

Instructions for Use for the Dermalux[®] System and Derma LiteCheck[®] during Hygiene and/or Personnel Training

Personnel training according to the Dermalux[®] Method

The **Dermalux[®] Training method** is a convincing aid in training personnel in hospitals. It is also suitable for use in residential and nursing homes together with nursing schools and also in the Food & Beverages and pharmaceutical industries or in professional skin care. Where normally a wipe test with an incubation period of up to 48 hours would be necessary to demonstrate hand contamination, it is now possible to make invisible contamination on participants' hands immediately visible during training.

No controlling methods are carried out using the **Dermalux[®] Method** since it is possible to sensitise hygiene consciousness in an easy and extremely effective manner within seconds. You will very quickly develop a feeling for the communication possibilities using the fluorescence method and learn how the participants get the most fun from the programme. After all, you wouldn't like to "make an exhibition" of the test subject.

• Show cross-contamination immediately

The instructor applies the **Dermalux[®] Test Lotion**, which is invisible in natural daylight, onto his hand prior to welcoming and greets the participants with a handshake. The **Dermalux[®]** device is able to make this fabricated cross-contamination of the participant's hands visible, underlining the didactic teaching method effectively. The participants are thus able to experience how quickly and easily contamination can be transferred. This sharpens hygiene awareness and the participants are thereby motivated to perform the necessary hand washing and disinfecting on a regular basis.

• Simulate and instruct hand disinfecting under everyday practice conditions

Correct execution of hand disinfecting can be simulated and instructed in an equally memorable way. Our training agents **Dermalux[®] Crystal Gel Tester** and **Dermalux[®] Alcohol Tester II** were specially developed for this use and the participants should apply them to the hands in the same way as hygienic hand disinfecting. The areas where the agent has not been applied are immediately visible. Tests have shown that areas between the fingers and underneath the nail bed are often missed. Follow-up applications and correct application can be directly demonstrated and practised via the **Dermalux[®] Checkbox Multimedia** or using the **Derma LiteCheck[®]**. Following this training, participants are able to achieve a much improved use with commercial disinfectants.



The appearance of **Dermalux® Alcohol Tester II** is similar to that of standard disinfectants and therefore, if required, it is possible to create a training situation which is close to conditions in a practice. For this reason, great care must be taken not to confuse the test agent with the commercial disinfectant. **Dermalux® Crystal Gel Tester** is a transparent, alcoholic gel product which through body heat turns to liquid on the hands and is described by many participants as being particularly pleasant.

The agent allows “clean” working during training, using only a small amount. This agent is particularly recommended for those training situations in hand disinfection where it needs to be communicated: When applying the medium, the most important aspect is to first cover all areas of the hand in order to ensure the necessary exposure time. This is why it is important to check using the **Dermalux® Checkbox Multimedia** or the **Derma LiteCheck®** after the first few seconds whether all areas of the hand have been covered. The clock should only be used in the second step for timing the prescribed length of time required to rub in after this has been assured. The reason why the gel is useful is because a liquid test agent is applied too easily and quickly to the hands and this aspect is then inadequately demonstrated. The gel reflects the preference of many countries toward gel products and, therefore, offers further scopes of application in this field.

We would like to point out that both these test agents are unsuitable for skin and hand disinfecting purposes, they have purely been developed to be used in simulating practice conditions.

• Controlling hand washing

The correct way to wash hands will also be demonstrated during training. Once the participants have completely covered their hands with the **Dermalux® Test Lotion**, they will then be asked to wash their hands. By the subsequent control under the **Dermalux®** device, the fluorescence shows up those areas often missed as brightly glowing: nails and nail beds, balls of the thumb, finger and hand joints or, for example, those areas on the left hand that are difficult to reach for right-handers.

• Disinfection without washing hands – not always

There is a consensus of opinion in hospitals not to wash hands more than is necessary. Visible dirt makes washing essential. When there is no visible contamination or if there has been no protein content (blood), then disinfecting hands is often sufficient. Hands must be washed prior to starting work.

Do not forget skin care! Disinfectants do not necessarily contain the appropriate properties.

