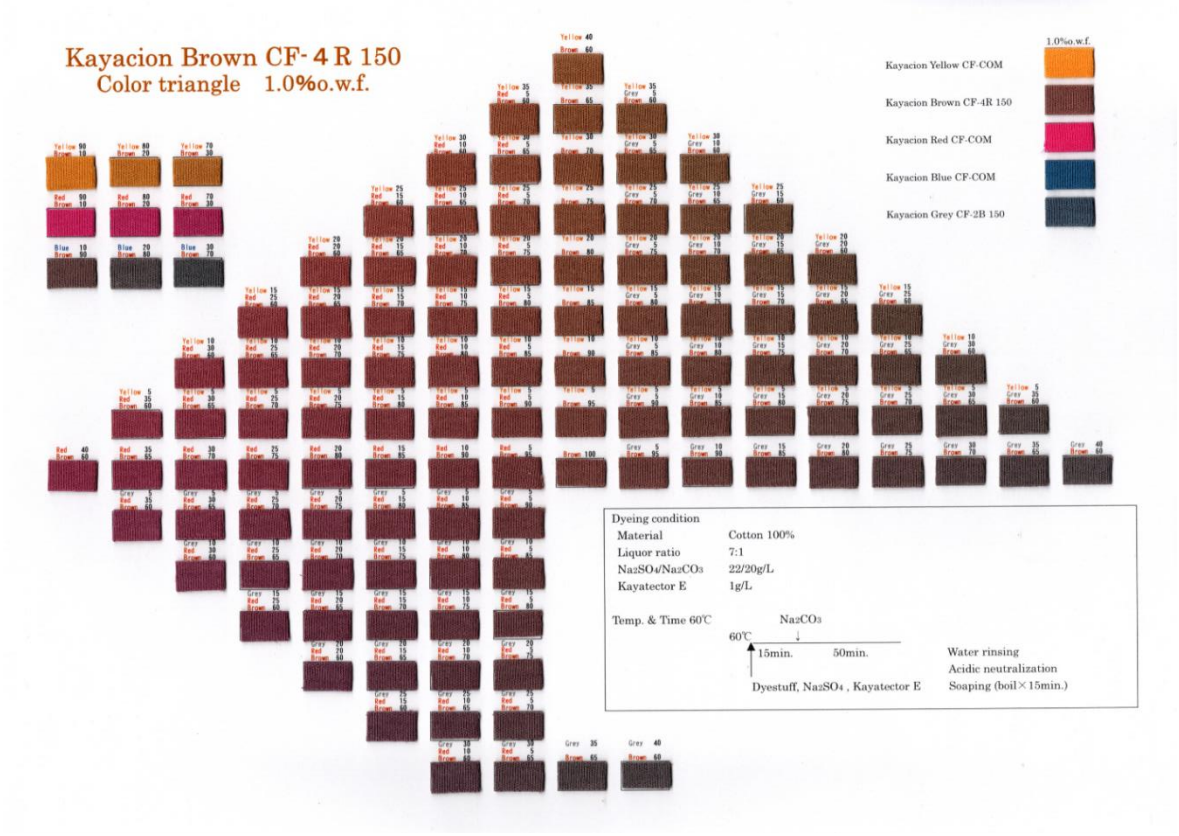
Technical Information

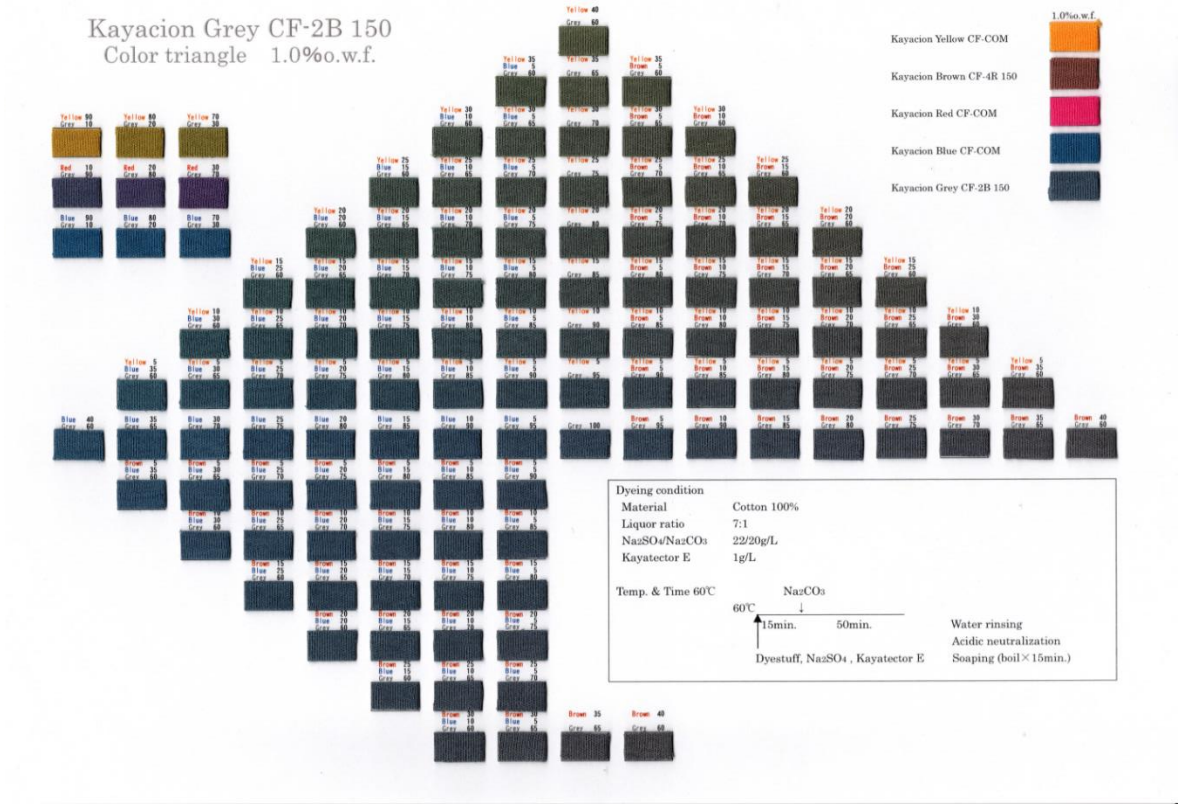
(vol.13)

Nippon Kayaku (Thailand) CO., LTD.
Technical Service Center

「Main features of Kayacion Brown CF-4R 150 and Kayacion Grey CF-2B 150」

- KCN Brown CF-4R 150 and KCN Grey CF-2B 150 is already available for purchase and used by dyeing factories in China and Asia, and have been well received by customers.
- When dyeing critical shades or mixed shades such as brown or grey with trichromatic colors of different dyeability, reproducibility is often a problem both in laboratory and in production. The changes in liquor ratio, dyeing temperature, salt amount, temperature of alkali addition is an important consideration for ensuring reproducibility. The extent to which each component of the trichromatic colors affects the shade due to these conditions will have an impact on the change in hue of the dyeing.
- Nippon Kayaku has developed the KCN Brown CF-4R 150 and KCN Grey CF-2B 150 as a solution to the dyeing difficulties due to reproducibility issues mentioned above. The dyeability of KCN Brown CF-4R 150 and KCN Grey CF-2B 150 are also matched with KCN CF-COM series, allowing for shading with these trichromatic colors with reproducibility.
- The figure on the next page shows the color triangles for combination shades using KCN Brown CF-4R 150 and KCN Grey CF-2B 150 as the basis with the primary colors of the KCN CF-COM series. Various shades can be produced with excellent reproducibility.





