



## Carpet Dyeing and Printing

ENDLESS POSSIBILITIES TO OPTIMISE YOUR PROCESS

### OPTIMISE CARPET PROCESS

High-quality carpets are produced with high-quality products for dyeing, screen printing, valve jet printing and finishes. We know which products you need for carpet processing.

[TANATEXCHEMICALS.COM](http://TANATEXCHEMICALS.COM)

ADDING PASSION  
TO TEXTILES.



# CARPET DYEING AND PRINTING

**TANATEX Chemicals develops, produces and sells textile processing solutions for high-quality carpets. We provide a full range of products for dyeing, screen printing, valve jet printing and finishing of carpets. We present our dyeing and screen printing range especially for carpet processing.**

## Wetting agents

Penetration problems are common even in goods that are pre-wet with water and/or steamed before dyeing. This is due to the hydrophobic properties of oils and other lubricants applied to the fibre during production and spinning. If these are not removed during pre-treatment, uniform penetration of the pile cannot be guaranteed. ERKANTOL® NR and TANASPERSE® CJ are well known wetting agents for carpet dyeing and printing application.

## Scouring agents

Penetration problems may occur if there is a high concentration of lubricant on the fibre, even if it has been treated with a scouring/wetting agent. TANATERGE® AL is a nonionic low-foaming detergent.

## Leveling agents for PA and wool carpets

Leveling agents are used to improve the overall quality. Their mode of action varies greatly, depending on ionicity. While non-ionic/weakly cationic products have affinity for the dye, anionic products have affinity for the fibre. They act as a colourless dye during application. TANATEX offers the right product for different applications with its LEVEGAL® range.

LEVEGAL® AD is a nonionic, low-foaming product, and improves the combinability of dyes (has affinity to anionic dyes). It is recommended for exhaust dyeing with high turbulences as well as continuous and space dyeing.

The nonionic/anionic LEVEGAL® FTS-K (foaming) is mainly recommended for continuous dyeing processes (has affinity to the PA fibre as well as to the anionic dyes).

Anionic leveling agents such as LEVEGAL® SER level out barriness caused by the structure of the fibre and are therefore used on unlevelled yarn qualities with a tendency to cause streaky dyeings (has affinity to PA fibres).

For wool dyeing as well as differential dyeing the use of the amphoteric AVOLAN® UL 75 is recommended. When dyeing differential carpet, this well-known product results in optimum leveling and differentiation, having no negative influence on light fastness (especially benefit on critical PA yarn).

## Anti-frosting agents

Frosting is a risk in all continuous dyeing and printing processes. It is caused by dye liquor sinking from the pile tips into the pile before fixation in the steamer. This reduces the dye concentration on the surface of the fibre and thus the colour strength of the pile tips. Anti-frosting agents prevent this phenomenon. They cause foaming at the start of the steaming and thus convey the dye back to the surface of the fibre (uniform diffusion of the dye from top to the bottom of the pile).

Our TANALEV® range offers two anti-frosting agents: TANALEV® VKU-F, a nonionic/slightly anionic and TANALEV® AFP, pure anionic product.

## Dispersing agents

Dispersing agents help to maintain the stability of dye dispersions in continuous and discontinuous processes. AVOLAN® IW (Flakes) and AVOLAN® IW-E liquid are commonly used to separate anionic and cationic components. AVOLAN® IS is applied when dyeing with metal complex dyes. LEVEGAL® DLP is extremely efficient when dyeing and printing with disperse dyes.

