

Test Report

Report No: ASH17-025150-01

Date: Jun 23 2017

Client name: ZHEJIANG SAMSUNG DOWN CO., LTD.
Client address: NO.288 XIAOSHAO EAST ROAD, XIAOSHAN DISTRICT, HAZHOU, ZHEJIANG
Sample name: SM123 WHITE DUCK DOWN 9010 (Sanitized Antibacterial Treated)
Sample Batch No.: /
Product Date: /
Manufacturer: /
End article and Brand: /
Appearance/colour: white
Substrate (CO,WO,PA,PES,other in %): DOWN
Weight(gr/m²): 100g
Process-conditions
Applied product: Sanitized T99-19
Concentration %: 0.8%
Application method: TIDITTING
Additional chemicals/effects: /
Drying(°C & Sec.): 120°C, 3min
Curing(°C & Sec.): /

Above information and sample(s) was/were submitted and certified by the client, SGS quoted the information with no responsibility as to the accuracy, adequacy and/or completeness.

SGS Sample No.: ASH17-025150.001
SGS reference No.: SL617062347716TX
Date of sample received: 2017-06-15
Testing period: 2017-06-15 ~ 2017-06-23

TEST(S) REQUESTED/TEST METHOD(S)/TEST RESULT(S):

Please refer to the next page(s)

CONCLUSION:

Please refer to the next page(s)

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SGS Authorized Signature

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CONCLUSION:

According to the significance of evaluation from Sanitized AG following Log reduction / percentage results is valuated as good result:

	Log	%
Original	>= 1	>= 90
Washed	>= 0.6	>=70

Pass, The Bacteriostatic activity against *Staphylococcus aureus* is >5.4 / >99.9%, the submitted sample is valuated as good result.

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TEST(S) REQUESTED:

Selected test(s) as requested by applicant:
Antibacterial Assessment for the submitted sample

TEST METHOD:

Antibacterial Assessment: JIS L 1902:2015 Textiles-Determination of antibacterial activity and efficacy of textile products Chapter 8.1: Quantitative test (Absorption method)

TEST ORGANISMS:

Staphylococcus aureus ATCC 6538

TEST RESULT(S):

Antibacterial Assessment

Name of test bacteria (Strain number)	<i>Staphylococcus Aureus</i> (ATCC 6538)	
Concentration of inoculum (CFU/mL)	2.8×10^5	
Difference of extremes for three control specimens(log) (condition: less than 1)	0h	18h
	<0.1	<0.1
Difference of extremes for three test specimens(log) (condition: less than 2)	0h	18h
	<0.1	<0.1
Growth value of F of control specimens ($F = \log C_t - \log C_0$)	+2.0 ($\log C_t: +6.7, \log C_0: +4.7$)	
Growth value of G of test specimens ($G = \log T_t - \log T_0$)*	<-3.4 ($\log T_t: <+1.3, \log T_0: +4.6$)	
Antibacterial activity value / In percent* ($A = F - G$) / (%)**	>5.4 / >99.9	
Measuring method	Plate count method	
Sterilization method	Autoclave(121 °C/15min)	

REMARK:

* In the case of $\log C_0 > \log T_0$, substitute $\log C_0$ for $\log T_0$.

*The test result in percent is calculated according to the specified formula from Sanitized AG.

The control sample is 100% cotton standard fabric specified by JIS L 1902:2015, provided by SGS lab.

A: antibacterial activity value

$\log C_t$: common logarithm of arithmetic average of the numbers of bacteria, obtained from three control specimens after 18h.

$\log C_0$: common logarithm of arithmetic average of the numbers of bacteria, obtained from three control specimens immediately after 0h.

$\log T_t$: common logarithm of arithmetic average of the numbers of bacteria, obtained from three test specimens after 18h.

$\log T_0$: common logarithm of arithmetic average of the numbers of bacteria, obtained from three test specimens immediately after 0h.

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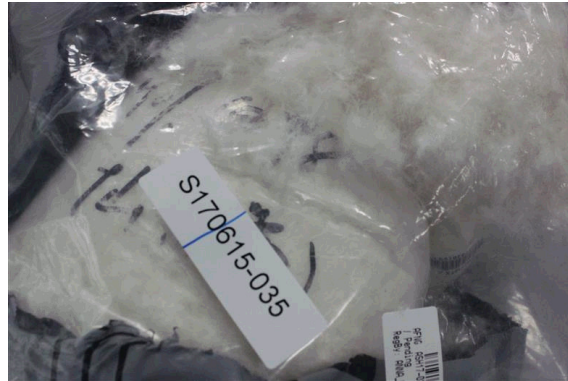
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SAMPLE DESCRIPTION: sample in bag
ASH17-025150.001



*** End ***

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