



RESERVOL®

Textile Additive

CHEMICAL NAME: Sodium m-nitrobenzene sulfonate, technically pure
C₆H₄NO₅Na; CAS # 127-68-4

PHYSICAL FORM: Yellow to tan flake or powder

PRODUCT SPECIFICATIONS

Activity	94.0 – 98.0
Total Solids, %	≥ 98
pH, 20 % soln.	8.0 – 12.0
Sodium Sulfate, %	≤ 2.0
Sodium Carbonate, ppm.	≤ 5000
Sodium Chloride, ppm.	≤ 4000

PRODUCT DESCRIPTION:

Textile Printing: In direct printing with reactive dyes, on cellulose fibers, an addition of approximately 10 g/kg Reservol to the print paste facilitates production of uniform prints under varying conditions and protects the reactive dyes from negative reduction effects. Reservol also prevents a change in shade of dispersed dyes during undesirable i.e., in direct printing with natural thickening agents on polyester, acetate, and triacetate fibers. In the production of roller-printed discharge styles, readily dischargeable grounds are often affected by “facing” of the discharge paste. To prevent this, pre-dyed goods are either padded with a solution of 5 – 8 g/l Reservol before printing begins, or preprinted with a slightly thickened solution of 15 – 30 g/kg Reservol. Using Reservol in screen and roller printing ensures crisp and sharp outlines by preventing the formation of halos around the discharge print. Reservol should not be used for printing polyamide fibers. In the production of resist prints under vat prints and dyeing, Reservol functions as a resist agent. In this application, the typical loading is 50 – 200 g/l Reservol.

Colored Bleach Goods: Adding 1 – 3 g/l of Reservol to the boil-off liquor prevents reduction of susceptible dyes.

Reactive Dyeing: Reservol prevents shade variations, in reactive dyeing, caused by reduction of dyes under undesirable processing conditions, i.e., time, temperature, and hot air/steam. Reservol is effective in counter acting the effect of trace amounts of reducing agents in the dyeing of woven fabrics that still contain sizing, knitted fabrics that have not been boiled-off, and viscose rayon goods. Typical loading levels of 1 – 2 g/l Reservol are added to the dye bath before the reactive dye is added.

Oxidation in a Fresh Bath: The dye liquor is typically drained off from the jigs and yarn dyeing equipment and a fresh bath is heated to 140°F and maintained for oxidation. Oxidation is then carried out in a fresh bath using the following conditions: Jig or Short Liquor Ratio (depending on shade depth): 4 – 8 g/l Reservol; Yarn or Long Liquor Ratio: 2 g/l Reservol.

A reductive clearing treatment should be administered to medium and dark shades before being oxidized with Reservol in a fresh bath. For jet dyeing machines or other long liquor ratio machines, cold overflow rinse to eliminate most of the hydrosulfite is recommended. The amount of hydrosulfite can be measured with vat indicator paper. Then the addition of 2 – 4 g/l of Reservol is made. Reservol is compatible with all auxiliaries used in vat dyeing. Normal dye recipes can continue to be used because oxidizing with Reservol in a fresh bath usually produces the same shade as a peroxide oxidation with intermediate rinsing. It is recommended to run preliminary shade fastness trials to ensure shade variations do not results. This procedure prevents oxidation stains and is very reliable.

Oxidation in Continuous Equipment: As an oxidizing agent, Reservol is quite advantageous in the alkaline range on equipment that has few rinsing compartments, (small continuous units). This treatment is carried out using 5 g/l of Reservol at 140°F. The final desired shade will be achieved more rapidly, in subsequent rinsing steps, if the goods are oxidized at 175 - 185°F. The material is listed on the USA TSCA Inventory. Containers should be kept tightly closed; avoid direct sources of heat or sunlight when possible. Shelf life expected one year from date of shipment provided the material is stored at 40 – 90 deg. F. and bags remain tightly closed.

04/13; 03/11; 05/07; 04/10

The information provided herein is believed to be reliable; however, no guarantees are made or liability assumed. Tiarco Chemical makes no claims or warranties concerning the suitability of the product for a particular use or purpose.