

New Textile Chemicals and Dyestuffs from Clariant International Ltd.

Clariant is a global leader in the field of specialty chemicals. Clariant's innovative products play a key role in its customers' manufacturing and treatment processes or else add value to their end products. Clariant has recently developed and launched worldwide a range of versatile new products. Further information on the products summarized below:

New Dyestuffs

Foron® Black AS-3LF: Foron Black AS-3LF is a new disperse dyestuff for high light-fast applications and the successor to Foron Black AS-LF. A high light-fast and hot light-fast black disperse dyestuff, it is 30% stronger than Foron Black AS-LF and characterized by good build-up. It achieves a neutral shade under different light sources and low color fading after exposure to light.

It is suitable for complying with all common automotive light-fastness standards and characterized by excellent sublimation fastness up to 180°C at 30 seconds, with very good combinability with UV-absorbers such as Clariant's Fadex®.

Foron® Dark Blue S-WF: Foron Dark Blue S-WF is being introduced to cover a current color spectrum matching gap and is intended to be employed as a base element for dark blue and navy shades. It displays a better cotton reserve when compared to Clariant's Foron Navy S-WF and is therefore an excellent choice for PES/cotton blends. Due to its excellent exhaust behavior and very high sublimation fastness, Foron Dark Blue S-WF is suitable for both exhaust and continuous (SWIFT) applications.

Nylosan® S range: Clariant is also introducing three new patented additions to its Nylosan S range. All three dyestuffs are suitable for polyamide – particularly PA/PU microfibers – and wool fibers, and represent state of the art in respect of wet fastness within the Acid Super Milling Dyestuff Class. Unlike conventional Milling dyestuffs, however, these Nylosan S products have a very high degree of compatibility. In combination with Lanasyne F, they are suitable for a range of color effects from the most intense bright colors to the deepest dull ternary shades. Application of these products is comparable to existing conventional acid dye methods.

The three new products of Nylosan S range are as follows.

Nylosan® Orange S-3R: A metal-free, bright reddish ternary orange element which fits the color space between the existing Nylosan Yellow S-L and Nylosan Red S-GS products.

Nylosan® Red S-3B: A metal-free, bluish-red ternary element for the color space between the existing Nylosan Red S-B and Nylosan Blue S-R products.

Nylosan® Navy S-3G: A metal-free, greenish navy ternary element for use as a dark blue ternary element, in addition to the production of a number of navy and black shades.

All three new elements exhibit almost identical performance.

In respect of polyamide, they offer:

- ❖ Very high build up (even on microfiber).
- ❖ Very high fastness to washing, perspiration and water.
- ❖ Slight-to-moderate polyurethane stain.
- ❖ Moderate-to-good light-fastness.
- ❖ A high degree of compatibility with new and existing Nylosan S dyestuffs.

For wool they provide:

- ❖ Very high processing fastness in respect of alkaline milling, over dyeing, decatising, chemical setting and hot water, in addition to high wet fastness to washing and perspiration.
- ❖ Maximum wool protection, dyeing in the iso-electric region and no need for alkaline clearing.
- ❖ Moderate-to-good light-fastness.
- ❖ A high degree of combinability with new and existing Nylosan S dyestuffs.

Diresul® Indinavy RDT-B and Diresul® Indiblack RDT-2R: Advanced Denim is a new concept based on maximized sulphur dye products, technologies and applications, and takes environmental concerns into consideration while complying with health and safety standards.

The Advanced Denim concept is also designed to meet the demands of tomorrow's denim fashions in respect of both style and quality performance. To complement the existing Diresul RDT dye range, Clariant has introduced Diresul Indinavy RDT-B liquid, which enables deeper and faster blue shades to be achieved and offers the market new and interesting effects, in addition to Diresul Indiblack RDT-2R liquid for black, grey and blue effects.

The latest Diresul RDT dyes are suitable for both Indigo and Indigo-free denim applications and enable biodegradable dyeing with reducing agents as well as innovative application procedures that help to save substantial quantities of water, time and energy (Pad-Ox).

Imacol® C3G liq: Imacol C3G liquid is a highly-effective lubricant for dyeing cellulose fibers and blends. It reduces fiber metal friction at all stages of textile wet processing, is highly effective over a wide pH range, does not impair the shade and fastness properties of dyeing and is non-foaming and very economic in use.

New finishing chemicals

Nuva® 1910 liq: Nuva® 1910 liquid for cotton and PA-based fabrics achieves excellent initial performance as well as good durability. The product also works well on PES, where only low durability requirements are in place. Because the product has a good chemical compatibility, it can even be used successfully with selected fire retardants. Nuva 1910 liq is developed from fluorocarbon technology with a polyamide-based cationic copolymer that significantly improves the efficiency of the fluorocarbons.

New fibre finishes

Afilan® FOX liq: Afilan FOX is a spin finish for the spinning of polypropylene BCF (bulk continuous filament), CF (continuous filament) yarns and multi-filaments. It is suitable for undyed as well as solution-dyed yarns and can be applied either as neat oil or as an aqueous solution (at a concentration of around 10-20 % with oil-pick up of 0.8-1.4%).

Afilan FOX liq can be easily diluted with water in any ratio and provides well-balanced friction and cohesion properties. It has excellent antistatic properties and an optimized thermo stability.

Afilan® AKT liq: Afilan AKT liquid is a highly-efficient antistatic agent with a strong anti-corrosive effect for use in the manufacturing of polyester, polypropylene, polyamide or acrylic staple fibers. It is applicable by spraying, padding or immersion and usually does not yellow white goods, even at higher drying and thermoset temperatures. Based on high quality raw materials, Afilan AKT liq. has no effect on the shade or fastness properties of dyed goods and also does not cause thermomigration.

Clariant's Textile Business is a global leader in textile chemicals and dyes and further information can be obtained from Clariant Pakistan. ♦