



TEST REPORT

APPLICANT: SHINWON FELT CO., LTD. REPORT NO. : H214-15-13030

SAMPLE RECEIVED DATE : 2015-05-28
TEST STARTED DATE : 2015-05-28
REPORT ISSUED DATE : 2015-06-03

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SAMPLE DESCRIPTION: ONE(1) PIECE OF SUBMITTED CUTTING SAID TO BE NON WOVEN FABRIC.

ITEM : NEEDLE ROOM FELT

TEST CONDUCTED : AS REQUESTED BY THE APPLICANT, FOR DETAILS PLEASE SEE ATTACHED PAGES.

PREPARED AND CHECKED BY FOR FITI

Koo Koo

HYUN-JIN, KOO QUALITY MANAGER AUTHORIZED BY FOR FITI

moon Ou Iroh

MOON-OK NOH PRESIDENT

※ Report Verification No.: WAM7-M17V-HX7D ※

(You can see the authenticity of your test report through the above "Report Verification No." at FITI homepage.)





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TEST CONDUCTED TEST RESULT

(01) COLORFASTNESS TO WASHING (ISO 105 CO6 : 2010, A2S, 30 MINUTES MECHANICAL WASH AT (40 \pm 2) $^{\circ}$ C, IN 0.4 % ECE REFERENCE DETERGENT AND 0.1 % SODIUM PERBORATE TETRAHYDRATE SOLUTION WITH 10 STEEL BALLS) : GRADE

COLOR CHANGE	4-5
COLOR STAINING	
- ACETATE	4-5
- COTTON	4-5
- NYLON	4-5
- POLYESTER	4-5
- ACRYLIC	4-5
- WOOL	4-5

(02) COLORFASTNESS TO RUBBING (ISO 105 X12 : 2001) : GRADE

	" 1
WARP	
- DRY	4-5
- WET	3-4
WEFT	
- DRY	4-5
- WET	3–4

(03) COLORFASTNESS TO LIGHT (ISO 105 B02 : 2013, XENON-ARC-LAMP, BLUE SCALE) : GRADE

#1

#1

#1

UP TO GRADE 4 4





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TEST CONDUCTED TEST RESULT

(04)) COLORFASTNESS TO PERSPIRATION (ISO 105 E04	4 : 2013) : GRA	NDE
			#1
	ACID COLOR CHANGE COLOR STAINING - ACETATE - COTTON - NYLON - POLYESTER - ACRYLIC - WOOL		4-5 4 4-5 4-5 4-5 4-5 4-5
	ALKALI COLOR CHANGE COLOR STAINING - ACETATE - COTTON - NYLON - POLYESTER - ACRYLIC - WOOL		4-5 4 4-5 4-5 4-5 4-5 4-5
(05)) RESISTANCE TO ARTIFICIAL SALIVA (DIN 53160)-1 : 2010) : (GRADE
			#1
	COLOR STAINING		4-5

(06) FORMALDEHYDE CONTENT (ISO 14184 : 2011, PART 1) : mg/kg

#1

NOT DETECTED

NOTE) DETECTION LIMIT = 16 mg/kg

e-DOCUMENT SERVICE =



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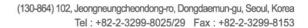
TEST CONDUCTED TEST RESULT

(07) HEAVY METAL'S CONTENT (EN 71 PART 3): mg/kg

#1

LEAD (Pb) < 1 CADMIUM (Cd) < 1 MERCURY (Hg) < 1

NOTE) THE SAMPLE WAS EXTRACTED BY USE OF 0.07 mol/L HCI SOLUTION FOR 2 h AT 37 $^{\circ}\text{C}$. DETECTION LIMIT = 1 mg/kg $\,$ < = LESS THAN





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#1

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(08) ARYLAMINES (BS EN	14362-1:2012)	:	${\rm mg/kg}$

<u>NAME</u>	CAS NO.	
4-AMINODIPHENYL	92-67-1	<5
BENZIDINE	92-87-5	<5
4-CHLORO-o-TOLUIDINE	95-69-2	<5
2-NAPHTYLAMINE	91-59-8	<5
o-AMI NOAZOTOLUENE	97-56-3	<5
2-AMINO-4-NITROTOLUENE	99-55-8	<5
p-CHLOROAN I L I NE	106-47-8	<5
2,4-DIAMINOANISOLE	615-05-4	<5
4,4'-DIAMINODIPHENYLMETHANE	101-77-9	<5
3,3'-DICHLOROBENZIDINE	91-94-1	<5
3,3'-DIMETHOXYBENZIDINE	119-90-4	<5
3,3'-DIMETHYLBENZIDINE	119-93-7	<5
3,3'-DIMETHYL-4,4'-DIAMINODIPHENYLMETHANE	838-88-0	<5
2-METHOXY-5-METHYLBENZENAMINE(p-CRESIDINE)	120-71-8	<5
4,4'-METHYLENE-BIS-(2-CHLOROANILINE)	101-14-4	<5
4,4'-OXYDIANILINE	101-80-4	<5
4,4'-THIODIANILINE	139-65-1	<5
o-TOLUIDINE	95-53-4	<5
2,4-TOLUENEDIAMINE	95-80-7	<5
2,4,5-TRIMETHYLANILINE	137-17-7	<5
4-AMI NOAZOBENZENE	60-09-3	<5
2-METHOXYAN I LINE	90-04-0	<5
2,4-DIMETHYLANILINE	95-68-1	<5
2,6-DIMETHYLANILINE	87-62-7	<5
SUMMARY: PRESENCE OF CARCINOGENIC AMINES		<5

NOTE) DETECTION LIMIT: 5 mg/kg

< = LESS THAN
