

adidas

PHP-AP0703

Moisture Content Test

Referenced documents:

adidas Quality Assurance Test Matrix 2021

PHP-AP0703 (7.03) Moisture content Test V1_1

Mold Prevention Process – Global Quality Apparel – June 2018 Adidas

ISO 6741-1:1989-07 & ISO 6741-2:1987-04

SCI

Partner for Success

- 01. Objective and Scope 目的和範圍
- 02. Hardware / Equipment 硬體/設備
- 03. Sample 試片
- 04. Procedure 步驟
- 05. Requirements 要求
- 06. Document revision history 文檔修訂歷史

Objective目的

To measure the moisture content to prevent mold issue during storage and/or transport.

為防止在儲存和/或運輸過程中發霉，進行濕度的測量。

Scope範圍

For all products which will be stored and/or transported.

對於所有會進行存儲和/或運輸的產品。

Note:

It is not required that T1 suppliers are accredited for the execution of the oven test!

注意:

不需要經過T1供應商認可即可進行烘箱測試！



Aqua-Boy (hand measuring machine) Aqua-Boy(手動測量儀)

or any other device from a different supplier providing the same reading with comparable accuracy.
或其他供應商提供，可以測出同樣準確數據的其他設備。



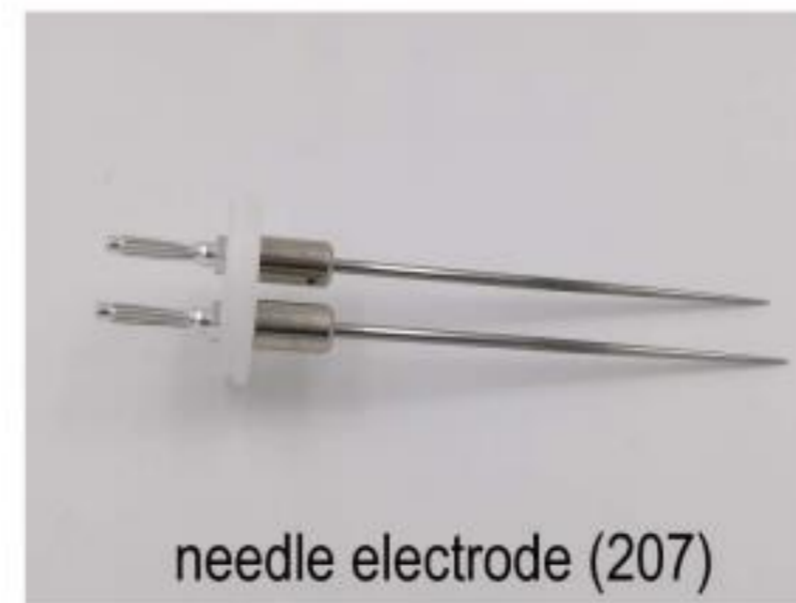
measuring cable (200)



surface electrode (213)



electrode holder (204)



needle electrode (207)

The Aqua-boy must be minimum once a year external calibrated as per the works-standard specification.
測量儀必須至少每年進行一次外部校準。

Moisture test process and Selection 水份測試過程及取樣

Incoming Fabric Testing 布料入倉測試

- o Before materials are released and stored in the material warehouse, fabrics should be tested for material moisture content with a moisture meter, to confirm if it is within a pre-determined range for the actual fiber content. The material moisture test result must be recorded, any failed fabric rolls cannot be issue to the next process. Any failed fabric must be segregated, and issues addressed with T2.
- o When QC doing the fabric inspection, select 10% of the fabric rolls, to test the fabric moisture for every selected fabric rolls.
- o If any material stored in the warehouse more than 3 months, all rolls must be re tested moisture content prior to use.

o在卸下物料並將其存儲在物料倉庫前，應使用濕度計測試布料的水分含量，確認實際布料濕度是否在預定範圍內。並記錄濕度測試結果，任何不合標準的布卷都不可進行下一步。必須區隔所有不合格的布捲，並反映給T2。



