



For the effective removal of PAH from the skin.

pak-ex is a special skin cleaning product for use after contamination by PAH (polycyclic aromatic hydrocarbons). PAH are formed particularly during incomplete combustion and can only be insufficiently removed with conventional products. The effective cleaning by pak-ex prevents the uptake of PAH through the skin or later oral uptake due to contamination spreading. pak-ex removes more than 96% of PAH. The skin-friendly formula is free of soap and penetration enhancers to avoid compromising the barrier properties of the skin.



> 96 % cleaning efficiency



soap-free (TRGS 401 compliant)



skin-friendly



50 ml / 200 ml

Developed by scientists

pak-ex was developed by specialists at the Leibniz Institute of Polymer Research Dresden e.V.. The product is patent pending (EP 2 215 7087.2).

Optimal for firefighting operations

It is important not only for firefighters, but also for everyone involved in the fire operations, to thoroughly clean themselves of PAH afterwards. They may all have contact with PAH - either through a cloud of fire smoke or through contact with contaminated equipment such as hoses. Therefore, pak-ex is available in 50 ml and 200 ml tubes. This allows pak-ex to be used in a variety of scenarios. Highly contaminated workers can use the 50 ml tube for subsequent personal use. This prevents the tube being passed on to other emergency personnel and contamination carry-over. The 200 ml tube may be used in a way that allows several lightly contaminated emergency personnel to clean.

Product Features Benefits

Removes more than 96% of PAH from the skin Significantly reduces the risk of absorption of PAH into the body through skin or transmission (e.g. hand-to-mouth contact).

pH skin-neutral Maintains the natural layer of acid film on the skin. This layer on the skin surface helps to maintain the natural bacterial balance.

Soap-free By not using substances known as 'penetration enhancers', the skin's barrier function is maintained to prevent increased skin penetration of PAH.

Balanced composition of the formula with skin-compatible components Suitable for all skin types.



Effectivity

Scientific studies of effectiveness were undertaken on a pig skin model based on Standard Operating Procedure SOP_SPH_04. (Preparation of split skin with defined thickness for use in penetration tests). A predefined amount of the PAH (fluorene and benz[a]pyrene) was applied onto the skin and after a constant exposure time the appropriate contamination solution was applied. Then it was rinsed off with cold water. For evaluation, the skin samples were fixed on a plate and characterised using 2D-resolved fluorescence spectroscopy. After measuring the reference sample, the intrinsic fluorescence of the skin was subtracted. In the case of PAH, the decontamination efficiency was found to be more than 96% and therefore up to 10 times better than conventional soaps in terms of PAH remaining on the skin.

Information about ingredients

pak-ex was developed on the basis of special and skin-compatible cosmetic raw materials. The formula of pak-ex deliberately avoids the use of substances known as 'penetration enhancers'. When working with dangerous substances, products containing degreasing ingredients (soaps, surfactants, solvents) should be avoided, 'since degreasing of the skin can lead to increased absorption of hazardous substances' (cf. TRGS 401). Clay minerals are natural minerals that are able to bind many substances. In pak-ex the clay minerals kaolin and bentonite are used. The special skin compatibility was confirmed by the independent laboratory Dermatest® and rated as very good.

Texture:

Beige, non-perfumed, paste-like suspension

Shelf life and storage

pak-ex has a shelf life of 24 months when stored at room temperature.

Application

pak-ex application is designed to be applied immediately without assistance needed.

1. Apply the gel generously to the contaminated skin area
2. Rub the gel into the affected skin area.
3. Rinse the affected skin area with cold water until it is clean again



Special attention should be paid to the hands, neck and face.

Skin tolerance

The independent dermatological institute dermatest has tested the skin tolerance of pak-ex and certified it as 'excellent'.



Service and Support

We are pleased to send you further information and support you in the implementation of pak-ex.

Contact

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