

# **TCS Textile Consultancy Services**

• **Textile Problem Analysis** • **Textile Labelling Advice** • **Education and Training**

**P. O. Box 132 Kallangur Qld 4503 Australia**

---

## **TITLE**

**THE FUSIBLE INTERFACING USED TO PROVIDE BODY TO THE FRONT PANELS OF THIS GREEN AND WHITE JACKET HAS FAILED FOLLOWING A SECOND ACCEPTABLE DRY CLEANING TREATMENT**

**Report prepared by**

**Steven Pyott**  
**B.Sc., M.Sc., CText A.T.I., Grad.Cert.Ed., Adv.Dip.Ed.**  
**Consulting Chartered Textile Technologist**

## **ENQUIRY**

The client submitted a lady's green and white polyester jacket for examination and report. The purpose of the enquiry was to comment on the most likely cause of the extensive blistering on the front of the garment that has become apparent after recent dry cleaning. It was reported that this was the second time that the garment had been dry cleaned.

The client reported that the jacket was pre-spotted with the proprietary product 'Dual Spot' and it was then dry cleaned in perchlorethylene charged with a proprietary soap product, using a shorter 10 minute cleaning cycle, in a process that was intended to correspond with the requirements indicated by the use of the circled P cleaning symbol -  $\textcircled{P}$  - on the care labelling, and the additional cautionary instructions: 'Sensitive, Reduce Cycle, and/or Heat'.

## **LABELLING**

- **Fibre Content Labelling:** 100% polyester
- **Care Labelling:** Warm Hand Wash Separately, Do Not Bleach, Soak or Tumble Dry, Drip Dry in Shade, Cool Iron, Dry Cleanable  $\textcircled{P}$  - Sensitive, Reduce Cycle, and/or Heat
- **Size Labelling:** 16

## **EXAMINATION**

The garment was examined under standard white lighting conditions and it was immediately evident that there was extensive blistering or bubbling of the green outer shell fabric throughout both the front panels, as well as on the upper rear inside panel below the neck, that runs across the top of the shoulders. It was noted that all these panels had a black fusible

interfacing fabric attached to the back of them and that this extensive blistering effect was due to this interfacing becoming partially separated from the shell fabric.

### **PHOTOGRAPHS**



**Various Views Of The Front Of The Garment Showing The Blistering Or Bubbling Effect Caused By The Failure Of The Fusible Interlining**

### **DISCUSSION**

The fusible interfacing used on this garment has exhibited a severe failure of performance as a result of a dry cleaning treatment that is compliant with the requirements of the attached care labelling. Manufacturers are required to ensure that their garments and any attached components are fully serviceable to all the care treatments specified on the attached care labelling.

Fusible interfacings are applied to the outer shell fabric to provide stiffening and additional body to parts of the garment. As such, they are required to be fully serviceable to wear and care treatments for the normal life of the garment, which could clearly involve multiple dry cleaning treatments in this case.

The process of attaching a fusible interfacing to a shell fabric involves the application of pressure and heat for the correct period of time to enable the fusible material to melt and then become fully and permanently attached to the outer shell fabric. The failure of fusible interfacings to withstand the effects of care treatments can be caused either by an incorrect manufacturing procedure, such as insufficient pressure or heat, or by the use of an incorrect fusible material for the particular type of fibre content used in the shell fabric.

Attached to this report is a copy of a technical bulletin – **TABS-204 Interfacing Separation** – prepared by the International Fabricare Institute (I.F.I.) in the U.S., which gives further detailed information about this commonly encountered problem. The technical bulletin states

that the responsibility for the failure of fusible interfacings in garments to withstand correct cleaning procedures clearly lies with the manufacturer.

### **CONCLUSIONS**

The fusible interfacing used in this garment has become extensively separated from its shell fabric as a result of a dry cleaning process that complies with the requirements of the garment's care labelling. The responsibility for this situation clearly lies with the manufacturer and the garment, along with a copy of this report, should be returned to the original point of purchase so that the customer can receive appropriate redress for her loss.




Steven Pyott

**B.Sc., M.Sc., CText A.T.I., Grad.Cert.Ed., Adv.Dip.Ed.**

**Consulting Chartered Textile Technologist**

### **CERTIFICATE**

*I, Steven Donald Pyott, do hereby certify that to the best of my knowledge and belief, the above information is accurate. Being an Associate of the Textile Institute, I have agreed to be bound by the terms of the Institute's Royal Charters, By-laws and Professional Code of Conduct for the time being in force. The Textile Institute accepts no responsibility for the information contained in this reply to your enquiry.*



Steven Pyott

# TABS

INTERNATIONAL FABRICARE INSTITUTE BULLETIN

## INTERFACING SEPARATION

### WHAT IS THE PROBLEM?

The problem occurs when the fusible interfacing material bonded to the shell fabric begins to separate during normal wear and care procedures.

### WHAT DOES IT LOOK LIKE?

In areas where the fusible has pulled apart from the shell fabric, the appearance is blistered because the shell lies unevenly.

### WHAT CAUSED IT?

The interfacing material may lack resistance to wear and cleaning procedures because of insufficient time, temperature, or pressure used in the original fusing process during manufacture. Also, not all fusibles are completely compatible with all shell fabrics. In some cases, there may be different rates of relaxation shrinkage between the two materials.

### CAN IT BE PREVENTED?

Better quality control procedures during manufacturing is the best method of prevention. The garment manufacturer must ensure that the shell fabric and the fusible are compatible and that the methods used to bond them together are completely durable for extended use and accepted care processes.



*The fabric of this jacket appears blistered because the fusible was pulled apart from its shell fabric.*

### WHO IS RESPONSIBLE?

The garment manufacturer is responsible for producing a product that contains component parts that can withstand acceptable conditions of wear and cleaning without exhibiting damage.

### IS THERE A REMEDY?

In some cases, the professional drycleaner can attempt to re-fuse the separated fabrics together by extensive finishing procedures. However, this process cannot be safely used on all fabrics without causing objectionable shine, seam impressions, or, in some cases, distortion.