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DISIFIN

All about DISIFIN

DISIFIN is a unique trouble free disinfectant in tablet form, that is non-toxic, a non-corrosive solution and 100% bio-degradable, effective against all known viruses, 99.99% bacteria and is also an excellent fungicidal & sporicidal. There are no known resistances. **DISIFIN** is available in tablets and powder.

In summary **DISIFIN** is:

- Safely dosed in space-saving tablet form, simple to handle and use (tablets)
- Effective against viruses, bacteria, spores, fungi and yeast
- There are **no known resistances**
- Non-cytotoxic, non-mutagenic and non-carcinogenic
- Quickly dissolved in water, with fast optimum agent concentration
- Long-lasting, up to 8 weeks in a UV reusable spray bottle
- 100% biodegradable within a few weeks
  (which means safe on environment and does not harm plastic, metal and wood surfaces)
- Safe around Animals and on materials

DISIFIN products are divided mainly into 5 categories as follows:

DISIFIN animal: for surface disinfection in the veterinary field application, such as Pet Shops, Veterinary Labs & Clinics, Farms, Zoo's, and for disinfection on Drinkers, Toys, Carpets and all types of animal cages

DISIFIN dent: for surface disinfection in the dental industry, such as Dental Practices, Laboratories and Dental Impressions

DISIFIN food: for surface disinfection and hygiene control for use in kitchens, caravans, camping, schools, nursing homes, catering and beverage industries

DISIFIN med: for surface disinfection in the medical field, such as Surgeries, Labs, Nursing homes, Theatres, Waiting rooms

DISIFIN tech: for surface disinfection and infection control for use on saunas, solariums, gyms, sport centers, kitchens, sanitary facilities, air condition units and funeral directors.

What is the difference between cleaning and disinfecting?

Cleaning describes the process of removing soil or residue from a particular surface, often through the use of soap products and detergents. The debris and cleansing product are then rinsed away with water.

Disinfecting is defined as complete elimination of all disease-causing bacteria or pathogens from an object or surface. Disinfectants are frequently used in facilities such as hospitals where there is a high risk of exposure to harmful bacteria and viruses.

Technical information

DISIFIN is not a chlorine disinfectant. It only releases max 2.5% chlorine during the active phase in contrast to 100% with chlorine disinfectants. The disinfecting effect of **DISIFIN** is not based on chlorine but rather on the active **Chloramine-T** substance.

Although **DISIFIN** is a chlorine compound based on the active substance **Chloramine-T**, **DISIFIN** attacks the peptide bonding of the proteins when the complete active substance molecule comes into contact with micro-organisms (virus, bacteria, fungus or yeast), in addition to having the effect of conventional chloride disinfectants, which continually split off chlorine. Immediate splitting-off of the chlorine molecule only takes place when there is direct contact with the amino group of the protein structure. If the chlorine is then separated, then a further mol of nascent oxygen (O nasc.) is split off in the second stage, unlike the functioning of chlorine disinfectants, which in turn attacks the amino group.

Thanks to this bi-functional reaction mechanism, the protein chains are irreversibly broken. That is why there can be no development of resistance.

The quantities of free chlorine that occur in a watery **DISIFIN** solution are so small that they cannot by themselves have a sufficient disinfecting effect.

Once **DISIFIN** has taken effect, it disintegrates into the environmentally harmless substances nitrogen (N_2, part of breathing air) sodium sulphate (Na_2S_{04} e.g. contained in laxatives) and carbon dioxide (CO_2 e.g. in sparkling mineral water.)

DISIFIN behaves like a chemical accumulator that only has a disinfecting effect and/or automatically makes this effect available when micro-organisms are present. Chlorine disinfectants, on the other hand, release subchlorous acid (HOCI) immediately and continually which then has a disinfectant effect. A disadvantage of this is that the disinfectant effect is quickly used up, especially when the disinfectant is exposed to sunlight, or when it is pumped around.

Because of the aeration this causes, the solubility of the subchlorous acid decreases and the chlorine gas escapes causing a distinct build-up odor. For these reasons, chlorine disinfectants are not stable and must therefore be replenished relatively soon. The subchlorous acid is very aggressive in its effect against surface materials and has a high degree of protein error.

Due to the functioning described and the special characteristics of DISIFIN, it is not comparable to conventional chlorine disinfectants.