



TEST REPORT

Technical Report: (5220)210-0555

August 5, 2020

Date Received: July 28, 2020

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Ken / Janus / Alice / Jacky Tsang
Dakota
Flat A&B 3/F, Fast Industrial Bldg.
658 Castle Peak Road, Lai Chi Kok, Kowloon, Hong Kong
/

Product Name: INTERLINING
Product End Use: Blouses
Color Name / Article Number: /
Color Code: OFF-WHITE
H&M Order No.: /
H&M Sample Type: Raw Materials
Age Group: Child 0-3 year-old
H&M Sample Stage: D/S (Develop sample)
H&M Product Category: Knit
Date of Testing: July 28, 2020 – August 5, 2020
Number of Working Days: 7
Priority: REGULAR
Speed Order: No
No. of sample provided: /
Fiber Composition: /
Care Instruction: /

SUMMARY OF TEST RESULTS

TEST REQUESTED	CONCLUSION	REMARK
Alkylphenols (AP) Content Test	PASS	
Alkylphenol Ethoxylates (APEO) Content Test	PASS	
Formaldehyde Content Test	PASS	
Chlorophenols Content Test	PASS	
Ortho-phenylphenol (OPP) Content Test	PASS	
pH Value Test in Textile and Artificial Leather	FAIL	
Phthalates Content Test	PASS	

REMARK

If there are questions or concerns on this report, please contact:

(852) 2331 0330
hmEnquiry@hk.bureauveritas.com

BUREAU VERITAS HONG KONG LTD.

MS. YANN LO
MANAGER, ANALYTICAL



Photo of the Submitted Sample





TEST RESULT

Alkylphenols (AP) Content Test

Test Method I : For Textile & Leather:
EN ISO 21084

Test Method II : For Polymers and other materials:
Organic solvent extraction, analysis with reference to EN ISO 21084.

Tested Item(s) : I001 White fabric with transparent adhesive

Maximum Limit:	100 mg/kg (sum)
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Tested Item(s)	Test Method	Result			Conclusion
		Detected Analyte(s)	Conc.	Unit	
I001	I	ND	ND	mg/kg	PASS

Note:

ND = Not detected
ppm = part(s) per million = mg/kg
Reporting Limit (mg/kg) : Sum (OP & NP) : 10

“>” = More than
mg/kg = milligram(s) per kilogram

Conc. = Concentration

Remark:

- The list of alkylphenols is summarized in table of Appendix.

Alkylphenol Ethoxylates (APEO) Content Test

Test Method I : For Textile and Other materials:
With reference to EN ISO 18254-1, analysis by Liquid Chromatograph Mass Spectrometer (LC-MS)

Test Method II : For Leather:
With reference to EN ISO 18218-1 and EN ISO 18254-1

Tested Item(s) : I001 White fabric with transparent adhesive

Maximum Limit:	Others: 100 mg/kg (Sum) Recycled materials: 1000 mg/kg (Sum)
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Tested Item(s)	Test Method	Result			Conclusion
		Detected Analyte(s)	Conc.	Unit	
I001	I	ND	ND	mg/kg	PASS

Note:

ND = Not detected
ppm = part(s) per million = mg/kg
Reporting Limit (mg/kg) : Sum (OPEOs & NPEOs) : 20

“>” = More than
mg/kg = milligram(s) per kilogram

Conc. = Concentration

Remark:

- The list of alkylphenol ethoxylates is summarized in table of Appendix.



TEST RESULT

Formaldehyde Content Test

- Test Method I** : Textiles & Other Materials: EN ISO 14184-1
Test Method II : Leather: ISO 17226:2 and/or ISO 17226-1
Test Method III : Glue & 0-3 years old products: JIS L 1041: 2011 Method A
Test Method IV : Carpets and mats: GB 18587 Grade B.
- Tested Item(s)** : I001 White fabric with transparent adhesive

Maximum Limit:	Type I	For baby < 36 months: 16 mg/kg			
	Type II	Others: 75 mg/kg			
	Type III	Carpets and mats : < 0.050 mg/m²/h			
Tested Item(s)	Type	Test Method	Result	Unit	Conclusion
I001	I	III	ND	mg/kg	PASS

Note:

ND = Not detected “>” = More than
ppm = part(s) per million = mg/kg mg/kg = milligram(s) per kilogram
Reporting Limit : 16 mg/kg (Method I, II, III), 0.050 mg/m²/h (Method IV)



TEST RESULT

Chlorophenols Content Test

Test Method : With reference to ISO 17070:2015 or 64 LFBG B 82.02-08 (Modified). Potassium hydroxide extraction, derivatisation and analysis by Gas Chromatograph Mass Spectrometer (GC-MS).

Tested Item(s) : I001 White fabric with transparent adhesive

Maximum Limit:	0.5 mg/kg (Each)			
Tested Item(s)	Result			Conclusion
	Detected Analyte(s)	Conc.	Unit	
I001	ND	ND	mg/kg	PASS

Note:

ND = Not detected

ppm = part(s) per million = mg/kg

Reporting Limit (mg/kg) : Each : 0.5

“>” = More than

mg/kg = milligram(s) per kilogram

Remark:

- The list of chlorophenols is summarized in table of Appendix.

