



## The Three Elements of Hand Hygiene: Skin Care, Hand Disinfection and Cleansing

**Well balanced hand hygiene programme  
To protect health care practitioner's hands**



# Hand Hygiene

## The Three Elements of Hand Hygiene

Healthcare practitioners perform hand washing and hand disinfection frequently. The number of indications requiring a skin treatment can be as many as 60 per working day depending on the type of ward, the individual patients and the type of work being carried out. In normal cases, the skin's defence mechanisms are adequate, i.e. the skin is able to compensate for stresses. However, the risk of developing hand dermatitis is 6 times higher in health care worker than in other occupations. Skin irritations occur in approximately 20 - 40 % of health care professionals.

To maintain a natural barrier, skin needs to be soft and hydrated. Well balanced use of the three elements of hand hygiene – skin care products, hand disinfectants and wash lotions will support the healthy condition of health care worker's hands.

One measure to support this natural barrier and the skin's regeneration process is the use of skincare products, i.e., creams or lotions, which are hospital approved for health-care use. It is proven that the use of a hand cream can reduce skin dryness and roughness. Skin care products should have no influence on the effectiveness of the hand disinfectant. Only compatible hand disinfectants and skin care products should be used.

The most critical aspect of skin care though is the prevention of activities that put a strain on the skin. If skin-stressing habits are continued, the skin's defences might become exhausted with time – the skin reacts with redness, flaking and even the development of fine cracks, irritant contact dermatitis.

Skin-stressing activities include frequent hand washing, washing with hot water or even scrubbing with a brush. In health care hand washing with plain soap and water is carried out to remove visible soils. The average clinical situation does therefore not call for hand washing!

Effective hand disinfection is one of the most important preventive measures for breaking the chain of infection. Hygienic hand disinfection in different medical areas ensures a rapid and reliable reduction of bacteria count and reliably destroys microorganisms.

The best option is to use an alcohol-based rub-in product. They have a fast and a broad spectrum of antimicrobial efficacy. This opinion is shared by the World Health Organization and many national institutes, who based their positions on the numerous studies detailing the benefits of alcohol-based hand disinfectants.

Additionally, well-formulated alcohol-based hand disinfectants contain skin emollients, which support the protective function of the skin. Thus, compliance with hand hygiene guidelines actually can enhance skin health.

## Baktolan® lotion

### Product properties

Baktolan® lotion is an exceedingly compatible oil-in-water emulsion adapted to the skin's pH-value. Top-quality nurturing panthenol effectuates smoothing and moisturization of the skin and supports cell regeneration.

Baktolan® lotion is absorbed quickly without leaving a bothersome greasy film. It is thus suitable for care of stressed hands. Additional advantage: Studies demonstrate that the efficacy of Sterillium® is not impaired when Baktolan® lotion is used.

- cares with vegetable oils and panthenol
- increases the skin's moisture content
- keeps skin smooth and supple
- tested compatibility with Sterillium®

### Composition

Aqua, Dicaprylyl Ether, Glyceryl Stearate, Cetearth-20, Glycerin, Coco-Caprylate/Caprata, Pentylene Glycol, Cetearth-12, Cetearyl Alcohol, Cetyl Palmitate, Octyldodecanol, Panthenol, Cetyl Alcohol, Hexyldecyl Laurate, Hexyldecanol, Acrylates/C10-30 Alkyl Acrylate Cross-polymer, 2-Bromo-2-Nitropropane-1,3-Diol, Parfum (Fragrance), Sodium Citrate.

## Baktolan® balm

### Product properties

Baktolan® balm is a water-in-oil emulsion with premium nurturing components. Its active ingredients allantoin and panthenol effectuate smoothing and moisturization of the skin, and support cell regeneration. Bisabolol, the pure active substance from chamomile oil, has a soothing and anti-inflammatory effect. Vitamin E diminishes skin damages caused by oxygen radicals, and thus can obviate early skin ageing. A skin-friendly, slightly acid pH-value of 5.5 cares for the preservation of the protective acid mantle. Additional advantage: Studies demonstrate that the efficacy of Sterillium® is not impaired when Baktolan® balm is used.

- provides skin with particularly nurturing and replenishing substances
- promotes skin regeneration
- stabilizes protective acid mantle
- alleviates skin irritations and erythemas
- smoothes skin noticeably and keeps it supple
- tested compatibility with Sterillium®

### Composition

Aqua, Isohexadecane, Octyl Stearate, Cetearyl Octanoate, Glycerin, Cetyl Dimethicone Copolyol, Hydrogenated Castor Oil, Cera Microcristallina, Panthenol, Allantoin, Tocopheryl Acetate, Bisabolol, Sodium Chloride, 2-Bromo-2-Nitropropane-1,3-Diol, Parfum.



# Sterillium®

## Product properties

Effective hand disinfection is one of the most important preventive measures for breaking the chain of infection. Sterillium®, the leading hand disinfectant in Europe, has for forty years provided many product advantages for reliable and gentle hand disinfection.

- comprehensive spectrum of activity
- very good residual and persistent effect
- reduction of the transient flora by more than 99.99 % in 30 s
- surgical hand disinfection within 1.5 min
- exceptionally good skin tolerability even with long term use excellent skin protection and skin care properties

## Composition

100 g solution contain: pharmaceutically active ingredients: Propan-2-ol 45 g, propan-1-ol 30 g, mecetronium-metilsulfate (INN) 0.2 g. Other ingredients: Purified water, tetradecan-1-ol, glycerol 85 %, fragrances, colouring agents patentblue V 85 %.

## Microbiological activities

Bactericidal, fungicidal, tuberculocidal, virucidal against enveloped viruses (incl. HBV, HIV, HCV), influenza A virus, SARS, effective against adeno, polyoma and rota viruses.

