

## Allergens in textile products – a concern or a threat?

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### Introduction

Sensitization has great impact on workers and consumers who are exposed to allergens. The levels of allergens in consumer products reflect to certain extent the exposure of workers to these allergens during manufacture. RPS has performed a study for the European Commission regarding Article 25 (and recital 27) of the Regulation 1007/2011/EU<sup>1</sup>, on the casual links between chemicals used in and remaining on finished textile products and allergic reactions. Furthermore, the study also aimed to provide a priority list of allergenic substances for considering, where appropriate, propose risk management measures in the context of existing EU legislation, as well as non-legislative risk management measures. A report has been submitted by the Commission in September 2013 to the European Parliament regarding possible new labelling requirements of textile products based on this study<sup>2</sup>.

### Method

In this study, the regulatory definitions of a sensitiser and an irritant in the EU CLP Regulation are used as a basis to establish the definition of allergens related to textile products. The possible allergens related to textiles have been identified by reviewing the existing relevant legal framework at EU level, in EU Member States and in the main trading partner countries, and by reviewing the available scientific literature and epidemiological information. Among these possible allergens the ones which can have contact with consumers (used and remain on the finished textile products) have been defined during a series of workshops with stakeholders based on the likelihood of exposure of consumers. To prioritize the allergens used and remaining on the finished textile products a combination of classification of the allergenic chemicals notified under REACH and likelihood of contacting with consumers (remaining on finished textile products) have been used. Furthermore, several types of regulatory and non-regulatory actions are proposed taken into account the existing legislative framework and the findings in the study.

### End results

The findings show that it is very difficult to identify the causal links between chemicals used in and remaining on finished textile products and allergic reactions due to a lack of current information on the use concentrations of allergenic chemicals in finished textile products in the textile industry and a lack of standard testing method on allergies. However, the study was able to conclude that allergic reactions can be induced by textile dyes, finish resins and some other chemicals such as flame retardants and biocides.

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<sup>1</sup> The [new regulation for labelling](#) was brought in on 27th September 2011, stating that: The labelling and marking of textile products must be “durable, legible, visible and accessible”; Labels must be firmly fixed; Name and percentage in weight of all fibres in the item must be listed in descending order. Fibres that are less than 5% of the total product weight, or together with other fibres are less than 15% of total product weight can be listed as ‘Other fibres’. Textile products made by independent tailors do not need to comply with the labelling regulation.

<sup>2</sup> Report from the Commission to the European Parliament and the Council regarding possible new labelling requirements of textile products and on a study on allergenic substances in textile products.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0656:FIN:EN:PDF>

## Conclusion

A three-category priority list of allergenic substances has been developed for the EC to consider to set up risk management measures where appropriate. The categories are:

1. Notified sensitizers in classification and labelling (C&L) Inventory and intended to remain on finished textile products, e.g. some disperse dyes.
2. Harmonised sensitizer which, though not intended to remain, do remain on finished textile products and cause textile allergies (e.g. through impurity or component in formulation), e.g. formaldehyde.
3. Harmonised irritant and intended to remain on finished textile products, e.g. some softeners, flame retardant, perfume and dyeing auxiliaries.

Resulting from the study, RPS proposed that several different types of regulatory and non-regulatory actions can be considered:

- To provide new consumer information requirements under existing legislation
- To combine non-regulatory and further harmonisation of control procedures of the presence of sensitizers against information on labels
- Derivation and harmonisation of limit values based on quantitative risk assessment methods
- Further analysis for possible regulatory actions especially for chemicals in category 2
- Further investigation on exposure and risk assessment of allergenic chemicals used in textiles.

Based on the results and conclusions of this study, the Commission concludes in its report:

- further efforts in research and deployment of alternative and non-allergenic substances are deemed important
- Although some voluntary labelling schemes already exist to inform consumers about the presence of allergenic substances in textile products, labelling schemes and other tools to convey information on allergenic substances should be further investigated.
- The need for further measures to control the presence of allergenic substance found in finished textiles should be assessed, if appropriate, addressed under the relevant instruments available in EU chemicals legislation, in particular under REACH.

[The study can be viewed here.](#)