Black and navy blue shades, dischargeable to white, on pure acetate silk

By Dr. Fischer

As a result of the growing importance of acetate silk, the printing of fabrics produced from this fibre also is steadily on the increase. At first mixtures of acetate silk and cotton claimed the chief interest, lately, however, there is also a rising demand for pure acetate silk fabrics, in particular voiles.

Generally speaking, the production of print-on styles on acetate silk offers no difficulties. For this purpose the special dyestuffs for acetate silk: Cellit, Cellit Fast and Celliton dyestuffs, also basic dyestuffs in conjunction with Cellexone or Mordant for Acetate Silk and a large number of Indanthren or Algol dyestuffs, are used on account of their simple method of application, the partial saponification of the fibre through the alkali contained in the print colour, being put up with.

It is more difficult to produce good discharge prints on acetate silk fabrics. The number of dyestuffs of good dischargeability is limited. Blotches dyed with Cellit Fast Yellow GGN, R, Cellit Fast Yellow G, Celliton Orange GR, Cellit Fast Red B, BB, Celliton Red R, Cellit Fast Rubine B, Cellitazol ORB (Developer: Beta Naphtol), Cellit Fast Violet 4R, Cellit Blue R, Cellitazol B (Developer ON), Cellitazol ORB (Developer: Phenol) are dischargeable. To enlarge the scale of shades it is, however, often necessary to make use of basic dyestuffs, such as Bismarck Brown FR extra, Brilliant Rhoduline
Violet R, Rhoduline Blue 5B, 6G, Turquoise Blue BB, Brilliant Green brands, or acid dyestuffs, such as Indian Yellow G, R, Orange IV, Fast Red AV, Silk Red G, N, Victoria Fast Violet B extra. Black and Navy Blue mostly were produced on the base of Cellitazol B (diazotised and developed with Developer ON); it turned out, however, that the shading dyestuffs, used in connection with them underwent so great a change during diazotisation and developing that it was not possible to obtain dyeings of good dischargeability.

A new dyeing process, for which the I. G. Farbenindustrie Aktiengesellschaft applied for a patent, did away with this difficulty in a simple manner. According to the above observation the shading dyestuffs are unfavourably affected in their dischargeability by the diazotising process. The dyeing process for navy blue and black was therefore altered in such a way that a ground dyeing of Cellitazol B, diazotised and developed with Developer ON, is shaded towards navy blue or black with suitable, dischargeable dyestuffs (e.g. Cellit Fast Yellow R and Cellit Fast Red BB) in a fresh bath. Dyeings produced in this way are dischargeable to a clear white.

To be continued