## Areas of application

Alcohol-based hand disinfection, which can be carried out anywhere, independently of a washbasin and water.

Sterillium® is suitable for hygienic and surgical hand disinfection. The preparation is used in all areas where hygiene is important, e.g.

- on wards (incl. sanitation areas)
- in functional areas (operating theatres, intensive care units, infection departments)
- in treatment rooms and out-patient departments
- in ambulances
- in laboratories, domestic services departments, by cleaning services
- in medical practices of all disciplines
- in retirement homes
- in the home-care of patients, old people and babies
- in home dialysis
- in industry (e.g. pharmaceutical, cosmetic and food processing industry)

Sterillium® is not suitable for the disinfection of mucous membranes and could not be used in the immediate proximity of the eyes.

## Directions for use and dosage

Sterillium® is rubbed undiluted into the dry hands; be sure that the hands are completely covered during the application time. Keep special attention to fingertips and thumbs.

The product should be applied with an easy-to-use dispenser which is ideally elbow-operated. For these dispensers, BODE offers single use product containers for most hygienic preconditions.

### CEN standard

#### EN 13727

Bactericidal effect in the quantitative suspension test

- Phase 2 / stage 1 effectiveness ..... 30 s

#### EN 1500

Test under simulated practical conditions of hygienic hand disinfection

- Phase 2 / stage 2

Hygienic hand disinfection ..... 30 s

#### EN 12791

Test under simulated practical conditions of surgical hand disinfection

- Phase 2 / stage 2

Surgical hand disinfection ..... 1.5 min

#### Hygienic hand disinfection:

Rub approx. 3 ml into the dry hands and keep hands moist for at least 30 seconds.

Surgical hand disinfection:

Keep the hands and forearms moist with the product for 1.5 min.

#### Bacteria

MRSA ..... 30 s

Tb ..... 15 s

#### Viruses

Virucidal against enveloped viruses

(incl. HBV, HIV, HCV) ..... 15 s

Herpes simplex virus ..... 15 s

Influenza A virus ..... 15 s

SARS virus ..... 30 s

Adenovirus ..... 1 min

Polyomavirus ..... 5 min

Rotavirus ..... 15 s

## Chemical-physical data

Appearance light blue, transparent

Density (20 °C) approx. 0.85 g/cm<sup>3</sup>

Flashpoint 23 °C (DIN 51755)



# Hand Hygiene

## Baktolin® basic

### Product properties

Baktolin® basic is a universal wash lotion for all areas where frequent hand washes are necessary. Baktolin® basic possesses a skin-friendly pH-value, which in combination with mild surfactants provides gentle cleansing and the maintenance of the skin's natural protective acid mantle.

- cleanses thoroughly
- with modern, mild surfactant
- soap- and alkali-free
- neutral pH-value

### Composition Baktolin® basic

Aqua, Sodium Laureth Sulfate, Sodium Chloride, PEG-7 Glyceryl Cocoate, Cocamidopropyl Betaine, Glycerin, Disodium Laureth Sulfosuccinate, Sodium Benzoate, PEG-120 Methyl Glucose Dioleate, Parfum (Fragrance), Sodium Citrate.

### Directions for use

Baktolin® basic should be dispensed by dispenser systems or from bottles with a dosing pump alternatively. With the convenient toggle cap the product can also be dispensed directly from the bottle – quickly and without dripping.

For hand washing, dispense approx. 2 – 3 ml of Baktolin® basic from bottle or dispenser, froth up with water, rinse off and dry hands thoroughly.

## BODE® Eurodispenser

### Product properties

BODE Eurodispenser 2000 is a user-friendly dosing dispenser, which can be utilized flexibly. With its closed housing, completely made of high-grade plastic, the BODE Eurodispenser 2000 not only protects the products in the bottles, but also facilitates the product application.

BODE Eurodispenser 2000 is suitable for the application of all hand disinfectants, wash lotions and skin care products, being filled into standard bottles.

The BODE Eurodispenser 3000 is a simple and practical application aid for the hygienic application of wash lotions and skin care preparations as well as for the application of hand disinfectants in limited spaces. The dispenser allows a fast and straightforward insertion of 350/500 ml BODE bottles.

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Consisting of a stainless steel wire frame, the BODE Eurodispenser 3 was particularly designed for the attachment to bedframes. Depending on the bed design, the dispenser is available in two versions – one with angled holder for the attachment to tubular frames and one with straight holder for the attachment to the foot part. The BODE Eurodispenser 3 is suitable for the application of hand disinfectants and skin care products in 500 ml BODE bottles.

BODE dosing pumps allow the convenient and hygienic application of products in original BODE bottles, e.g. when used in BODE Eurodispenser 3.

### Presentation



**Sterillium** 100 ml, 500 ml, 1000 ml

**Baktolan lotion** 100 ml, 350 ml, 500 ml

**Baktolan balm** 100 ml, 350 ml

**Baktolin basic** 500 ml, 1000 ml

**Eurodispenser 2000** for 350, 500 ml and 1000 ml bottles

**Eurodispenser 3000** for 350 and 500 ml bottles

**Replacement pump** Eurodispenser 3000

**Eurodispenser 3** for 500 ml bottles with straight clip

**Eurodispenser 3** for 500 ml bottles with angled clip

**Dosing pump** for 500 ml bottles and 1000 ml bottles



Note: The recommendations regarding our preparations are based on scientific tests and are given in good faith. More detailed recommendations, e.g. regarding material compatibility, are possible only in separate, individual cases. Our recommendations are not binding and do not constitute a guarantee. They do not preclude a company's own testing for the intended purpose and process. In this respect we cannot accept any liability. This is in accordance with our general conditions of sale and supply.



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