

TCS TEXTILE TECHNICAL UPDATE

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DAMAGE TO DYES CAUSED BY STRONG OXIDISING BLEACHES

WHAT IS THE PROBLEM?

The problem is the appearance of localised areas of discolouration or complete colour loss in dyed or printed fabrics that are often only noticed after a care treatment but which can occur at any time. It is often seen in clothing in the neck or collar area and can also be seen in towels.

WHAT DOES IT LOOK LIKE?

The appearance in darker shades is usually characterised by a very distinctive discolouration ranging from brown, through brick red or orange, often pink to yellow and finally to silvery white or complete colour loss.

WHAT CAUSES THE PROBLEM?

The problem is caused by the fabric having come into contact at some stage with a substance that contains a very strong oxidising bleaching agent. The bleaching agent continues to act on the colour as long it remains in contact with the fabric.

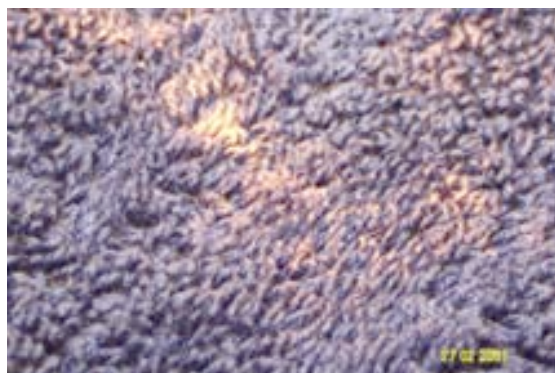
The bleaching effect works progressively on the dyed or printed fabric often attacking the blue/green components of the colour first, leaving the red/orange/yellow components until the end, before completely bleaching the fabric white or silvery white.

These types of strong oxidising agents are present in a wide range of industrial and domestic chemical products including swimming pool chlorine, home bleaches, disinfectants, kitchen cleaning and scouring products, hair care products, acne preparations, skin care products and even medicines.

The effect of the bleach can sometimes be accelerated during the cleaning process where heat is applied during drying and finishing.

CAN IT BE PREVENTED?

It can only be prevented by very careful handling of substances that contain these types of strong oxidising bleaches whilst the textile article is being worn or used.



The very typical pink discolouration caused by the effects of contact with a strong oxidising agent on dark colours such as on this navy towel

Such products often have clear warning labels attached to them indicating the risks of coming into contact with them, particularly where there is a health hazard involved.

Skin preparations and medicines which contain these types of agents, such as 'Oxy-10' etc, usually contain warning information on the packaging or in a leaflet that is included in the product packaging about the risks of damage to dyed fabrics.

WHO IS RESPONSIBLE?

In most cases, the consumer is responsible for causing the garment to come into contact with products containing these strong oxidising chemicals. This is usually accidental and often goes unnoticed at the time.

The discolouration may not appear as soon as contact with the bleaching agent is made and it can gradually develop over a period of time. This means that the real cause of the problem is therefore not always immediately evident.

IS THERE A REMEDY?

There is no remedy to this problem once colour loss has actually occurred because the effect is permanent. The only viable option is to re-dye the whole garment professionally if the fabric is made from fibre types that are amenable to this treatment such as viscose rayon, cotton, linen, and wool and silk.

**This technical update was prepared by
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