- o在進行布料品質檢查時，選擇10%的布卷，測試每個選擇的布卷布料水分。
- o如果任何材料在倉庫中存儲的時間超過3個月，必須在使用前重新測試所有布捲的濕度。

濕度測試過程及取樣 Moisture test process and Selection

Moisture Content Test at End-line 終端水份含量測試

- o Factory must measure the moisture content on garments at the end-line, after pressing and drying process.
- o **In every 4 working hours, select 3 pcs from each sewing line** to test the garments moisture, the test results must be documented.
If any failure, additional pieces must be checked & further drying time allowed and product retested before packing.

Moisture Test at Final Inspection 水份含量的最終檢查

During CFA AQL inspection, require moisture test on both the cartons and the finished product.

- o All selected cartons must be **tested inside & outside box** for the carton moisture level.
- o **In each selected carton, select 3 pcs garments from top, middle, and bottom,** to test the garment moisture, the test result must be documented.
The garments should be tested as soon as the cartons are selected and opened to get the true result.
- o If any cartons or garments failed the test, the whole PO must be re-work, and the investigation need to be carried out to identify the root cause, the prevention actions must be documented and implemented.

- o 必須對所有被選定的紙箱進行內部和外部的濕度測試。
- o 在每個取樣的紙箱內，從上層、中間和底部取3件服裝，測試服裝的濕度，必須記錄測試結果。
- o 一旦將選擇的紙箱打開，就應立即對服裝進行測試才能得到真實的結果。

- o 工廠必須在服裝整燙和烘乾處理的最後測量濕度。
- o 每隔4個工作小時，從每條車縫產線中取3件來測試服裝的濕度，必須將測試結果記錄在案。
- o 如果有任何超出標準，則必須檢查並再進行烘乾，然後在包裝之前對產品重新進行測試。



- o 如果任何紙箱或服裝未通過測試，整個PO則必須進行返工，並且必須進行調查以查明根本原因，必須將預防措施記錄在案並予以實施。

Battery check 電池檢查

Depress the red test button.

The needle must then point so within the red area.

If this can not be done, the battery must be renewed.