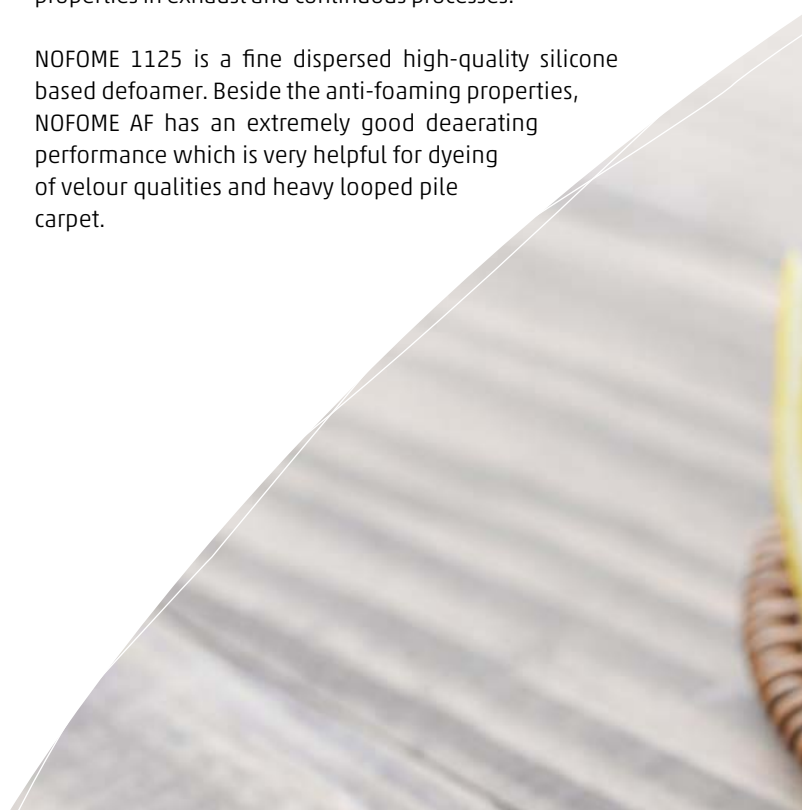
When applying the pH sliding method in exhaust dyeing, acid donor TANACID® ADP guarantees a regular exhaustion of the dyes by starting with a high pH coming to a low end pH. TANACID® NAC helps to set an acid pH medium.

## Anti-foams

A whole range of different anti-foams is offered, based on silicone and also silicone free. The competitive silicone based NOFOME DS is mainly used in exhaust application.

RESPUMIT NF is a silicone free anti-foam with good deaeration properties in exhaust and continuous processes.

NOFOME 1125 is a fine dispersed high-quality silicone based defoamer. Beside the anti-foaming properties, NOFOME AF has an extremely good deaerating performance which is very helpful for dyeing of velour qualities and heavy looped pile carpet.



### Anti-crease agents

Anti-crease agents are required for open-width dyeing of carpet fabrics on winch becks. Furthermore they are required in rope dyeing of carpets to prevent excessive deformation of the pile.

TANEDE® PRT is an excellent crease inhibitor, having dispersing properties at the same time. The lubricant TANALUBE® FF also acts as crease inhibitor. In combination these products ensure excellent physical properties of the carpet by getting good levelness results.

### Fixation accelerators

Fixation accelerators are used to increase the dyeing and fixation rate in dyeing and printing. TANAVOL® PEW 02 is recommended to reach dark shades, when dyeing and printing PES.

For PAN and CDP (cationic dyeable polyester) dyeing and printing, TANASSIST ACE Conc. is recommended to get dye and printing paste stability as well as reaching deep shades.

### Resist and displacement printing agents

Anionic resist agents are generally based on syntans which block the amino end groups in the polyamide and thus delay fixation of the dyes.

MESITOL® AS and MESITOL® HWS liq. are recommended as resist agents in printing pastes, as well as resist agents for WO/PA blends.

For displacement printing, a cationic auxiliary is used. Displacement printing is based on the fact that anionic dyes have different affinities for polyamide fibres and the fixation of these dyes in the steamer can be more or less prevented by a cationic auxiliary. The cationic TANASSIST® RDC is recommended for this displacement application.

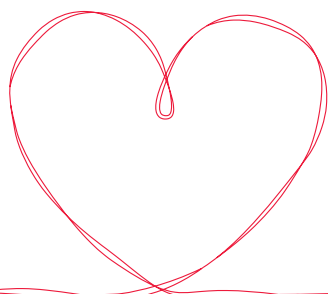




### Want to know more about our possibilities?

All mentioned auxiliaries are products used for carpet dyeing and screen printing. TANATEX develops a wide range innovative textile processing solutions that could also be used in the carpet industry.

On our website you can find our whole range: [TANATEXCHEMICALS.COM](https://www.tanatexchemicals.com)



*We believe that with our passion we can change the textile world.  
We improve experiences and make new experiences possible.*

#### **About TANATEX**

TANATEX Chemicals breaks new ground with ultramodern textile processing solutions, ranging from pre-treatment to finishing. Through a global network of offices, agencies and distributors, we support our customers worldwide with advanced top quality wet processing products and a high level of technical and tailor-made service. For almost 60 years we have proven to be a trustworthy and innovative associate. Since 2016 we are proud company of Transfar Chemicals.

Our cutting-edge products are based on the latest trends and demands in today's (technical) textiles and carpet processing industry. We do not sell mere products; we offer fit-for-purpose solutions. With an eco-friendly way of thinking, TANATEX experts are the ones to watch.

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