

## TEST REPORT

APPLICANT : HAERAE CO., LTD.  
BUYER :

KATRI NO : SFBB20-00000098  
RECEIVED DATE : JAN. 13, 2020  
ISSUED DATE : JAN. 31, 2020  
PAGE(S) : 1 OF 6

APPLICANT'S PROVIDED SAMPLE DESCRIPTION :

ITEM: 60 COTTON STAIN  
SUBMITTED FIBER CONTENT: 100 % COTTON  
SUBMITTED CARE INSTRUCTION: MACHINE WASH WARM, NORMAL CYCLE,  
ONLY NON-CHLORINE BLEACH IF NEEDED,  
TUMBLE DRY LOW, WARM IRON IF NEEDED

TEST ITEM	TEST RESULT
	#1
FIBER CONTENT (%) : AATCC 20A-2018	
COTTON	100
<NOTE> MOISTURE REGAIN : 8.00 % COTTON (BASED ON ASTM D 1909 - 2013)	

- Continues -



Lim, Hun Jin  
Director General

Tested by Name : Ryu Si Hyun



Technical Manager : Kim Jung Min



Location of Test : Wangsan-ro 51, Yongdu-dong, Dongdaemun-gu, Seoul, Korea

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KATRI NO : SFBB20-00000098  
 PAGE(S) : 2 OF 6

TEST ITEM	TEST RESULT
#1	
DIMENSIONAL CHANGE TO WASHING (%) : AATCC 135-2018	
WARP	-4.1
WEFT	-5.5
<NOTE> 1. WASHING CONDITION : MACHINE WASH (41 ± 3) °C, NORMAL CYCLE, TUMBLE DRY LOW, 3 CYCLES 2. (+) MEANS EXTENSION (-) MEANS SHRINKAGE	
APPEARANCE AFTER WASHING : AATCC 135-2018	
COLOR CHANGE	4.0
SELF STAINING	4.5
PILLING	4.5
OVERALL RATING	SLIGHT COLOR CHANGE WAS FOUND.
<NOTE> WASHING CONDITION : MACHINE WASH (41 ± 3) °C, NORMAL CYCLE, TUMBLE DRY LOW, 3 CYCLES	
SKEWNESS CHANGE AFTER WASHING (%) : AATCC 179-2019	
AFTER 3 CYCLES	+1.4
<NOTE> WASHING CONDITION : MACHINE WASH (41 ± 3) °C, NORMAL CYCLE, TUMBLE DRY LOW, 3 CYCLES	
HAND IRON (GRADE) : IN HOUSE METHOD	
WARM IRON	NO CHANGE(SAFE)
FABRIC WEIGHT (g/m <sup>2</sup> ) : ASTM D 3776/D3776M-09a(2017) OPTION C	
	109 (3.23 oz/yd <sup>2</sup> )
YARN NUMBER (Tex) : ASTM D 1059-2017	
WARP	9.6 (61.7 's)
WEFT	9.9 (59.4 's)
THREAD COUNT (Threads/25 mm) : ASTM D 3775-2017	
WARP	190
WEFT	103
WIDTH (cm) : ASTM D 3774-2018 OPTION B	
	159.5 (62.8 inch)

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KATRI NO : SFBB20-00000098

PAGE(S) : 3 OF 6

TEST ITEM	TEST RESULT
#1	
COLOR FASTNESS TO LAUNDERING (GRADE) : AATCC 61-2013, 2A, 49°C	
SELF STAINING	4.5
COLOR CHANGE	4.5
COLOR STAINING - ACETATE	4.5
COLOR STAINING - COTTON	4.5
COLOR STAINING - NYLON	4.5
COLOR STAINING - POLYESTER	4.5
COLOR STAINING - ACRYLIC	4.5
COLOR STAINING - WOOL	4.5
COLOR FASTNESS TO RUBBING (GRADE) : AATCC 8-2016 CROCKMETER METHOD	
DRY	4.5
WET	3.0
COLOR FASTNESS TO WATER (GRADE) : AATCC 107-2013	
SELF STAINING	4.5
COLOR CHANGE	4.5
COLOR STAINING - ACETATE	4.5
COLOR STAINING - COTTON	4.5
COLOR STAINING - NYLON	4.5
COLOR STAINING - POLYESTER	4.5
COLOR STAINING - ACRYLIC	4.5
COLOR STAINING - WOOL	4.5
COLOR FASTNESS TO CHLORINE BLEACH (GRADE) : AATCC SPOT TEST	
COLOR CHANGE	1.0
COLOR FASTNESS TO NON-CHLORINE BLEACH (GRADE) : AATCC SPOT TEST	
COLOR CHANGE	4.5

- Continues -

KATRI NO : SFBB20-00000098  
 PAGE(S) : 4 OF 6

TEST ITEM	TEST RESULT
#1	
DIMENSIONAL CHANGE TO WASHING (%) : AATCC 135-2018	
WARP	-2.0
WEFT	-2.9
<NOTE> 1. WASHING CONDITION : MACHINE WASH (27 ± 3) °C, GENTLE CYCLE, LINE DRY, 3 CYCLES 2. (+) MEANS EXTENSION (-) MEANS SHRINKAGE	
APPEARANCE AFTER WASHING : AATCC 135-2018	
COLOR CHANGE	4.0
SELF STAINING	4.5
PILLING	4.5
OVERALL RATING	SLIGHT COLOR CHANGE WAS FOUND.
<NOTE> WASHING CONDITION : MACHINE WASH (27 ± 3) °C, GENTLE CYCLE, LINE DRY, 3 CYCLES	
SKEWNESS CHANGE AFTER WASHING (%) : AATCC 179-2019	
AFTER 3 CYCLES	+1.4
<NOTE> WASHING CONDITION : MACHINE WASH (27 ± 3) °C, GENTLE CYCLE, LINE DRY, 3 CYCLES	
HAND IRON (GRADE) : IN HOUSE METHOD	
WARM IRON	NO CHANGE(SAFE)
COLOR FASTNESS TO LAUNDERING (GRADE) : Ref. AATCC 61-2013, 2A, 30 °C	
SELF STAINING	4.5
COLOR CHANGE	4.5
COLOR STAINING - ACETATE	4.5
COLOR STAINING - COTTON	4.5
COLOR STAINING - NYLON	4.5
COLOR STAINING - POLYESTER	4.5
COLOR STAINING - ACRYLIC	4.5
COLOR STAINING - WOOL	4.5

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KATRI NO : SFBB20-00000098  
PAGE(S) : 5 OF 6

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TEST ITEM	TEST RESULT
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	#1
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CONCLUSION & RECOMMENDATION :

BASED UPON THE RESULTS, WE RECOMMEND TO READ THE CARE INSTRUCTIONS AS FOLLOWS.

MACHINE WASH COLD  
GENTLE CYCLE  
ONLY NON-CHLORINE BLEACH IF NEEDED  
LINE DRY  
WARM IRON IF NEEDED

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KATRI NO : SFBB20-0000098  
PAGE(S) : 6 OF 6

IMAGE



#1