

TCS Textile Consultancy Services

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

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TITLE

THE BEADING ON THIS LADY'S RED AND BLACK DRESS HAS BECOME DAMAGED DUE TO DISSOLVING AND FUSING FOLLOWING THE RECOMMENDED METHOD CARE PROCEDURE - DRY CLEANING IN PERCHLORETHYLENE

Report prepared by

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ENQUIRY

A lady's red viscose/polyester lined black silk dress was submitted by the customer for examination and report. The purpose of the enquiry was to comment on the most likely cause of the damage to the beading that had become apparent after recent dry cleaning. The customer attached a report prepared by the Manager of the dry cleaning business detailing the dry cleaning process used on the garment and his opinion about the cause and responsibility for the damage to the trim.

The report indicated that the dress was dry cleaned in perchlorethylene, using a gentle cycle of a very short duration of 30 seconds, with a maximum temperature of 25⁰C. The process was intended to be in full accordance with the requirements indicated on the care labelling of the circled P dry cleaning symbol - **Ⓟ** - and a maximum 30⁰C process temperature.

LABELLING

- **Fibre Content Labelling:** Shell - 100% silk, lining - 75% rayon/25% polyester, Glass Beads
- **Care Labelling:** Dry Clean Only 30⁰C **Ⓟ**, Cool Iron, Do Not Iron On Beads
- **Size Labelling:** 8

EXAMINATION

The dress was examined and it was found to consist of a black outer shell sheer silk fabric and a red iridescent rayon/polyester lining with a bead trim all the way round the hem. The bead trim was examined and alternated between two very similar types of construction.

One type of the trim consisted of beads in the following order: a small gold bugle bead; two diamond shaped purple beads; one small gold bugle bead; a white bead; a small gold bugle bead; two purple diamond shaped beads; a small gold bugle bead; two small white beads; a small gold bugle bead and finally a pear-drop purple bead attached by six small beads. The other type of trim was almost exactly the same except that it started off with two small white beads making it hang lower than the other trim.

Most of the beads had been unaffected, but the small white beads all appear to have dissolved, fusing into each other. In a number of places they have fused into the adjacent or nearby trim so that they are no longer hanging vertically. In addition, there are white marks both on the outer shell and lining fabrics caused by the fabric coming into contact with the dissolving beads.

The garment labelling incorrectly states that the beading is glass, because it is very clear from the damage to the trim and the fabric, that the white beading component of the trim is not made from glass, since it has been readily been dissolved by the perchlorethylene dry cleaning solvent.

PHOTOGRAPHS





Two Photographs Showing the White Beading Fusing into Itself and the Purple Beading

DISCUSSION

The white beading on the attached trim has clearly failed because it is not made from glass and is not stable to dry cleaning in perchlorethylene which is specified as the only recommended care treatment on the care labelling. The dry cleaning treatment reported to have been carried out on this garment was very cautious, using a very short, gentle cycle at a maximum processing temperature of 25⁰C and this process must therefore be considered, at the very least, to be fully compliant with the requirements of the 'Dry Clean Only 30⁰C (P)' care labelling, attached to the garment.

The care labelling is clearly incorrect as this garment is most certainly not dry cleanable in perchlorethylene dry cleaning solvent, without severe damage to the white beading on the trim occurring, even using the great caution reported by the dry cleaner in this case. Also, there was additional damage to the fabric, in the form of white marks, caused by the fabric coming into contact with the dissolving beading. Further, the fibre content labelling information is incorrect because it states that the beading is glass when the white beading most clearly is not since it so readily dissolves in perchlorethylene.

The responsibility for the failure of this garment to respond appropriately to the required care treatment and the incorrect fibre content labelling information about the beading, clearly lies with the garment manufacturer, because manufacturers are required to select appropriate fabrics, and any trim used, for their garments and, by testing and/or appropriate technical advice, determine the correct composition and care instructions to be placed on the fibre content and care labelling, such that the fabrics and trims selected are stable to all the care treatments recommended. In this case, the white beading is most certainly not made from glass and is not stable to dry cleaning in perchlorethylene solvent.

CONCLUSIONS

The white beading on the trim of this garment is incorrectly labelled as being made from glass and, because of its chemical composition, it is highly unstable to dry cleaning in perchlorethylene solvent, under the conditions required by the care labelling. This has resulted in both the trim and the garment becoming severely damaged by the effects of the dissolving white beading.

The responsibility for this garment having incorrect information on its fibre content labelling and failing to perform appropriately to a care treatment specified on the care labelling clearly lies with the manufacturer. Accordingly, the customer should return the garment to the retail outlet where it was purchased so that she can receive appropriate redress for her loss.

This is at least the third garment from 'Guava' that has been examined by TCS Textile Consultancy Services where damage has resulted from the dry cleaner following the recommended or required care treatments of dry cleaning in the solvent perchlorethylene. The other enquiries included a black polyester velvet suit that had lost flocking after dry cleaning and a black and red dress had lost surface sparkle after dry cleaning in perchlorethylene.

A technical bulletin on this well known problem of attached trim being adversely affected by perchlorethylene dry cleaning solvent, entitled **Dissolving Trim TABS-221**, prepared by the International Fabricare Institute (IFI) in the U.S.A., was attached to the report for further information.



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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

DISSOLVING TRIM

WHAT IS THE PROBLEM?

The problem occurs when sequins, buttons, beads, or other plastic decorative trim soften, dissolve, and/or discolor during drycleaning.

WHAT DOES IT LOOK LIKE?

Some plastic materials (mainly polystyrene) become tacky when partially dissolved during routine drycleaning and can stick to other portions of the garment. Also, the dissolving trim can lose its original shape as well as discolor. In severe cases, beads will completely dissolve, leaving only the unbroken stitching threads still attached to the base fabric.

WHAT CAUSED IT?

Plastics are synthetic materials formulated by chemicals. In some cases, the chemicals will dissolve and revert back to their liquid state when exposed to drycleaning solvent. In most cases, the drycleaner has no way to know that the trim on a drycleanable garment is not serviceable.

CAN IT BE PREVENTED?

It is the responsibility of the garment manufacturer to ensure that all trim materials attached to a drycleanable garment are completely resistant to the drycleaning process. This is the only prevention.



Because the trim on this jacket was not solvent resistant, it dissolved during drycleaning and stained other portions of the garment.

WHO IS RESPONSIBLE?

The responsibility rests with the manufacturer or the garment maker for attaching trim to a drycleanable item that is not solvent resistant.

IS THERE A REMEDY?

Usually, once the damage has occurred, there is no remedy. However, in some cases, the remaining damaged trim can be removed and the garment recleaned to remove any plastic stains from the fabric. If this procedure is successful, new decorative trim can be attached. □

TABS—221 November 1995