

Kohl's Department Stores

Product Services

Heat Transfer & Screen Print Labels Wash Durability Evaluation SOP

1) Overview

Kohl's require that all apparel and apparel accessories with heat transfers & screen print labels be subject to wash durability prior to and during production to assure the quality and durability of the labels. The purpose of Kohl's Wash Durability Evaluation SOP Procedure for garments with heat transfer & screen print labels is to determine the appearance retention of the label used on apparel products after repeated home launderings.

Federal mandates that the care instruction on a garment must be permanent for the life of the garment. The mandate does not clearly quantify what is the life of a garment. In the absence of such information, Kohl's require:

1.1 Preferred Label Supplier Responsibilities:

- A. All heat transfers & screen print labels provided to Kohl's vendors regardless of product category, when used for care instruction, must withstand a minimum of 10 washes or 3 dry cleaning cycles during bulk production per the garment's care instruction. This requirement is non-negotiable.
- B. **Heat transfers & Screen Print labels when used for anything other than care instructions (e.g. fiber content, country of origin, brand name logo etc.) should withstand a minimum of 5 washes or 3 dry cleaning cycles during bulk production per the garment's care instruction. This would ensure the quality of the product.**

1.2 Non-Preferred Label Supplier Responsibilities:

- A. All heat transfers & screen print labels provided to Kohl's vendors regardless of product category, when used for care instruction, must withstand a minimum of 25 washes during bulk production per the garment's care instruction. This requirement is non-negotiable.

1.3 When using heat transfers & screen prints for one of Kohl's Private Brand & Exclusive Brand programs, the following guidelines must be taken into consideration:

A. FABRICS TO USE

- i. Knit flat surfaces – jersey, interlocks and piques
- ii. Certain textured or stretch fabrics – ribs, stretch interlocks, stretch jersey, stretch ribs and lightly brushed fabrics
- iii. Wovens – plain, twill or satins

B. FABRICS TO AVOID

- i. Heavily brushed
- ii. Napped
- iii. Mesh
- iv. High pile
- v. Coated
- vi. Fabrics with special treatments – waterproof or in some instances treated with heavy softeners

C. FONT SIZE

- i. Must be legible
- ii. Minimum size 5
- iii. If small font use, text must be "CAPITALIZE"

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- iv. The bigger the font size, the better the performance
- D. COLOR OF INK & COLOR OF BACKGROUND
 - i. Use contrasting colors where the color of the ink used in the label is in contrast to the base fabric
 - ii. Highlight the script so that it stands out from the base
- E. PRESSER EQUIPMENT TO APPLY HEAT TRANSFER LABELS
 - i. Automatic or Semi- Auto Presser ONLY

Please note to verify the durability of the Labels this test must be done prior to Garment Production.

2) Testing

2.1 Preferred Suppliers

Label Supplier who would like to become one of Kohl's Preferred Suppliers must go through the following procedures:

- A. Development Testing (financial responsibility is the label supplier) –For additional details in regards to preferred suppliers please review the “Introduction to Kohl's Private Brands Preferred Supplier Program” document found on K-Link. An extensive testing is required and supplier must demonstrate that their label technology can withstand 25 wash/dry cycles AND 3 dry cleaning cycles under the standard care instruction PLUS testing protocol 310:

Machine Wash Warm
Only Non-Chlorine Bleach When Needed
Tumble Dry Low
Warm Iron If Needed
Do Not Iron On Decoration

AND

Dry Clean

- B. Production Testing (financial responsibility is the vendor) - After development approval, vendor may proceed with verification on the bulk production of good appearance retention after **10** wash/dry cycles or **1** dry clean cycle per the garment's care instruction.

2.2 Alternative Suppliers

Vendors who are using alternative label suppliers for heat transfer/screen print labels must go through the following procedure:

- A. Production Testing (financial responsibility is the vendor) – Must verify in bulk production of good appearance retention after 25 wash/dry cycles per the garment's care instruction.

