferred to the property of TESTEX, which is entitled to freely decide on storage and disposal.

### Issuing

This test report is only issued as a PDF. Translations will be marked accordingly on the cover sheet.

### Quality Management, Accreditation And Notification

All tests are performed under a quality management system according to EN ISO/IEC 17025. TESTEX is accredited as a testing laboratory by the Swiss national accreditation body (SAS). The scope of accreditation is listed on [www.testex.com](http://www.testex.com). An accreditation logo on the test report indicates that at least one test method is accredited. Non-accredited test methods are marked with \*. However, these test procedures were also performed to the same quality level as the accredited tests. Sampling, which is usually performed by the customer, is outside the accredited range. Conformity statements are based on specifications of the cited standard. The "simple acceptance rule" is applied. This means that the measurement uncertainty is determined, but not taken into account for the conformity statement. Due to the system of mutual recognition of national accreditations (ILAC), this accreditation is valid worldwide. According to the Accreditation and Designation Ordinance (AkkBV), the accreditation mark may only be used by the accredited conformity assessment body.

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End of Report