Hygienic and Surgical Hand Disinfection

The classic hand disinfectant. Particular kind to the skin, regreasing. Broad spectrum of effectiveness against enveloped viruses. For operating theatres and wards.
Sterillium®

**Product properties**

Specific hand disinfection is one of the most important preventive measures for breaking the chain of infection. Carried out as hygienic hand disinfection in industry or as hygienic or surgical hand disinfection (pre-operative antisepsis) in the different areas of medicine, it ensures a rapid and reliable reduction in the bacterial count, with a reliable kill of the microorganisms.

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: bactericidal (incl. MRSA), fungicidal, tuberculocidal, virucidal against enveloped viruses (incl. HBV, HIV, HCV), adeno, papova and rota virus
- 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 ingredient: Propan-2-ol 45 g, propan-1-ol 30 g, meclotrimetilsulfate (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), SARS, effective against adeno, papova and rota virus.

**Areas of application**

The great advantage of the use of Sterillium® is that hand disinfection 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 the home-care of patients, old people and babies
- In home dialysis
- In industry (pharmaceutical industry, cosmetic industry, 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.

**Direction for use and dosage**

Sterillium® is rubbed undiluted into the dry hands; care must be taken to ensure that the hands remain moist for the full contact time. In order to prevent gaps in hand disinfection the standard rub-in technique (EN 1500) should be used.

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.

**RKi list of disinfectants in accordance with § 18 of the Federal Law on the Prevention of Infectious Diseases in Humans (IfSG)**

<table>
<thead>
<tr>
<th>Effect area</th>
<th>Description</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (bacteria, fungi)</td>
<td>Sterillium®</td>
<td>30 s</td>
</tr>
<tr>
<td>In case of Tb use twice</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CEN standard**

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 at least 3 ml into the dry hands for 30 seconds.

**Surgical hand disinfection**

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

**Bacteria**

<table>
<thead>
<tr>
<th>Microorganisms</th>
<th>Sterillium® Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDA microorganisms (time kill test)</td>
<td>30 s</td>
</tr>
<tr>
<td>MRSA</td>
<td>30 s</td>
</tr>
<tr>
<td>Listeria</td>
<td>30 s</td>
</tr>
<tr>
<td>Salmonella</td>
<td>30 s</td>
</tr>
</tbody>
</table>

**Viruses**

<table>
<thead>
<tr>
<th>Enveloped viruses (incl. HBV, HIV, HCV)</th>
<th>Sterillium® Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herpes simplex virus</td>
<td>30 s</td>
</tr>
<tr>
<td>Influenza A virus</td>
<td>15 s</td>
</tr>
<tr>
<td>SARS virus</td>
<td>30 s</td>
</tr>
<tr>
<td>Adeno virus</td>
<td>1 min</td>
</tr>
<tr>
<td>Papova virus</td>
<td>5 min</td>
</tr>
<tr>
<td>Rota virus</td>
<td>30 s</td>
</tr>
</tbody>
</table>
In the case of lengthy operations, it is desired that the effect of the hand disinfectant is maintained for the entire period of the operation (persistent effect). Also, after the disinfection, the microorganisms reaching the surface of the skin, e.g. as a result of perspiration, should be killed; in contrast to the persistent effect, this effect is called the residual effect.

The residual effect is particularly highly valued due to the fact that approx. 25 % of the surgical gloves become punctured during use.

Sterillium® possesses remarkable residual and persistent effects.

The formulation permits penetration into the stratum corneum of the skin. There it forms a defensive barrier against microorganisms which rise to the surface of the skin with sweat. The number of microorganisms on the hands in the surgical gloves therefore remains low for a period of several hours.

A severely stressed, damaged skin jeopardises the success of hand disinfection. Daily regenerative skin care has proven to be particularly important for maintaining the function of the skin. In breaks, after completion of the operating programme, and at the end of the working day, use of a protection and care product, e.g. from the Baktolan® range, is recommended.

If a care lotion is used immediately prior to hand disinfection, there is the risk of the disinfectant’s effectiveness being adversely affected. In contrast, studies of the effectiveness of Sterillium® in conjunction with the frequently used skin-care products Baktolan® balm and Baktolan® lotion revealed no adverse effects on the disinfection. It was shown in the studies that the use of these skin-care products has no effect on the effectiveness of subsequent hand disinfection with Sterillium®. From the microbiological point of view there are no objections to use Baktolan® balm (Baktolan® lotion) in conjunction with the hand disinfectant Sterillium® (Evaluatory test report by Prof. Dr. P. Heeg, 28.08.1999).

**Chemical-physical data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>light blue, transparent</td>
</tr>
<tr>
<td>Density (20 °C)</td>
<td>approx. 0.85 g/cm³</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>23 °C (DIN 51755)</td>
</tr>
</tbody>
</table>

**Note:** Flash point according to DIN 51755: 23°C. Flammable. Do not bring into contact with naked flames. Do not use near to sources of ignition. Observe the instructions for use and safety regulations for alcohol-based disinfectants. Do not use Sterillium® after the expiry date.

**Presentation**

- 100 millilitre bottle
- 500 millilitre bottle
- 1 litre bottle
- 5 litre canister

**Special notes:**

- 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.

02-06