



Product Service

Technical Report No. 68.162.12.02892.01
Dated 2013-01-08

Applicant: 东莞欣亚织造制品有限公司.

Address: 广东省东莞市寮步镇上屯工业区良平路

Attn.: Mr. Liao

Sample Description: 粘扣带 (魔术贴)

Model No.: --

PO No.: --

Sample Receive Date: 2012-12-31

Test Period: From 2013-01-04 to 2013-01-07

Test Requested and Conclusion:

(1) Azo Dyes Content	PASS
(2) Allergenic and Carcinogenic Disperse Dyes Content	PASS
(3) Formaldehyde Content	PASS
(4) Phthalates (DEHP, DBP, BBP, DINP, DIDP, DNOP and DIBP) Content	PASS
(5) Polycyclic Aromatic Hydrocarbons (PAHs) Content	PASS
(6) Total Cadmium (Cd) Content	PASS
(7) Organotin Compounds (MBT, DBT and TBT) Content	PASS
(8) Nonylphenol (NP) and Nonylphenoethoxylate (NPEO)Content	PASS

Test Results: Refer to following page(s)

Remark(s):

- The result relates only to the items tested.
- The conclusion was drawn according to the client's specification.



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1. TESTED SUBJECT DESCRIPTION

SAMPLE NUMBER	TESTED MATERIAL DESCRIPTION	PHOTO
001	Black velcro (hook)	
002	Black Velcro (loop)	

2. TEST RESULT

2.1. AZO DYES CONTENT

Test method: With reference to EN 14362-1:2012. With reference to EN 14362-3:2012 to confirm 4-aminoazobenzene. [Reporting Limit: 5.0 mg/kg]

TEST ITEM	RESULT [mg/kg]	CLIENT'S SPECIFICATION [mg/kg]
	SAMPLE 001+002	
4-aminobiphenyl	<5.0	<30
Benzidine	<5.0	<30
4-chloro-o-toluidine	<5.0	<30
2-naphthylamine	<5.0	<30
o-aminoazotoluene	<5.0	<30
5-nitro-o-toluidine	<5.0	<30
4-chloroaniline	<5.0	<30
2,4-diaminoanisole	<5.0	<30
4,4'-diaminodiphenylmethane	<5.0	<30
3,3'-dichlorobenzidine	<5.0	<30
3,3'-dimethoxybenzidine	<5.0	<30
3,3'-dimethylbenzidine	<5.0	<30
4,4'-methylenedi-o-toluidine	<5.0	<30
p-cresidine	<5.0	<30
4,4'-methylene-bis-(2-chloro-aniline)	<5.0	<30
4,4'-oxydianiline	<5.0	<30
4,4'-thiodianiline	<5.0	<30
o-toluidine	<5.0	<30
2,4-toluenediamine	<5.0	<30
2,4,5-trimethylaniline	<5.0	<30
2-methoxyaniline	<5.0	<30
2,4-xylidine	<5.0	<30
2,6-xylidine	<5.0	<30
4-aminoazobenzene	<5.0	<30
Test method	EN 14362-1	-

Notes:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than

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2.2. ALLERGENOUS AND CARCINOGENIC DISPERSE DYES CONTENT

Test method: With reference to DIN 54231:2005, extracted by methanol and analyzed by Liquid Chromatography Mass Spectrometry (LC-MS). [Reporting Limit: 1mg/L]

TEST ITEM	RESULT [mg/L]	CLIENT'S SPECIFICATION [mg/L]
	SAMPLE 001+002	
Allergenus disperse dyes		
C.I.Disperse Blue 1*	<1	<5
C.I.Disperse Blue 3	<1	<5
C.I.Disperse Blue 7	<1	<5
C.I.Disperse Blue 26	<1	<5
C.I.Disperse Blue 35	<1	<5
C.I.Disperse Blue 102	<1	<5
C.I.Disperse Blue 106	<1	<5
C.I.Disperse Blue 124	<1	<5
C.I.Disperse Orange 1	<1	<5
C.I.Disperse Orange 3	<1	<5
C.I.Disperse Orange 37/76/59	<1	<5
C.I.Disperse Red 1	<1	<5
C.I.Disperse Red 11	<1	<5
C.I.Disperse Red 17	<1	<5
C.I.Disperse Yellow 1	<1	<5
C.I.Disperse Yellow 3*	<1	<5
C.I.Disperse Yellow 9	<1	<5
C.I.Disperse Yellow 39	<1	<5
C.I.Disperse Yellow 49	<1	<5
C.I.Disperse Brown 1	<1	<5
Carcinogenic disperse dyes		
C.I.Acid Red 26	<1	<5
C.I.Basic Red 9	<1	<5
C.I.Basic Violet 14	<1	<5
C.I.Direct Black 38	<1	<5
C.I.Direct Blue 6	<1	<5
C.I.Direct Red 28	<1	<5
Disperse Orange 11	<1	<5
Other banned dyes		
C.I.Disperse Yellow 23	<1	<5
C.I.Disperse Orange 149	<1	<5