3) Sample Submission

- 3.1 Development Testing (Preferred Suppliers) = Submit 2 sets in various ¼ yd. x full width fabrics (interlock, jersey, rib etc.) finishes (brushed, sueded, flat surface) and font size, apply the various types of heat seal application, i.e. rubber, plastisol, silicone, resin or polyurethane with one of Kohl's Private Brand Labels.

- 3.2 Production Testing (Preferred and Non-Preferred Suppliers) = Submit two apparel or textile products in the colorway indicated by the appropriate protocol.

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4) Procedure

4.1 Preparation

- i. Read the care label instructions carefully.
- ii. Compare the samples to each other, to confirm that they are identical.
- iii. Launder 1 of the samples per the care instruction, using household detergent Tide[®] Powder. Use a 4 lb. load with approx. 18 gallons of water, made up of the garment and ballast. Tumble dry per AATCC 135.
- iv. Dry Clean per AATCC 158.
- v. Repeat the above wash and dry cycles to the specified number of launderings per 4.2A and/or 4.2B.
- vi. Report the results by using the Heat Transfer & Screen Print Label Wash Durability requirements.

4.2A. Preferred Suppliers

<p>Development Testing (submitted by label supplier) = 25 home laundering cycles PLUS 3 Dry Clean cycles</p>	<p><u>Development:</u></p> <p><u>Home Laundering</u></p> <p>Perform 5 consecutive wash/dry cycles. Each wash/dry cycle consists of one wash/one dry. Evaluate after the 5th cycle. If satisfactory, repeat rotation and evaluate after every 5 wash/dry cycles up to 25. Completed procedure will consist of 25 wash/dry cycles and 5 evaluations unless failure occurs prematurely. The procedure should be stopped when failure occurs.</p> <p><u>Dry Cleaning</u></p> <p>Perform 3 dry clean cycles and evaluate.</p>
<p>Production Testing (submitted by vendor) = 10 cycles or 3 Dry Clean cycles</p>	<p><u>Production:</u></p> <p><u>Home Laundering</u></p> <p>Perform 5 consecutive wash/dry cycles. Each wash/dry cycle consists of one wash/one dry. Evaluate after the 5th cycle. If satisfactory, repeat rotation and evaluate after the 10th cycle. Completed procedure will consist of 10 wash/dry cycles and 2 evaluations unless failure occurs prematurely. The procedure should be stopped when failure occurs.</p> <p><u>Dry Cleaning</u></p> <p>Perform 3 dry clean cycles and evaluate. Please note to verify the durability of the Labels this test must be done prior to Garment Production Start date.</p>

4.2B. Non-Preferred Suppliers

<p>Production Testing (submitted by vendor) = 25 cycles</p>	<p><u>Production:</u></p> <p>Perform 5 consecutive wash/dry cycles. Each wash/dry cycle consists of one wash/one dry. Evaluate after the 5th cycle. If satisfactory, repeat rotation and evaluate after every 5 wash/dry cycles up to 25. Completed procedure will consist of 25 wash/dry cycles and 5 evaluations unless failure occurs prematurely. The procedure should be stopped when failure occurs.</p> <p>Please note to verify the durability of the Labels this test must be done prior to Garment Production Start date.</p>
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5) Appearance Requirements

The following appearance requirements are to be compared between the washed and unwashed product using the performance standard indicated. **This must be entered on the Kohl's worksheet** on the line in front of each appearance requirement. **The evaluation only applies to the heat transfer & screen print labels, not the fabric. The overall rating of satisfactory or unsatisfactory is based upon all appearance requirement observations.**

