

Test Report

white duck feather 2-4cm

IDFL # 20-310303

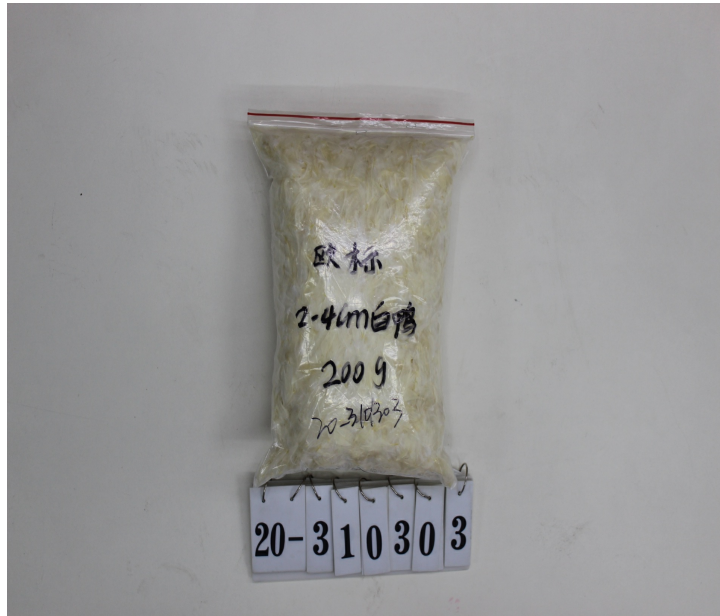
Zhejiang Samsung Down Co., Ltd
Wed 10 June 2020

Linda Shen
Zhejiang Samsung Down Co., Ltd
No.288, Xiaoshao East Road,
Xintang Street,
Xiaoshan District,
Hangzhou, Zhejiang 311201
China

linda@samsungdown.com
3-Day

Arrival Date: Fri 5 June 2020
Report Date: Wed 10 June 2020

Sample Type: Plumage
Shipped By: By Hand
Sample Identification: white duck feather 2-4cm



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.

IDFL LABORATORY AND INSTITUTE

IDFL SALT LAKE
1455 South 1100 East
Salt Lake City, UT 84105
USA
+1 801 467 7611
info@idfl.com

IDFL EUROPE AG
Zürcherstrasse 282
CH-8500 Frauenfeld
Switzerland
+41 52 765 1574
europe@idfl.com

IDFL CHINA
Tonghui Mid-Road 688, Xiaoshan
Hangzhou Zhejiang 311200
China
+86 571 8273 6561
china@idfl.com

IDFL TAIPEI
2F., No. 163 Sec. 2, Wenhua Rd.
Banqiao District, New Taipei City
Taiwan
+886 2 2259 1178
taiwan@idfl.com

Approved By

www.idfl.com
Client 2313
XS
Sample 5 of 5
Page 1 of 4

Test Report

white duck feather 2-4cm

IDFL # 20-310303

Zhejiang Samsung Down Co., Ltd

Wed 10 June 2020

Test Orders Summary

Test	Test Component	Result	Expected Value
Content EN 12131 2018	Total Down	2.9%	
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	81 mm/30g	
Oxygen Number EN 1162 1996	Oxygen	1.6 mg/100g	
Turbidity EN 1164 1998	Turbidity Glass Tube	1000 mm	

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.

IDFL LABORATORY AND INSTITUTE

IDFL SALT LAKE
1455 South 1100 East
Salt Lake City, UT 84105
USA
+1 801 467 7611
info@idfl.com

IDFL EUROPE AG
Zürcherstrasse 282
CH-8500 Frauenfeld
Switzerland
+41 52 765 1574
europe@idfl.com

IDFL CHINA
Tonghui Mid-Road 688, Xiaoshan
Hangzhou Zhejiang 311200
China
+86 571 8273 6561
china@idfl.com

IDFL TAIPEI
2F., No. 163 Sec. 2, Wenhua Rd.
Banqiao District, New Taipei City
Taiwan
+886 2 2259 1178
taiwan@idfl.com

