Product Note



LANXESS solutions for disinfection and antimicrobial protection

- LANXESS manufactures actives for home and institutional disinfection
- LANXESS offers ready to use formulations and active ingredients for a wide range of applications

Mumbai, October 26, 2012. LANXESS, the global specialty chemicals company manufactures a spectrum of active molecules which have a wide range of applications in the home and institutional disinfection segment. For the formulation and production of specialized disinfectants to all-purpose disinfectants for use in hotels, hospitals, surgeries, household, institutions, stables and sheds, the business Material Protection Products from LANXESS offers a wide range of active ingredients – phenolic derivatives, aldehydes, and quaternary ammonium compounds. The active molecules are made available as ready-to-use concentrates for application in household, industry, public institutions and animal husbandry.

The LANXESS active molecules are applicable for many personal care and health care products that are used daily and generally come into contact with the skin. Therefore, it complies with regulations related to quality, health and safety requirements for use in cosmetics, pharmaceuticals, antiseptics and skin disinfectants. Few examples would be liquid handwash, hand sanitiser, antiseptic lotions, antimicrobial gel body washes, deodorant liquid soaps, deodorant sticks or body disinfectants that are applied in the area of wounds. The LANXESS actives for personal care disinfection help to keep pathogenic micro-organisms in check, break infection chains and maintain good health wherever in use.

In hospitals and similar institutions, where disinfection is indispensable, antimicrobials are needed to ensure a safe environment, prevention of further spread of pathogenic microorganisms and implementation of an effective health care

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management. Aqueous pharmaceutical formulations need reliable and safe in-can preservation. LANXESS in-can preservatives and antimicrobials for these purposes are highly effective, safe in use and cost effective. For example, they can be used for cleaning surgical equipment, glass surfaces, floors, toilets and other sanitary cleaning etc.

LANXESS Products:

Preventol CD601 is a ready formulated disinfectant concentrate with cleaning power, highly effective in combating and eliminating a broad spectrum of microbial activity arising from bacteria, viruses, fungi and spores. This formulation combines the benefits of new generation phenolic active ingredients and stabilized aldehyde-based active ingredient to create a synergistic combination. It is proven to be effective where there is a high combination of blood and/or protein and against naked viruses. It is perfectly suited for surface disinfection in hospitals, clinics, nursing homes, commercial establishments, manufacturing areas and animal houses. It is also ideal for protecting medical devices and instruments.

The range of phenolics from the stable of LANXESS Material Protection products includes Preventol CMK, OEXtra and ONExtra. These are used for the formulation of disinfectants of all-purpose disinfectants and liquid soaps, for use in hospitals, surgeries, industry, institutions, stables and sheds.

Preventol CMK, when used in combination with other phenolic active ingredients such as Preventol Oextra, ON extra and/or Preventol BP, is highly effective against lipophilic, enveloped viruses such as Herpes simplex, Hepatitis B or HIV viruses. It is recommended for use in formulation of aqueous alkaline solutions for strong dirt dissolving power and good miscibility with water and is preferable for heavy duty disinfection.

Preventol Oextra and ONextra: The AOX-free grade Preventol Oextra distinguished by its low acute toxicity, good biodegrability and

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as a non-sensitising active ingredient with only a slight odour. The halogen free grades Prevenol O extra and Preventol ON extra have a broad and balanced spectrum of activity against bacteria, yeats and mould fungi. Preventol Oextra can be successfully combined with a very small amount of Preventol GDA 50 in order to achieve a fully virucidal effect.

Preventol SB is an active ingredient for antimicrobial deodorant soaps, washing products, medicated cleansing products and other cosmetic deodorant products. It can also be used in toothpaste, bar soaps, shower gels, hygienic disinfection of fabrics and antibacterial finishing of plastics and fibres. This ready-to-use formulation is at least as effective as equivalent liquid soaps containing Triclosan/Triclocarban (TCC). TCC is highly effective against skin resident microflora and works well at low temperatures. It works continuously ensuring maximum antibacterial protection, long after application. It is insoluble in water so is not removed by rinsing once applied to the skin. It can be used for light or white colored products as it does not discolor.

Preventol BP has a broad spectrum of activity against bacteria (especially gram-positive cocci), yeast and mold fungi. When used in other phenolic active ingredients (those mentioned above) have high effectiveness against cocci and lipophilic, enveloped viruses such as Hepatitis B or HIV viruses.

As with other groups of active ingredients, the microbicidal effectiveness of Preventol BP can be affected by the formulating components of the disinfectant, the pH of the ready-to-use dilutions, the degree of contamination/germ count, the amount of dirt/protein, the hardness of water and the temperature.

Another interesting product range from this business unit is DGH (Dodecylguanidinium Hydrochloride) which is a broad spectrum microbiocide for paper, paper board, industrial process water treatment, and oil and gas applications. It is non-corrosive, completely water soluble, has broad pH stability and is very effective

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against Sulphate reducing bacterias. LANXESS offers this product further to the acquisition of Verichem in 2011.

Thus, LANXESS' expertise in chemistry and technical know-how brings out ingredients that can be used for sensitive, high impact applications in personal care, health care, home and institutional care and veterinary disinfection wherein the microbial activity is reduced to an acceptable level as defined for a purpose, a level which is harmful neither to health nor to the quality of perishable goods.

As evaluated in 2010, the overall target formulated disinfectant consumption in India is projected to grow at a CAGR of 11.5% between 2010 and 2015. These include institutional, pharmaceutical and food and beverage related disinfection. This market has few large players and several well entrenched small formulators across the country, making it very fragmented and lacking forward/backward integration in product lines. Thus, LANXESS' global network and several years of expertise bring in consistency of quality, a wide range of applications and technical support. In this market, the maximum demand comes from the public health institutions and large public sector organizations due to increase in the number of specialty hospitals, enhanced awareness of hygiene and the strengthening of the regulatory framework.

With more than 30 active ingredients offered in over 100 specialty products and formulations, LANXESS offers a wide spectrum of environmentally compatible protection the world over.

The LANXESS business unit Material Protection Products offers one of the broadest product lines in industrial biocides, disinfectants and preservatives and belongs to the LANXESS' Performance Chemicals segment, which achieved global sales of EUR 585 million in Q2 2012.

For more information, please visit: http://lanxess.in/en/industries-products-india/business-unit-india/material-protection-india/

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About LANXESS

LANXESS is a leading specialty chemicals company with sales of EUR 8.8 billion in 2011 and currently around 16,900 employees in 31 countries. The company is currently represented at 49 production sites worldwide. The core business of LANXESS is the development, manufacturing and marketing of plastics, rubber, intermediates and specialty chemicals. LANXESS is a member of the leading sustainable indices Dow Jones Sustainability Index (DJSI) World and FTSE4Good.

Forward-Looking Statements

This news release may contain forward-looking statements based on current assumptions and forecasts made by LANXESS AG management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.

Information for editors:

All LANXESS news releases and their accompanying photos can be found at http://press.lanxess.com. Recent photos of the Board of Management and other LANXESS image material are available at http://photos.lanxess.com. The latest TV footage, audio files and podcasts can be found at http://multimedia.lanxess.com.

You can find further information concerning LANXESS chemistry in our Web Magazine at http://webmagazine.lanxess.com.

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