Notes:

- "mg/L" denotes milligram per Litre
- "<" denotes less than
- "*" denotes both allergenus and carcinogenic dispersion dyes

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2.3. FORMALDEHYDE CONTENT

Test method: With reference to ISO 14184-1:2011 and analyzed by UV-Vis spectrophotometer.
 [Reporting limit: 16mg/kg]

TEST ITEM	RESULT [mg/kg]	CLIENT'S SPECIFICATION [mg/kg]
	SAMPLE 001+002	
Formaldehyde	<16	<100

Notes:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than

2.4. PHTHALATES CONTENT

Test method: With reference to US EPA 3550C:2007, extracted by chloroform and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

TEST ITEM	RESULT [%]	CLIENT'S SPECIFICATION [%]
	SAMPLE 001+002	
Di(2-ethylhexyl) phthalate (DEHP)	<0.005	Sum<0.1
Dibutyl phthalate (DBP)	<0.005	
Benzyl butyl phthalate (BBP)	<0.005	
Di-isononyl phthalate (DINP)	<0.005	
Di-isodecyl phthalate (DIDP)	<0.005	
Di-n-octyl phthalate (DNOP)	<0.005	
Diisobutyl phthalate (DIBP)	<0.005	
Sum of all detected phthalates	<0.005	

Notes:

- "%" denotes percent by weight
- "<" denotes less than

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2.5. POLYCYCLIC AROMATIC HYDROCARBONS CONTENT

Test method: With reference to ZEK 01.4-08, extracted by toluene and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.20mg/kg]

TEST ITEM	RESULT [mg/kg]	CLIENT'S SPECIFICATION [mg/kg]
	SAMPLE 001+002	
Naphthalene	<0.20	Benzo[a]pyrene <0.2mg/kg Sum 18 PAH (EPA) <0.2 mg/kg
Acenaphthylene	<0.20	
Acenaphthene	<0.20	
Fluorene	<0.20	
Phenanthrene	<0.20	
Anthracene	<0.20	
Fluoranthene	<0.20	
Pyrene	<0.20	
Benzo[a]anthracene	<0.20	
Chrysene	<0.20	
Benzo[b]fluoranthene	<0.20	
Benzo[k]fluoranthene	<0.20	
Benzo(j)fluoranthene	<0.20	
Benzo(e)pyrene	<0.20	
Benzo[a]pyrene	<0.20	
Indeno[1,2,3-c,d]pyrene	<0.20	
Dibenzo[a,h]anthracene	<0.20	
Benzo[g,h,i]perylene	<0.20	
Sum of above PAHs	<0.20	

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2.6. TOTAL CADMIUM CONTENT

Test method: With reference to EN 1122:2001 Method B, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 2.0mg/kg]

TEST ITEM	RESULT [mg/kg]	CLIENT'S SPECIFICATION [mg/kg]
	SAMPLE 001+002	
Total cadmium (Cd)	<2.0	<100

Notes:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than

2.7. ORGANOTIN COMPOUNDS CONTENT

Test method: With reference to ISO 17353:2005, extracted by acidified methanol, followed by derivatization and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005mg/kg]

TEST ITEM	RESULT [mg/kg]	CLIENT'S SPECIFICATION [mg/kg]
	SAMPLE 001+002	
Monobutyltin (MBT)	<0.005	<1.0
Dibutyltin (DBT)	<0.005	<1.0
Tributyltin (TBT)	<0.005	<0.025

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2.8. NONYLPHENOL AND NONYLPHENOETHOXYLATE CONTENT

Test method:

NONYLPHENOL: With reference to in-house method, extracted by acetone and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 5mg/kg]

NONYLPHENOETHOXYLATE: With reference to in-house method, extracted by ethanol and analyzed by Liquid Chromatography and Mass Spectrometry (LC-MS). [Reporting limit: 50mg/kg]

TEST ITEM	RESULT [mg/kg]	CLIENT'S SPECIFICATION [mg/kg]
	SAMPLE 001+002	
Nonylphenol (NP)	<5	Sum of NP,NPEO<100
Nonylphenol Ethoxylates (NPEO)	<50	
Sum of NP,NPEO	<100	

Notes:

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