



Gammacolor s.r.l.  
Via Zeuner, 5 20822 Seveso (MB) Italy  
tel. +39 0362550550 fax +39 0362551915  
email info@gammacolorsrl.com



Associazione Tessile e Salute  
Azienda associata

p.IVA 00736390964 C.F. 02639210158 c.c.i.a. Milano n. 927455 Codice ISS azienda 00736390964

## GAMOL WS Dispersing-solubilizing agent

### Typical Data

Composition:	Sodium salt of condensed naphthalene sulphonic acid
Appearance:	Fine powder, light brown
Density at 20 ° C	0.7 g / cm <sup>3</sup>
ionic charge	Anionic
pH 10 g / l sol.	8.5
Appearance	brown
Stability to hard water	Excellent up to 40 ° dH
Stability to pH changes	Excellent from pH 1 to pH 13
Electrolyte stability	Excellent up to 150g / l of sodium sulphate
High temperature stability	Excellent up to 150 ° C
foaming power	none
Compatibility	Excellent with anionic and non-ionic products and dyes; not compatible with cationic ones, if not in particular baths to be tested previously
Storage stability	Excellent in normal environmental conditions for 24 months

GAMOL WS is a very versatile product and it can be advantageously used in a series of applications that we report schematically:

- dispersant for disperse dyes , during dyeing at atmospheric pressure and under pressure, for acetate and synthetic fibers;
- dispersant for vat and sulfur dyes;
- solubilizing adjuvant for direct dyes, acids, metal complexes and indigosols;
- dispersant for dyes and pigments in the preparation of printing pastes;



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- dispersant for mineral fillers in the preparation of binders based on natural and synthetic rubber latex;
- adjuvant, with a suspending effect, during the washing of fibers containing mineral fillers.

### **Preparation of solutions**

GAMOL WS dissolves with hot water (70-80 ° C): stirring until complete solution. 10-20% mother-solutions are stable several days: in any case the solution should be filtered prior to use..

### **FIELDS OF EMPLOYMENT**

#### 1) Dispersive for dispersed dyes

The dyeing technique with which the dispersed dyes are used for both acetate and triacetate and for polyester, polyamide, acrylic and vinyl fibers is known.

In the specific sector of the acetate rayon the dyeing temperature does not exceed 75-80 ° C and the dyes are facilitated in their dispersibility by addition of surfactants which generally form part of the non-ionic series.

The use of GAMOL WS becomes indispensable when synthetic fibers are dyed under pressure, ie at a temperature of 110-130 ° C. The same in the case of dyeing in which dyeing accelerators (carriers) are used and where temperatures near 100 ° C are required. GAMOL WS is a versatile product both in the case of acetate dyeing and synthetic fibers dyeing, in any form (staple, yarn and fabric) and with any dyeing method and equipment.

practical application of the GAMOL WS is very simple.

A 10% of GAMOL WS is prepared in water at (70-80 ° C) ,taking into account that the quantity of dispersant must be 0.5-1 g / l calculated on the total volume of the dyeing bath.

With this solution the dye is mixed and the dispersion is poured ,after filtration, in the dyeing bath.

Before adding the dye, a small amount of GAMOL WS (0.1 - 0.2 g / l) should be added directly to the dyeing bath.

The use of GAMOL WS does not affect in any way the dyeing process and the characteristics of exhaustion of the dyes used.

The combined use of non-levelling agent and emulsifiers, while used directly in the dye bath, is certainly positive.

#### 2) Dispersing for vat and sulfur dyes

In this case, the application technique mentioned for the dispersed dyes is valid.

The GAMOL WS, as a function of its dispersing action, facilitates the regular reduction and development of dyes.

#### 3) Dispersing for direct dyes, acids, metal complexes and indigosols



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Generally, these categories of dyes do not require dispersants, but in some cases a synergistic solubilization action may be required, with particular reference to dyes characterized by strong fiber substantivity (see direct dyes on rayon viscose).

GAMOL WS solves this problem positively. They are used in cases of limited difficulty from 0.5 to 1 g / l of product using the usual technique of impasting with the 10% solution of GAMOL WS.

#### 4) Dispersing for printing dyes

In the preparation of printing pastes it is sometimes required to use a product which allows a perfect dispersion of organic and inorganic pigments and at the same time reduces viscosity by inhibiting the formation of gels. In these cases the use of the GAMOL WS solves the specific problem allowing to work with low viscosity and high concentration in dry matter thicknesses. GAMOL WS is used indifferently with various dyes, with organic and inorganic pigments; the method of use consists in adding a solution of GAMOL WS to the dye, mixing appropriately. The quantity of dispersant is 2-3 grams per kg of printing paste.

#### 5) Dispersive for mineral fillers

This sector refers in particular to the preparation of binder and anti-skid surfaces for carpet backing. The use of rubber latexes or synthetic resins for this finishing is known. The addition of GAMOL WS in addition to explicating its specific dispersing function, tends to reduce viscosity.

The quantities of GAMOL WS are 2-4% calculated on the weight of the charge or pigments.

#### 6) Adjuvant with suspending effect in the washings

For the washing of textile material containing mineral fillers or dirt (for example, the removal of lace and tulle, the washing of curtains in synthetic fibers, etc.), we recommend the addition of GAMOL WS, employed in 20% on the weight of the normally used detergent. GAMOL WS has good anti-redepositional power.

**Keywords:** dispersant, solubilizer, dispersed, vat, sulfur, suspending agent, sulphur, dispersing

The data are the result of careful studies and / or experience obtained, however, they should be considered indicative and still no guarantee of employment. Data contained in this document is not intended to be specific.

For information: e-mail [info@gammacolorsrl.com](mailto:info@gammacolorsrl.com)