Observation	Definition	Requirement
Color Bleeding/Self Staining	Visual observation of color transfer to another color or portion of the product using the Gray Scale for Evaluating Staining.	Gray Scale Rating: 4.5 or better
Excessive Color Change	Visual observation comparing the washed product to the unwashed product using the Gray Scale for Evaluating Change in Color.	Gray Scale Rating: 4.0 or better
Peeling, Flaking, Cracking, or other evidence of delamination	Visual observation that no peeling, flaking, cracking or other evidence of delamination occurs in a screen-print or heat-seal label after wash.	Observation results are Pass, Fail, or N/A.
Legibility of text	Visual observation that the text of a heat-seal label is legible after wash.	Observation results are Pass, Fail, or N/A.
Color loss of label	Visual observation comparing the color change of the washed item to the unwashed washed product and reporting whether there was any color loss.	Observation results are Pass, Fail, or N/A.
Change in sheen or gloss to the extent that a metallic finish no longer appears shiny	Visual observation that no change in the sheen or gloss of the metallic finish has occur after wash.	Observation results are Pass, Fail, or N/A.
Loss of surface texture	Physical observations to determine that the texture/handfeel of the washed item is the same as the original item.	Observation results are Pass, Fail, or N/A.
Softening or melting	Visual observation that no softening or melting of the heat heal item has occurred after wash.	Observation results are Pass, Fail, or N/A.

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6) Heat Transfer / Screen Print Label Wash Durability
Evaluation Worksheet

Date Tested _____

Color _____

Style Number _____

Signature _____

DURABILITY EVALUATION
(PLEASE CHECK BOXES FOR NUMBER OF WASHES)

5 X 10 X 15 X 20 X 25 X

- Peeling, Flaking, Cracking or other Evidence of Delamination - P , F , N/A
- Legibility of Text - P , F , N/A
- Color Loss of label - P , F , N/A
- Change in sheen or gloss to the extent that a metallic finish no longer appears shiny - P , F , N/A
- Loss of surface texture - P , F , N/A
- Softening or Melting - P , F , N/A
- Color Bleeding/Self Staining - Gray Scale Rating:
4.5 or Better = _____
- Excessive Color Loss - Gray Scale Rating:
4.0 or Better = _____
- Other _____

Overall Rating of Appearance: Pass or Fail

Additional Comments: _____

7) Turnaround Time

7.1 Preferred Supplier Development Heat Transfer & Screen Print Labels:

The above testing can be completed in **9** laboratory working days. Turn time is calculated from the day after the third party lab receives the sample to the day the report is issued to the client.

7.2 Preferred Supplier Production Heat Transfer & Screen Print Labels:

The above testing can be completed in **6** laboratory working days. Turn time is calculated from the day after the third party lab receives the sample to the day the report is issued to the client.

7.3 Non-Preferred Supplier Production Heat Transfer & Screen Print Labels:

The above testing can be completed in **9** laboratory working days. Turn time is calculated from the day after the third party lab receives the sample to the day the report is issued to the client.

8) Pricing

Please refer to Kohl's approved third party labs for individual pricing.

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9) Apparatus

9.1 Required Materials to Complete Testing

- i. American Washer and Dryer – It is recommended that AATCC approved brand names, such as Whirlpool or Kenmore is used. A current list of recommended model numbers can be found on AATCC's web site. <http://www.aatcc.org/Technical/WashDry.htm>
- ii. Gray Scale. <https://www.aatcc.org> (Products/QC Products/Colorfastness Testing)
- iii. Household detergent – American label Ultra Tide ® Powder.

9.2 Wash Conditions – AATCC 135:

Care instructions call for 'machine wash warm', the water temperature should be at 105°F or 40°C.

- i. Normal Cycle – 12 minute wash, 6 minute final spin
- ii. Permanent Press Cycle – 10 minute wash, 4 minute final spin
- iii. Delicate Cycle – 8 minute wash, 4 minute final spin

9.3 Dry Conditions – AATCC 135:

When the care instructions call for 'tumble dry low', the temperature should be 137°F, +/- 5°.

- i. Tumble Dry Low – set heat temperature to Low
- ii. Time setting –
 - a. Knits - approx. 45 minutes
 - b. Wovens – approx. 25 minutes
 - c. Sweaters – approx. 35 minutes
 - d. Denim – approx. 35 minutes

9.4 Dry Cleaning – AATCC 158

10) Revisions

1/20/20 – Removed "Kohl's Connection" and replaced with K-Link. Edited dry cleaning cycles to be up to three times instead of one. Removed "Ultra" from Tide detergent.