Setamol® Disperse ws

Universal, anionic dispersing agent for dyes, and protective colloid
Nature
Polycondensation product of an aromatic sulfonic acid, anionic

Physical form
Low-dusting, brownish microgranules

Shelf life
Setamol® Disperse WS can be kept in the original sealed containers at temperatures between 0 and 40 °C for at least 24 months. Partly used containers should be kept tightly closed in a cool place and used up as soon as possible.

Please note the information on handling, ecology and disposal in the current Safety Data Sheet.

Properties

pH1
Approx. 6.8 (10 % aqueous solution)

Tolerances for the above test characteristic are given in the product specification.

Solubility (20 °C)
Approx. 550 g/l in water; soluble in polar solvents

A 10 % solution in water is brown and clear.

Ionicity
Anionic

Stability
Even under HT conditions, Setamol® Disperse WS is stable to acids, alkalis, hard-water salts and electrolytes.

Compatibility
As an anionic product, Setamol® Disperse WS is compatible with all anionic and nonionic auxiliaries.

In alkaline baths, it can also be used together with the cationic product Uniperol™ Level P. Precipitates with Uniperol™ Level P are only likely in acid or neutral liquors.

The product property data merely provide an indication of how the product is to be used. They do not constitute the agreed quality of the product, nor are they the object of regular quality control tests.

Action
As an effective dispersing agent and protective colloid, Setamol® Disperse WS stabilizes dye dispersions and therefore helps increase the standard of fastness and the levelness of the dyeings. The product does not have any wetting or detergent effect.

In acid liquors, Setamol® Disperse WS has an affinity to animal fibers such as wool and silk, and to polyamide fibers.

Application

Preparation of stock solutions
Setamol® Disperse WS can be dissolved either by scattering it into 10 to 20 times the quantity of boiling hot water or by pouring the same quantity of hot water over it and stirring.

10 % stock solutions can be prepared that are clear and very stable at room temperature.

The product is virtually universally applicable.

1 In accordance with DIN 19268
Stabilization of dye liquors and prevention of dye agglomeration

### Vat dyes

**Stock vat**

The stability of stock vats can be considerably improved by adding approx. 5 – 10 g/l Setamol® Disperse WS. The product must be added to the dye dispersion before it is vatted.

**Jig dyeing**

Approx. 2 g/l Setamol® Disperse WS is added to improve the stability of the dye liquor. The product prevents vat acid stains, for example during dyeing with Vat Blue types.

**Package dyeing machine or winch beck**

Approx. 1 – 2 g/l Setamol® Disperse WS is added to prevent precipitation and filtration of the dyes. This addition is particularly recommended when the pigmentation or semi-pigmentation process is used.

**Pad-steam process**

Approx. 2 g/l Setamol® Disperse WS in the chemical padder prevents agglomeration of detached dye particles in the liquor. After steaming, Setamol® Disperse WS facilitates removal of the unfixed dye. The presence of Setamol® Disperse WS is especially important during the oxidation of vat dyes. It prevents agglomeration and filtration of the newly formed insoluble pigments in the oxidation bath.

### Indigo

**Stock vat**

Adding approx. 1 g/l Setamol® Disperse WS to the stock vat formulation increases the process reliability.

### Disperse dyes

**Application rate:** approx. 0.5 – 2 g/l Setamol® Disperse WS

The amount of Setamol® Disperse WS required depends on the type of dye preparation. Adding Setamol® Disperse WS is particularly important with liquid dyes that do not contain much dispersing agent, in order to ensure a stable dye dispersion throughout the dyeing process. A higher application rate is required with short liquor ratios (jig dyeing) because of the greater risk of agglomeration.

Setamol® Disperse WS both stabilizes the dye dispersion during the dyeing process and prevents agglomeration of dye particles remaining in the dyebath as it cools down.

### Naphthol dyes

Approx. 1 – 3 g/l Setamol® Disperse WS is added to stabilize naphthol dye impregnating baths.

### Washing off prints

Setamol® Disperse WS is particularly recommended for washing off prints with disperse dyes on blends of acetate or triacetate with polyamide. It stops the dye from going on to the polyamide component during washing off.

**Application rate:** approx. 1 – 1.5 g/l

### Basic dyes

On account of its anionic nature, Setamol® Disperse WS has affinity to cationic dyes and is often added to the wash baths.

**Application rate:** approx. 0.5 – 1 g/l
Safety

When using this product, the information and advice given in our Safety Data Sheet should be observed. Due attention should also be given to the precautions necessary for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. Responsibility for compliance with the requirements of the downstream textile market rests with the textile processor.