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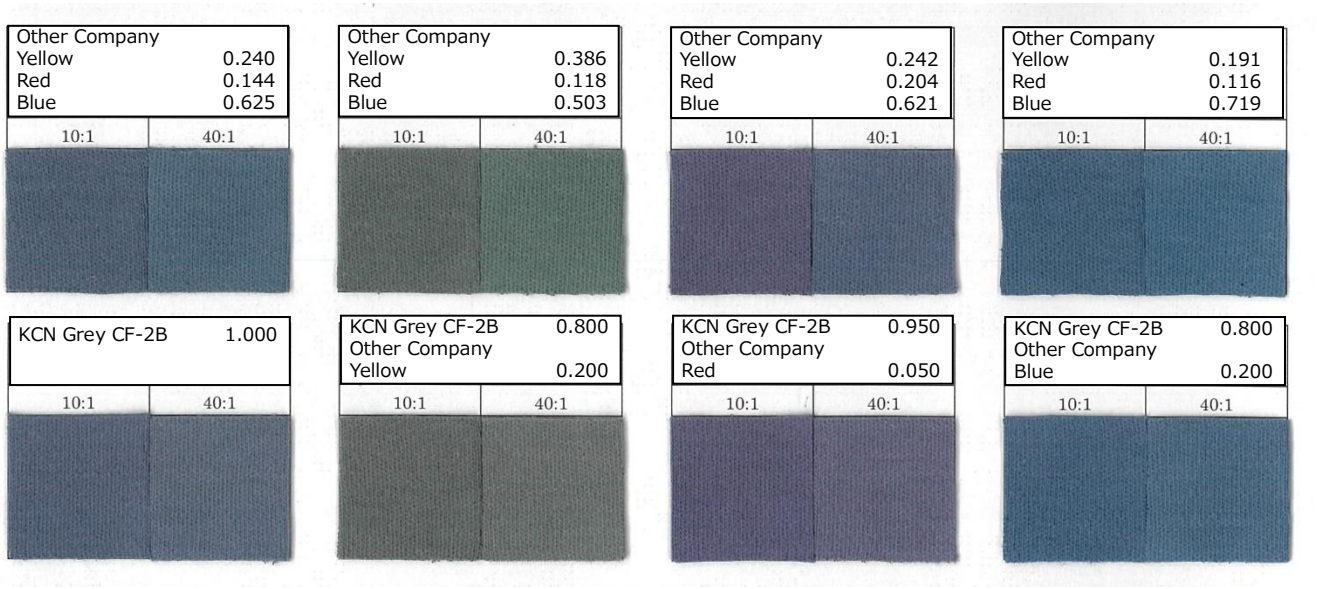
Furthermore, when the trichromatic colors of other products in the market with inferior reproducibility are used, it is possible to improve the reproducibility of the dyeing by using KCN Brown CF-4R 150 and KCN Grey CF-2B 150 as the main dye. Because the reproducibility of KCN Brown CF-4R 150 and KCN Grey CF-2B 150 is excellent, the reproducibility will be significantly improved compared to the reproducibility of only using the trichromatic series with inferior reproducibility.

The data below shows the effect of liquor ratio on mixed shades of other company's trichromatic combinations and mixed shades of KCN Grey CF-2B 150 as the main dye with shading of other company's trichromatic color.



The improvement in reproducibility of using KCN Grey CF-2B 150 as the base color is shown in the data above.

For example, in the case of using only the low reproducibility trichromatic colors (upper row in the data above), the affinity of Red is relatively lower than yellow and blue, causing the greenish hue change when the liquor ratio is changed.

On the other hand, when KCN Grey CF-2B 150 is used as the base with shading from the trichromatic colors, the hue change due to the liquor ratio change is much smaller than using low reproducibility trichromatic colors available in the market. Therefore, the reproducibility can be improved by using our KCN Grey CF-2B 150 and KCN Brown CF-4R 150 as a base dye.

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