

羽绒绒检测报告单

Feather and Down Test Report
吸湿排汗羽绒

CONTENT IDFB Part 3 2013	
朵绒 Down Clusters	91.6%
绒丝 Down Fibers	2.3%
羽丝 Waterfowl Feather Fibers	1.0%
毛片 Waterfowl Feathers	4.3%
损伤羽毛 Broken and Damaged Waterfowl Feathers	0.1%
长毛片 Quill	0.0%
陆禽毛 Landfowl	0.3%
杂质 Residue	0.4%
总计 Total	100%
蓬松度 Steam Fill Power IDFB Part 10 -B 2015	
Volume	775 in ³ /30g
耗氧指数 Oxygen IDFB Part 7 2013	
耗氧指数 Oxygen	1.6 mg/100g
清洁度 Turbidity IDFB Part 11 2013	
浊度玻璃管 Turbidity Glass Tube	1000mm
残值率 Fat and Oil IDFB Part 4 2013	
残值率 Fat and Oil	0.9%
APEO ISO 18254-1 2016	
Octylphenol Polyethoxylate (OPEO)	3.1
Nonylphenol Polyethoxylate (NPEO)	2.2
SUM (OPEO+NPEO)	5.3

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STUDY N°LIU210819: EFFICACY ASSESSMENT OF DOWN TREATED
WITH "COOL TOUCH MOISTURE MANAGEMENT"

Title: "Efficacy assessment of feathers treated with COOL TOUCH MOISTURE MANAGEMENT"
Report Nr.: LIU210819
Customer: LIU QIAO
Date: August, 21st 2019 |
Author: Camille PALAMIDESSI
Research Engineer at Proneem

I. SAMPLES DESCRIPTION

Sample #	Textile material	Treatment
1	Goose down	COOL TOUCH @12%/w
2	Goose down	UNTREATED

II. PERFORMANCE TESTS

Laboratory: Microtek, 87 boulevard de la Méditerranée, 13015 Marseille, France

Study monitor: Camille PALAMIDESSI, Engineer

Study completion date: 25/07/2019

Methods: COOL TOUCH MOISTURE MANAGEMENT:
- Water absorption speed (Internal Method)
- Water diffusion radius (Internal Method)
- Drying speed (Internal Method)

测试方法: 物
- 吸水速度
- 扩散半径
- 干燥速度

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III. RESULTS

A. WATER ABSORPTION SPEED

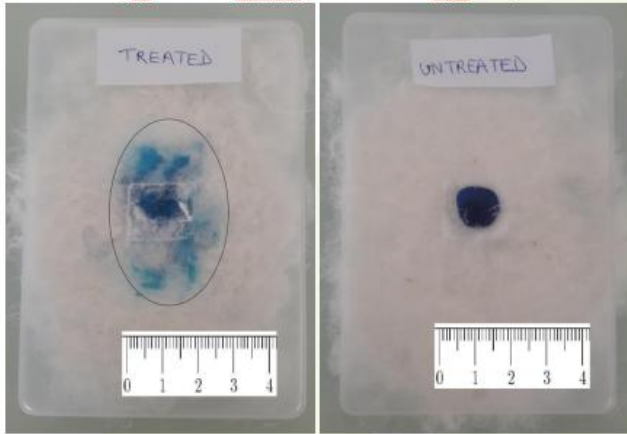
Sample #	Absorption time (sec)	Comparison with the control sample
1	0.98	The sample becomes hydrophilic.
2	>1h (Hydrophobic)	N/A

The sample #1 becomes hydrophilic and absorbs quickly the water (≈1 second).

B. WATER DIFFUSION RADIUS

Sample #	Diffusion radius (cm)	Comparison with the control sample
1	2.5-5.0	x2.5-5.0 bigger
2	1.0	N/A

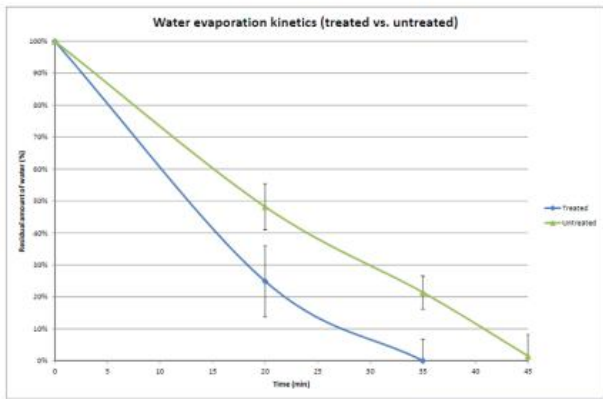
The sample #1 has a diffusion radius 2.5 to 5.0 bigger than the control sample. Water is more efficiently diffused.



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C. DRYING SPEED

Sample #	Drying time (min)	Comparison with the control sample
1	35	22% faster
2	45	N/A



Treated sample dries 22% faster than control sample.

测试方法: 干燥速度

IV. CONCLUSION 结论

COOL TOUCH 羽绒绒 测试方法: 干燥速度
Sample treated with "COOL TOUCH MOISTURE MANAGEMENT" (at 12% w/w) exhibits an improved "moisture management" performance in comparison with the untreated sample:

- 吸水速度: 测试方法: 干燥速度
- The treated sample becomes hydrophilic and absorbs quickly the water (<1 second).
- Diffusion radius is 2.5 to 5.0 bigger than on the control sample.
- Drying is 22% faster on the treated sample than on the control sample.

测试方法: 干燥速度

The conclusion is that COOL TOUCH MOISTURE MANAGEMENT" treatment improves the "moisture management" characteristics of the down (absorption, diffusion, drying).

Camille PALAMIDESSI 21/08/2019
Author Date Signature