Ortho-phenylphenol (OPP) Test

Test Method : 1 M KOH extraction, 16 hours at 90 degrees C, derivatization and analysis § 64 LFBG B 82.02-08 or DIN EN ISO 17070:2015.

Tested Item(s) : I001 White fabric with transparent adhesive

Maximum Limit:	1000 mg/kg			
Tested Item(s)	Result		Unit	Conclusion
I001	ND		mg/kg	PASS

Note:

ND = Not detected

ppm = part(s) per million = mg/kg

Reporting Limit (mg/kg) : 100

“>” = More than

mg/kg = milligram(s) per kilogram



TEST RESULT

pH Value Test in Textile and Artificial Leather

Test Method : ISO 3071, extraction with potassium chloride solution.

Tested Item(s) : I001 White fabric with transparent adhesive

Maximum Allowable Limit		pH 4.0- pH 7.5		
Parameter	Unit	Result		
Test Item(s)	-	I001	-	-
pH (Trial 1)	-	8.3	-	-
pH (Trial 2)	-	8.3	-	-
Mean of Trial 1 & 2	-	8.3	-	-
Conclusion	-	FAIL	-	-

Phthalates Content Test

Test Method I : Textile: CPSC-CH-C1001-09.4 and EN ISO 14389: 2014.

Test Method II : Others: CPSC-CH-C1001-09.4, analysis by Gas Chromatograph Mass Spectrometer (GC-MS).

Tested Item(s) : I001 White fabric with transparent adhesive

Maximum Limit:	500 mg/kg (Each) 1000 mg/kg (Sum)
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Tested Item(s)	Test method	Result			Conclusion
		Detected Analyte(s)	Conc.	Unit	
I001	I	ND	ND	mg/kg	PASS

Note:

ND = Not detected

">" = More than

Conc. = Concentration

ppm = part(s) per million = mg/kg

mg/kg = milligram(s) per kilogram

Reporting Limit (mg/kg) : Each : 50

Remark:

- The list of phthalates is summarized in table of Appendix.

END



APPENDIX

List of Alkylphenols :					
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Octylphenol (OP)	Various (140-66-9, 27193-28-8, 1806-26-4)	2	Nonylphenol (NP)	Various (25154-52-3, 104-40-5, 84852-15-3, 11066-49-2)
CAS-No. = Chemical Abstracts Service registry number					

List of Alkylphenol Ethoxylates :					
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Octylphenoethoxylates (OPEOs)	Various (9002-93-1, 9036-19-5, 68987-90-6)	2	Nonylphenoethoxylates (NPEOs)	Various (9016-45-9, 26027-38-3, 127087-87-0, 37205-87-1, 68412-54-4)
CAS-No. = Chemical Abstracts Service registry number					

List of Chlorophenols :					
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Pentachlorophenol (PCP) and its salts and esters	87-86-5	3	Trichlorophenol (TriCP) and its salts and esters: 2,3,5- Trichlorophenol; 2,3,6- Trichlorophenol & 2,4,5- Trichlorophenol; 2,4,6- Trichlorophenol; 3,4,5- Trichlorophenol & 2,3,4- Trichlorophenol	933-78-8; 933-75-5 & 95-95-4; 88-06-2; 609-19-8 & 15950-66-0
2	Tetrachlorophenol (TeCP) and its salts and esters: 2,3,5,6- Tetrachlorophenol 2,3,4,6- Tetrachlorophenol 2,3,4,5- Tetrachlorophenol	935-95-5 58-90-2 4901-51-3	-	-	-
CAS-No. = Chemical Abstracts Service registry number					

APPENDIX

List of Phthalates :					
No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Butyl benzyl phthalate (BBP)	85-68-7	12	Di-iso-pentyl phthalate (DIPP)	605-50-5
2	Dibutyl phthalate (DBP)	84-74-2	13	n-Pentyl-iso-pentyl phthalate (NPIPP)	776297-69-9
3	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	14	Di-cyclohexyl phthalate (DCHP)	84-61-7
4	Di-iso-butyl phthalate (DIBP)	84-69-5	15	Di-iso-octyl phthalate (DIOP)	27554-26-3
5	Di-n-octyl phthalate (DNOP)	117-84-0	16	Di-n-pentyl phthalate (DPP)	131-18-0
6	Di-iso-nonyl phthalate (DINP)	28553-12-0	17	Dihexyl phthalate, branched and linear	68515-50-4
7	Di-iso-decyl phthalate (DIDP)	26761-40-0	18	Dimethyl phthalate (DMP)	131-11-3
8	Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	19	1,2-benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0
9	Di-n-hexyl phthalate (DHP)	84-75-3	20	1,2-benzenedicarboxylic acid, di-C7-11-branched and linear, alkyl esters (DHUNP)	68515-42-4
10	Diethyl phthalate (DEP)	84-66-2	21	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6
11	Di-n-propyl phthalate (DPRP)	131-16-8	22	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate; 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters; 1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters	68515-51-5 68648-93-1
CAS-No. = Chemical Abstracts Service registry number					