We would like to make a suggestion with the following training procedure, e.g. in food preparation, that the participants also demonstrate “disinfected dirt”. To do this the hands first have the **Dermalux® Test Lotion** rubbed in. Following this, the participants disinfect their hands using the commercial disinfectant. When the results of disinfecting are being examined using the **Dermalux®** devices, the fluorescent test agent applied to the hands demonstrates under the UV light that “contamination” is still present because the participants did not wash their hands prior to disinfection. Interesting discussions can result from this demonstration.



• Healthy skin holds fewer hygiene risks

Damaged skin is also detrimental to hand hygiene. For this reason, at the end of the training period we again recommend that the participants are informed of appropriate skin protection and skin care measures, how to select the appropriate products that healthy skin needs and how it should be applied to the hands. It is best to use the Dermalux[®] Test Lotion for application control in this training segment.

We also recommend that you point out a mistake that is often made when washing hands and that is not to remove residual soap carefully enough from between fingers, for example. The skin reacts sensitively to tenside residue and alcoholic components of disinfectants when used in combination. Equally detrimental is not to dry hands adequately. Even the most high-quality paper towel cannot dry effectively if all areas of the hand are not worked carefully. Even the correct way to dry hands can be trained using the **Dermalux[®] Method**. Ask us!

• Dermalux[®] technical accessories make the training even more interesting

Once you have used the **Dermalux[®] Method** as a training method you will be very reluctant to ever do without it again. Personal experience is much more memorable than most of the usual didactic methods. This direct relationship with their own hands is exactly what many test subjects need. They feel them moving and are also able to observe them inside the device at the same time. Added to this is the instructor using his own hands to accompany all effects during individual talks, for example by moving the finger of the test subject, thereby demonstrating the various levels of perception; and this is what is important. The device's open construction makes this possible. Furthermore, the **Dermalux[®] Multimedia Cam**, the camera unit which aids group communication via live images from inside the device, can be installed on the **Dermalux[®] Checkbox Multimedia**. If you do notice restlessness during the training, why don't you simply take the small camera away from the Checkbox's viewing slot and quickly focus on one of the participants from the discussion group. That will almost certainly guarantee brief, friendly laughter.

Instructions for Use that are Important to the Hand Hygiene Training

- Switch on the Dermalux[®] Checkbox Multimedia or Derma LiteCheck[®] about 15 minutes before training starts in order to reach the optimum operating temperature and maximum performance of the lamps.
- Select an appropriate area for training so that the attractive white fluorescence effect is not affected by light shining directly into the device.
- Place the device on a dark surface if possible. The Dermalux[®] Transport and Display case, available as an accessory, is equipped with a black shelf on which to display the device to its best advantage. The shelf can also be removed and used a a table mat to place underneath the device.
- To view the hands inside the Dermalux[®] Checkbox Multimedia, the test subject stands in front of the device and puts his hands into the opening. Be careful when hands are moved that the fingertips in the Checkbox are kept at the same level as the white markings. The test subject then looks through the upper, marked viewing slot (sticker "fluorescence test") and is now able to view his hands under the UV light completely. Other test subjects who are undergoing instruction as part of group training are also able to see into the device in order to take part in discussions, for example, concerning test results. Hands inside the Derma LiteCheck are viewed between the open side doors.



- Immediately remove spots of training material from clothing, furniture surfaces and flooring or rinse. Possibly cover sensitive material prior to training.
- Please observe the application guidelines and safety at work regulations. Only use the device switched on according to the manufacturer's guidelines. Do not look directly into the UV light. Observe all technical information regarding operation of the device.
- The test subject should inform themselves of any possible increased risk towards UV skin sensitivity if they are taking certain medication, various antibiotics for example, or by a known hypersensitivity. It is also recommended to seek medical advice, for example, if persons have undergone cataract operations. In individual cases, use of UV protective glasses may be necessary.
- We recommend washing hands after the tests.
- Please observe all technical information regarding operation of the device.

Warning:

Please solely use the Dermalux Checkbox or Derma LiteCheck, which have undergone special technical inspection and have been developed for safe UV hand hygiene training, for conducting the Dermalux fluorescence test for which it is intended. Carefully observe the instruction and safety notices included.

Avoid use of unsuitable and/or untested devices for these purposes, for example, inspection lamps as well as devices which have not been developed for the evaluated Dermalux hand hygiene training.

