

Zeolite-containing detergents: No indications of allergic reactions

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About one third of all washing detergents sold in the EU contain zeolites. Synthetic zeolite A and the zeolites P, X and Y are especially common in household washing detergents. The structures of the crystalline aluminosilicates are porous with a large inner surface area which facilitates ion exchange. They are therefore well suited to deionise water. For this reason, they are increasingly used in detergents to replace phosphates which are an environmental burden.

Washing programmes that are particularly water-saving in conjunction with the type of textiles and the composition of the detergent may result in detergent residues including zeolites. The Federal Institute for Risk Assessment (BfR) has examined whether zeolites in washing detergents might cause allergic reactions such as scalp irritation or other skin reactions.

Animal tests revealed zeolites A, Y and X to be slightly irritating to the eyes, which is interpreted to be primarily the result of mechanical irritation or a local pH change. However, to date no animal studies are known that indicate allergic reactions caused by zeolites. Similarly, there are no indications to suggest properties that are allergenic for humans.

The full version of this BfR Opinion is available in German on http://www.bfr.bund.de/cm/252/zeolithhaltige_waschmittel_keine_hinweise_auf_allergische_reaktionen.pdf