

Technical Bulletin

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Reducing Bleaches in Spotting and Stain Removal

Reducing Bleaches, also called “dye strippers,” have the potential to offer a greater impact than oxidising bleaches when you are faced with fugitive dye marking and all other methods of removal you have tried have failed, although any bleach should be a last resort. It should also be borne in mind that the use of reducing bleaches should only be used by competent spotters who have a high level of experience and stain removal knowledge already.

Sodium Bisulphite is the mildest choice of all the reducing bleaches, and it is used on a regular basis in laundry operations to neutralise chlorine bleach. To the professional laundry man, it is known as an anti-chlor.

Some resin treatments or finishes on cotton, rayon, nylon or blended fabrics, may cause them to retain varying amounts of chlorine when laundered or bleached with chlorine and this can cause discoloration or even degradation of the fabric. If the customer has attempted doing whites at home using chlorine bleach, some double-layered areas, such as seams, may look dull and off-white due to retaining chlorine after the rinse cycle. A quick soak in bisulphite dissolved in water that is at body temperature (37°C) will neutralise the chlorine and restore the whiteness. You, the cleaner, are now a hero and have shown your expertise and professionalism.

It will need to be “made-up” each time you use it because it does not keep, deteriorating as it cools. To use bisulphite at the spotting table, dissolve a teaspoon of the white powder into a small amount of water at around body temperature. On larger areas you can apply directly from a spotting bottle, while smaller areas can be treated by using a cotton swab dipped in the bisulphite solution or even a toothpick for pinpoint accuracy. Alternatively, a few grains put on the stain, having first tested it on an inner seam, then apply gentle steam from the spotting table steam gun should be effective on small colour stains. Sodium bisulphite is useful in removing berry stains or medicine stains.

If you are experiencing any difficulty in obtaining sodium bisulphite a good local source would be your local home wine brewing supply store, as sodium bisulphite is widely used for sanitising the fruit juices to be used in wine, to stop yeast growth, and as a preservative. Camden Tablets are a product sometimes used in winemaking; each tablet contains 1/16th teaspoon (0.3 ml) of sodium bisulphite.

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To use bisulphite in a soak, dissolve a tablespoon of the white powder for each four and half litre of warm water (35°C - 50°C). You can make it more aggressive by adding just a little acetic acid, no more than 7 mls of 10% solution acetic acid. There is only minimal additional risk by reducing the water temperature and leaving out the acetic acid, to deal with any fibre and pastel colours, but test first on a piece of the fabric taken from an inner seam.

Sodium Hydrosulphite (Hydros)(Sold as Sodium Dithionite) is a more aggressive reducing bleach than sodium bisulphite. It has many of the same characteristics, but, with a more aggressive result.

Use the same formula at the spotting table of the white powder into a small amount of water, a teaspoon full to one and half litres of water, with the water being no warmer than body temperature. When testing on an inside seam, you should add a drop of acetic acid to speed up the reaction, but you are advised not to do this when spotting, since the reaction can quickly “get away” from you and cause damage. Small areas can be treated by using a cotton swab dipped in the hydrosulphite solution or even a toothpick for pinpoint accuracy. Alternatively, a few grains put on the stain, having first tested it on an inner seam, then apply gentle steam from the spotting table steam gun should be effective on small colour stains, but carefully test first is always the best policy. There is no point in removing the dye stain if the item affected has the colour of fabric removed in the treatment.

For effectiveness when spotting, bisulphite and hydrosulphite should be made up only as needed. This chemical is especially useful on the colour red; and like bisulphite, it will usually enhance the “whiteness” of a dull white garment. Do not use on or around metal or metallic fibres, the area may take on a charcoal or black appearance which can then be a permanent stain.

For soaking use one level tablespoon of powder for 9 litres of water in a plastic container, not metal, and it is not a treatment for use within a washing machine. Three teaspoons make one tablespoon.

Always observe Health and Safety precautions wearing gloves and eye protection. Also, cleanliness should be a major priority when using bleaches because any amount left behind after treatments can damage other items if left behind by not carrying out a thorough cleaning regime.

Storage of Sodium Hydrosulphite it is also good practice to keep the product dry because moisture can cause it to self combust therefore carefully replace the lid after use and store in a dry place.

When in use it can smell like bad eggs therefore use in a well ventilated area. It can also affect your breathing if inhaled whilst dissolved in warm water, although normal breathing is quickly restored in fresh air.