Approved By

www.idfl.com

Client 2313

XS

Sample 5 of 5

Page 2 of 4

Test Report

white duck feather 2-4cm

IDFL # 20-310303

Zhejiang Samsung Down Co., Ltd
Wed 10 June 2020

Content EN 12131 2018^{2, 1}

Down Clusters	2.8%
Down Fibers	0.1%
Waterfowl Feather Fibers	0.3%
Waterfowl Feathers	95.0%
Broken and Damaged Waterfowl Feathers	1.4%
Quill	0.0%
Landfowl	0.0%
Residue	0.4%
Total	100.0%

Result(s) Used for Evaluation

Total Down	2.9%
Down Fiber Allowance (0.1%) + Down Clusters (2.8%)	
Total Waterfowl Feathers	96.7%
Waterfowl Feather Fibers & Broken and Damaged Waterfowl Feathers Allowance (1.7%) + Waterfowl Feathers (95.0%)	
Other Elements	0.4%
Excess Down Fiber (0.0%) + Excess Waterfowl Feather Fibers & Broken and Damaged Waterfowl Feathers (0.0%) + 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	81 mm/30g
Volume	178 cm ³ /g

Fill Power - Steam Conditioning EN 12130-A 2018²

Volume	365 in ³ /30g
--------	--------------------------

Oxygen Number EN 1162 1996^{2, 1}

Oxygen	1.6 mg/100g
--------	-------------

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.

IDFL LABORATORY AND INSTITUTE

IDFL SALT LAKE
1455 South 1100 East
Salt Lake City, UT 84105
USA
+1 801 467 7611
info@idfl.com

IDFL EUROPE AG
Zürcherstrasse 282
CH-8500 Frauenfeld
Switzerland
+41 52 765 1574
europe@idfl.com

IDFL CHINA
Tonghui Mid-Road 688, Xiaoshan
Hangzhou Zhejiang 311200
China
+86 571 8273 6561
china@idfl.com

IDFL TAIPEI
2F., No. 163 Sec. 2, Wenhua Rd.
Banqiao District, New Taipei City
Taiwan
+886 2 2259 1178
taiwan@idfl.com

Approved By

www.idfl.com

Client 2313

XS

Sample 5 of 5

Page 3 of 4

Test Report

white duck feather 2-4cm

IDFL # 20-310303

Zhejiang Samsung Down Co., Ltd
Wed 10 June 2020

Turbidity EN 1164 1998 ^{2, 1}

Turbidity Glass Tube **1000 mm**

Turbidity NTU **1.96 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
100% Waterfowl Feathers	Content EN 12131 2018	Total Down	Min 0%	2.9%	Pass
		Other Elements	N/A %	0.4%	-
		Down Clusters	Min 0%	2.8%	Pass
		Landfowl	Max 9.9%	0.0%	Pass
Class I	Content EN 12131 2018	Other Elements	Max 5%	0.4%	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)		365 in³/30g	-
Fill Power Tumble Dry (cm ³ /g)	Fill Power -Tumble Dry Conditioning EN 12130-B 2018	Fill Power Tumble Dry (cm ³ /g)		178 cm³/g	-

Total Down: Down Fiber Allowance (0.1%) + Down Clusters (2.8%) = **2.9%**

Total Waterfowl Feathers:

Waterfowl Feather Fibers & Broken and Damaged Waterfowl Feathers Allowance (1.7%) + Waterfowl Feathers (95.0%)

= **96.7%**

Other Elements:

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

= **0.4%**

Suggested Label based on **EN 12934** requirements

New Pure Duck Feathers Class I,
100% 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

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.

IDFL LABORATORY AND INSTITUTE

IDFL SALT LAKE
1455 South 1100 East
Salt Lake City, UT 84105
USA
+1 801 467 7611
info@idfl.com

IDFL EUROPE AG
Zürcherstrasse 282
CH-8500 Frauenfeld
Switzerland
+41 52 765 1574
europe@idfl.com

IDFL CHINA
Tonghui Mid-Road 688, Xiaoshan
Hangzhou Zhejiang 311200
China
+86 571 8273 6561
china@idfl.com

IDFL TAIPEI
2F., No. 163 Sec. 2, Wenhua Rd.
Banqiao District, New Taipei City
Taiwan
+886 2 2259 1178
taiwan@idfl.com

Approved By

www.idfl.com

Client 2313

XS

Sample 5 of 5

Page 4 of 4