

Progress in occupational skin protection

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The number of occupational dermatoses is increasing although the workplace safety regarding the materials and substances used has constantly been improved. Thus, skin protection at the workplace and an effective skin care become the focal point of interest.

Employees at risk

Employees working in damp and humid environments are particularly susceptible for occupational dermatoses. Particularly at risk are professional groups like e.g. hairdressers, metal-workers, hospital staff, but also professionals in the catering business. Hence, the Federal Minister for Work and Social Affairs recommends these professional groups to abide by the technical regulations "TRGS 531 – Risks of skin disorders caused by working in humid conditions" and "TRGS 540 – Sensitizing Substances. In addition to the protective measures mentioned herein, skin protection and an effective skin care are the best prerequisites for a successful prevention of occupational dermatoses.

The regeneration of skin takes priority

Latest reports have shown that skin regeneration during the time off work is just as important as preventive skin protection at the workplace. Beginning the work with incompletely regenerated skin already is a bad start for the employee's skin balance. Hence, during the time off work it is necessary to apply an appropriate skin care which adequately supports the skin regeneration instead of impairing it. Therefore, it is essential to use base creams which are free of mineral oils and non-occlusive. Additionally, base creams should be free of preservatives and perfumes, as an already disordered or even damaged skin barrier is particularly susceptible for the sensitizing potentials of these ingredients. It is a well-known fact today, that perfumes are the number one sensitizing substances.

Sensitive skin will not tolerate the long-term use of emulsifiers

Emulsifiers are a further criterion when choosing the appropriate creams for skin protection and skin care. Emulsifiers are auxiliary compounds with the very useful

property of combining oil-based substances and water into a cream and transport them into the skin. However, they act in both ways: they also have the disadvantage of removing cream components and skin-specific protective substances out of the skin. Thus, frequent washing rapidly leads to a dry skin condition. Skin care creams for the preventive care at the workplace should be free of emulsifiers. By the way, emulsifier free preparations also have positive effects on chronic disorders of the skin barrier and even on the neurodermitic skin. Neurodermatitis patients are particularly sensitive as their skin by nature shows a deficiency in skin-own protective substances.

DMS – a new effective principle in skin care

New skin care creams based on DMS (DMS = Derma Membrane Structure) meet all requirements of the protective skin care at the workplace particularly if the skin is exposed to water and potentially harmful materials and substances. The chemical composition of DMS resembles the natural skin components and its physical structure is very similar to the natural membrane structure of the skin. DMS-creams are:

- free of mineral oils
- free of preservatives
- free of perfumes
- free of emulsifiers

Novrithen® - the skin care for dry and stressed skin

A very prominent representative of the new generation of skin care creams is Novrithen®. Besides the DMS system Novrithen® contains vitamin E, urea and primrose oil nanoparticles. DMS and vitamin E protect the skin while urea keeps the skin moist and soft. Primrose oil nanoparticles supply essential fatty acids for the endogenous synthesis of barrier substances (ceramide I). Ceramides are the best prerequisites to protect against skin

roughness. Furthermore, Novrithen® stabilizes the natural transepidermal water loss (TEWL) and hence is the problem solver in cases of dry and stressed skin.

Methods of use

Novrithen® develops its regenerative properties best when applied on the cleansed skin immediately after work. It is recommended to reapply the cream in the evening especially if the skin has additionally been stressed in leisure time.

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