

LETTER TO THE EDITOR

Comment on “occupational psoriasis after exposure to rockwool”

To the Editor,

Romita and colleagues¹ described, according to their introduction and conclusions, “The first case of occupational psoriasis induced by rockwool” while challenging the decision of the European Union to declassify mineral wool fibres as R38/H315 (irritating to the skin). To our knowledge, an association between exposure to stone/rock wool and the development of psoriasis has never been suggested before. We would, therefore, like to add information regarding the link made in this case report between mechanical skin irritation and psoriasis.

The authors describe an “itchy papulopustular dermatitis” (rather than “dermatosis”) and this, together with Figure 1 in their communication, does not illustrate psoriasis. The histology from an area on the trunk showed features “suggestive for psoriasis” but a photomicrograph is not provided, and neither is a photograph of the site biopsied. Furthermore, it is not stated when the biopsy was taken in relation to the development of the itchy dermatosis. However, the patient was known to have a history of psoriasis. Therefore, one cannot conclude from the information given that the patient had “occupational psoriasis,” as the patient had an established psoriatic diathesis before his inappropriate exposure to stone/rock wool.



FIGURE 1 Psoriasisiform lesions of the trunk¹

It is well-known that rock/stone wool fibres may cause mechanical irritation to the skin under certain circumstances.²⁻⁵ However, as the article rightly states, mineral wool fibres were classified as a skin irritant by the European Commission in 1997, but declassified in 2009 on the basis of several human and in vivo studies confirming that temporary mechanical itching does not fulfil either European or United Nations GHS criteria for classification as irritant.⁶ This scientific understanding is reflected in the regulatory framework, and when combined with an extensive and proactive user-information and instruction programme, including pictograms on all product packaging and “Safe Use Instruction Sheets,” it provides the necessary product stewardship framework ensuring safe use and installation of mineral wool products under normal working conditions.

The phenomenon of Koebnerization, originally defined in 1876, is well-known for psoriasis; the condition may develop at the site(s) of mechanical (or other) injury to the skin, such as scratching (eg, Sagi and Trau⁷). The authors have not shown that mechanical injury from fibres was the cause of the dermatosis nor do they appear to have considered scratching as the cause.

Romita et al¹ state that their patient reported that “the skin lesions had started a few days before consultation, right after he had worked in a closed cabin for exceptional reasons, during the cutting operations without any personal protective equipment.” Such use significantly conflicts with the industry safe-use instructions. The exposure to a high concentration of mineral wool fibres, including stone/rock wool fibres, in a closed room without any ventilation and no personal protective equipment can trigger a temporary itching effect that disappears quickly after exposure ceases; it can be prevented by implementing the recommendations provided on the packaging materials/pictograms.

The authors patch tested their patient with a phenol formaldehyde resin, but fail to state the chemical characteristics of this resin and how it relates to the resin the patient would have encountered.

In conclusion, exposure to mineral wool fibres can cause temporary mechanical itching, which can be avoided by following the clear user instructions as provided by the industry. The temporary discomfort caused by mechanical itching does not warrant a classification as hazardous according to the GHS.

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CONFLICT OF INTEREST

Statement about EURIMA. Anissa Alami Badissi is the Health and Safety Manager of EURIMA. Dr Christoph Koch is convenor of the Health and Safety Committee. EURIMA is representing the major mineral wool producer in Europe. HDS Ltd was compensated financially for the time spent in aiding the preparation of this letter.

AUTHOR CONTRIBUTIONS

Christoph Koch: Writing-original draft. **Anissa Alami Badissi:** Writing-original draft. **David Basketter:** Writing-review & editing. **Ian White:** Writing-review & editing. **John McFadden:** Writing-review & editing.

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