

Test Report

90% washed white duck down

IDFL # 20-310814

Zhejiang Samsung Down Co., Ltd
Wed 24 June 2020

Linda Shen
Zhejiang Samsung Down Co., Ltd
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Xiaoshan District,
Hangzhou, Zhejiang 311201
China

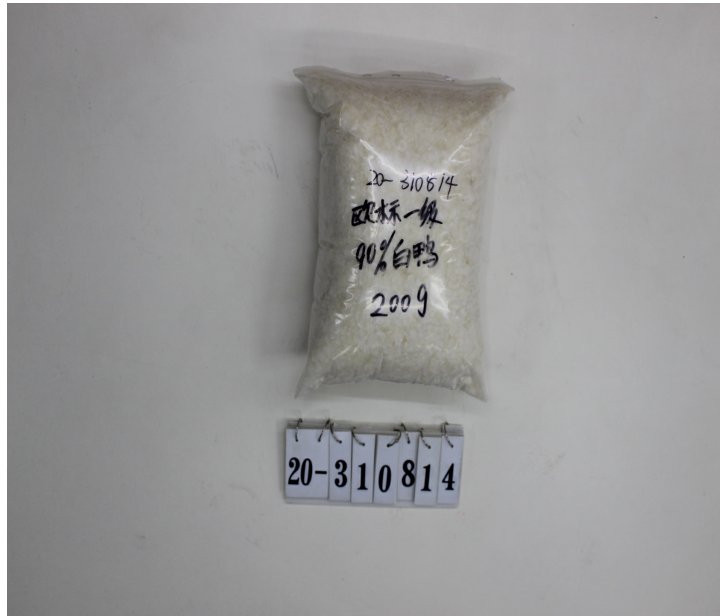
linda@samsungdown.com

Normal (8-10 Days)

Arrival Date: Mon 15 June 2020

Report Date: Wed 24 June 2020

Sample Type: Plumage
Shipped By: SF 1089595963074
Sample Identification: 90% washed white duck down



¹ CMA Accredited

² CNAS Accredited

This analysis represents (within normal testing variances) the test results from the sample(s) submitted. The analysis may not represent the entire lot, batch or production run. In no event shall IDFL be responsible or liable for any direct, indirect, punitive, incidental, special, or consequential damages whatsoever arising out of or connected with the use of, misuse of, or reliance upon such results or analysis. This test report is subject to the Terms and Conditions found at www.idfl.com.

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Test Orders Summary

Test	Test Component	Result	Expected Value
Content EN 12131 2018	Down Clusters	86.7%	81.0%
	Total Down	88.6%	
Species Down & Feathers IDFB Part 12 2013	Total Goose	0%	
	Total Duck	100%	
Fill Power -Tumble Dry Conditioning EN 12130-B 2018	Final Fill Power Height	176 mm/30g	
Oxygen Number EN 1162 1996	Oxygen	1.6 mg/100g	
Turbidity EN 1164 1998	Turbidity Glass Tube	1000 mm	

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Content EN 12131 2018^{2, 1}

Down Clusters	86.7%
Down Fibers	1.9%
Waterfowl Feather Fibers	1.1%
Waterfowl Feathers	9.8%
Broken and Damaged Waterfowl Feathers	0.1%
Quill	0.0%
Landfowl	0.0%
Residue	0.4%
Total	100.0%

Result(s) Used for Evaluation

Total Down	88.6%
Down Fiber Allowance (1.9%) + Down Clusters (86.7%)	
Total Waterfowl Feathers	10.7%
Waterfowl Feather Fibers & Broken and Damaged Waterfowl Feathers Allowance (0.9%) + Waterfowl Feathers (9.8%)	
Other Elements	0.7%
Excess Down Fiber (0.0%) + Excess Waterfowl Feather Fibers & Broken and Damaged Waterfowl Feathers (0.3%) + Landfowl (0.0%) + Residue (0.4%) + Quill (0.0%)	

Species Down & Feathers IDFB Part 12 2013^{2, 1}

Goose Down	0%
Duck Down	100%
Goose Feathers	0%
Duck Feathers	100%
Total Goose	0%
Total Duck	100%

Fill Power - Tumble Dry Conditioning EN 12130-B 2018²

Height	176 mm/30g
Volume	388 cm ³ /g

Fill Power - Steam Conditioning EN 12130-A 2018²

Volume	750 in ³ /30g
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Oxygen Number EN 1162 1996^{2, 1}

Oxygen	1.6 mg/100g
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Turbidity EN 1164 1998 ^{2, 1}

Turbidity Glass Tube 1000 mm

Turbidity NTU 1.19 NTU

European Standards Down & Feather Products Labelling EN 12934

Evaluation Component	Test	Test Component	Requirement	Result	Finding
Basic	Oxygen Number EN 1162 1996	Oxygen Number	Max 20 mg/100g	1.6 mg/100g	Pass
	Turbidity EN 1164 1998	Turbidity	Greater than 300 mm	1000 mm	Pass
90% Down / 10% Feathers	Content EN 12131 2018	Total Down	Min 85%	88.6%	Pass
		Other Elements	N/A %	0.7%	-
		Down Clusters	Min 80.95%	86.7%	Pass
		Landfowl	Max 9.9%	0.0%	Pass
		Total Waterfowl Feathers	N/A %	10.7%	-
Class I	Content EN 12131 2018	Other Elements	Max 5%	0.7%	Pass
Duck (Down & Feathers)	Species Down & Feathers IDFB Part 12 2013	Total Duck	Min 70	100	Pass
Fill Power Steam (in ³ /30g)	Fill Power - Steam Conditioning EN 12130-A 2018	Fill Power Steam (in ³ /30g)		750 in ³ /30g	-
Fill Power Tumble Dry (cm ³ /g)	Fill Power - Tumble Dry Conditioning EN 12130-B 2018	Fill Power Tumble Dry (cm ³ /g)		388 cm ³ /g	-

Total Down: Down Fiber Allowance (1.9%) + Down Clusters (86.7%) = **88.6%**

Total Waterfowl Feathers:

Waterfowl Feather Fibers & Broken and Damaged Waterfowl Feathers Allowance (0.9%) + Waterfowl Feathers (9.8%)

= **10.7%**

Other Elements:

Excess Down Fiber (0.0%) + Excess Waterfowl Feathers & Broken and Damaged Waterfowl Feathers (0.3%) + Landfowl (0.0%) + Residue (0.4%) + Quill (0.0%)

= **0.7%**

Suggested Label based on EN 12934 requirements

New Pure Duck Down and Feathers Class I,
90% Down
10% Feathers

The decision rules found in the test standard EN 12934:1999 fall within the measure of uncertainty as referenced in the relevant test standards

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