電池檢測 - 按動紅色測試鍵，指針應該指在紅色區域，如指針未在紅色區域內，則需要更換新電池。



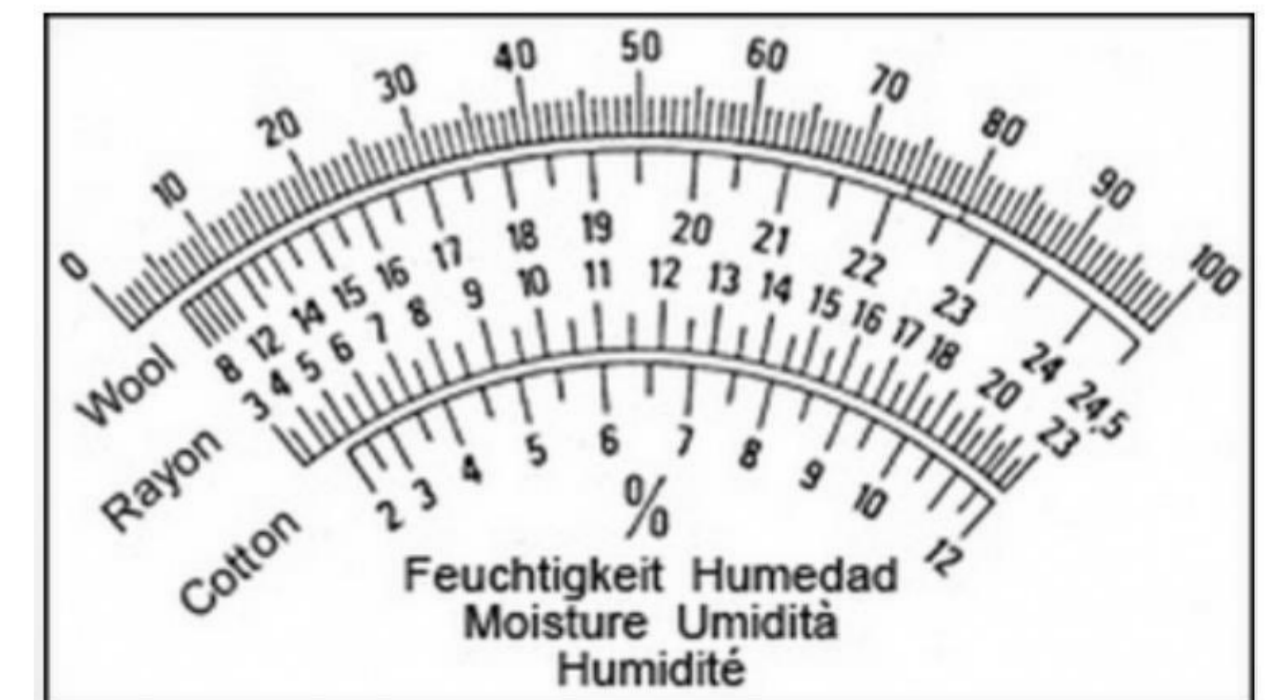
Measuring 測量

Having connected the electrode to the meter, bring it into firm contact with the product to be measuring.

Depress the white measuring button and read the result directly on the meter scale.

Release the white button to finish the operation.

測試時，電極與主機連接後，將電極放在待測目標上，按住白色測試鍵，讀出刻度盤讀數，完成測試後鬆開白色鍵。



Average of min. three measurements

量測3個點並平均其數值。

PHX-AP0703 Moisture Content Test – Version 1.1

PHX-AP0703水分含量測試-版本1.1

Material composition	Aqua Boy max. scale value	ISO 6741-1/-2 max. moisture content
Cotton and Cotton blends		
100% Cotton	≤ 56	≤ 7,0%
90% Cotton 10% Elastane/Spandex (Cotton content 85% - 99%)	≤ 56	≤ 7,0%
70% Cotton 30% Polyamide (Cotton content 65% - 75%)	≤ 59	≤ 6,1%
80% Cotton 20% Polyester (Cotton content 75%-85%)	≤ 59	≤ 6,0%
70% Cotton 30% Polyester (Cotton content 65% - 75%)	≤ 53	≤ 5,5%
60% Cotton 40% Polyester (Cotton content 55% - 65%)	≤ 45	≤ 5,0%
50% Cotton 50% Polyester (Cotton content 45% - 55%)	≤ 37	≤ 4,5%
50% Cotton 50% Polyacrylic (Cotton content 45% - 55%)	≤ 62	≤ 4,5%

Material composition	Aqua Boy max. scale value	ISO 6741-1/-2 max. moisture content
Viscose and Viscose blends		
100% Viscose	≤ 59	≤ 13,0%
90% Viscose 10% Elastane/Spandex (Viscose content 85% - 99%)	≤ 59	≤ 13,0%
50% Viscose 50% Cotton (Viscose content 45% - 55%)	≤ 48	≤ 10,0%
80% Viscose 20% Polyamide (Viscose content 75%-85%)	≤ 59	≤ 11,2%
50% Viscose 50% Polyester (Viscose content 45% - 55%)	≤ 57	≤ 7,5%
30% Viscose 70% Polyester (Viscose content 25% - 35%)	≤ 62	≤ 5,3%
Other fibers and blends		
100% Linen	≤ 67	≤ 11,0%
60% Linen 40% Cotton (Linen content 55% - 65%)	≤ 47	≤ 9,4%
100% Polyamide	≤ 67	≤ 4,0%
100% Polyacrylic	≤ 83	≤ 2,0%
100% Polyester	≤ 57	≤ 2,0%

Document revision history

Document revision history 文檔修訂歷史

Date	Section	Change Description
2021/5/25		Require oven test only at ext. 3rd party lab.