

# Final Test Report

## Treated SM302T 90% Washed White Goose Down

XS-31953  
Hangzhou Samsung Down Products Co.,  
Ltd

09 Feb 2017

### Michael Mao

Hangzhou Samsung Down Products Co., Ltd  
No.288, Xiaoshao East Road, Xintang Street,  
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CHINA

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michael@samsungdown.com  
Arrived: 16 Jan 2017  
Completed: 25 Jan 2017  
Fat and Oil: 09 Feb 2017  
Retest FP: 09 Feb 2017

**Sample Description:** Plumage

**Shipped By:** STO 402221842938

**Filling Label:**

**Sample Identification:** Treated

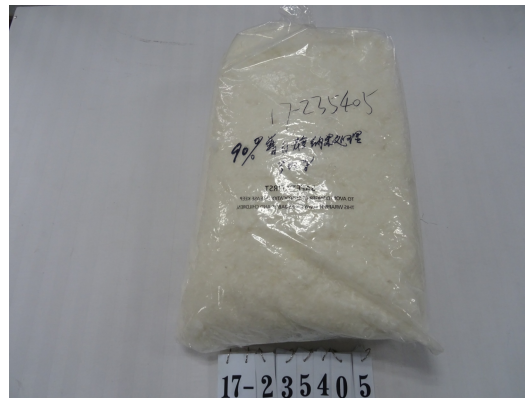
SM302T 90% Washed White Goose Down (Texcote Nano DWR).

Zi Goose, Anser Cygnoides Domestica, Farm Raised.

BRAND NAME: MACKAGE

SEASON: FALL17

STYLE NAMES: As Per Production/Consumption Chart Submitted to APP



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### Content Analysis IDFB-3 - USA Report Format

<b>Down Cluster</b>	92.7%
<b>Down Fiber</b>	2.7%
<b>Feather Fiber</b>	2.3%
<b>Waterfowl Feathers</b>	2.2%
<b>Broken / Damaged Feathers</b>	0.1%
<b>Quill</b>	0.0%
<b>Landfowl</b>	0.0%
<b>Residue</b>	0.0%
<b>Total</b>	100.0%

### Species IDFB-12

<b>Goose Down</b>	87%
<b>Duck Down</b>	13%
<b>Goose Feathers</b>	95%
<b>Duck Feathers</b>	5%
<b>Total Goose</b>	87%
<b>Total Duck</b>	13%

### Fill Power

Method	Conditioning	Final
IDFB/Lorch Cylinder (in <sup>3</sup> /30g)	Steam IDFB-10-B	770

### Cleanliness Evaluation

<b>Oxygen IDFB-7</b>	1.6 mg/100g
<b>Turbidity IDFB-11-B</b>	1000+ mm
<b>IDFB-11-A</b>	1.06 NTU
<b>Fat and Oil IDFB-4</b>	1.1%
<b>Moisture IDFB-5</b>	8.3%

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### Odor Evaluation

CHECK-IN	
<b>1. ODOR UPON ARRIVAL :</b> Odor upon opening of shipping box	Normal
<b>2. INITIAL ODOR of SAMPLE :</b> Odor of sample after removal from shipping box and any packaging material (such as plastic, etc.)	Normal
<b>3. LATER ODOR of SAMPLE :</b> (24 hours after removal from packaging)	'Not necessary if odor is OK in #2 above.'
<b>4. ODOR of PACKAGING :</b> (Any Odor that might exist in packaging)	Normal
OPENING ROOM	
<b>5. INITIAL ODOR - FILL MATERIAL :</b> Odor of fill material immediately after cutting open samples	Normal
<b>6. LATER ODOR - FILL MATERIAL :</b> Odor after leaving fill material in a screened box for 24 hours	'Not necessary if odor is OK in #5 above.'
LAB TEST	
<b>7. ACTUAL LAB TEST :</b> (1-5 'Nose' Lab Test)	4 PASS (Normal Feather Odor)
<b>8. OTHER COMMENTS :</b> OtherCommentsDesc	
<b>Conclusion</b>	

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# DWR Test Report



## Sample Info – Treated

IDFL #: 17-235405

Treated

SM302T 90% Washed White Goose Down (Texcote Nano DWR).

Sample ID: Zi Goose, Anser Cygnoides Domestica, Farm Raised.

BRAND NAME: MACKAGE

SEASON: FALL17

STYLE NAMES: As Per Production/Consumption Chart  
Submitted to APP

Date: 9-Feb-2017

Expected Results		Test Results	
Content:	90.0%	Content:	92.7%
Species:	Goose	Species:	Goose
Fill Power:	N/A	Fill Power:	770in <sup>3</sup> /30g
Fat & Oil	N/A	Fat & Oil	1.1%

Approved By:



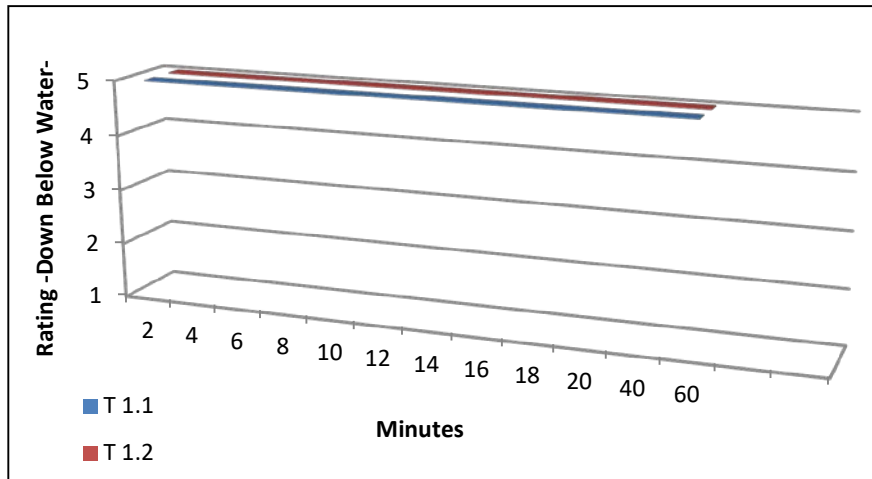
# DWR Test Report

## IDFB 18-A

Hydrophobic Shake Test

Measurement Interval - 2 Minutes

### 17-235405



5 Down Completely Above Water  
 1 Down Completely Under Water

Minutes	T 1.1	T 1.2
2	5	5
4	5	5
6	5	5
8	5	5
10	5	5
12	5	5
14	5	5
16	5	5
18	5	5
20	5	5
40	5	5
60	5	5

Treated material remains at rating 5 after : 60 minutes



# DWR Test Report

## IDFB 18-A (Picture References)

Hydrophobic Shake Test

Measured Time Interval – 2 Minutes

2 Minutes



Rating: 5

10 Minutes



Rating: 5

## IDFB 18-A

Hydrophobic Shake Test

Measured Time Interval – 2 Minutes

40 Minutes



Rating: 5

60 Minutes



Rating: 5