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BIOCIDE TREATED ARTICLES – ASSESSING KNOWLEDGE LEVELS

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ABSTRACT

The study assessed the level of knowledge regarding biocides in consumer products within three stakeholder groups; importing companies, municipalities and consumers. Importer representatives of five product categories were interviewed. Questionnaires were sent to the environment and consumer advice offices of Swedish municipalities and to representatives from two consumer organisations. Twelve out of thirty companies reported not to import biocide treated products, and most of them considered this an informed, conscious decision. In municipalities, the environment respondents were generally aware about biocides in consumer products and associated risks, while consumer advisers had less knowledge. Both groups stated that little effort was directed to the issue in their municipalities. Consumer organisation respondents were more knowledgeable, and worked to educate consumers about biocides.

INTRODUCTION

Biocides are substances used to prevent damage to humans, products, animals or the environment caused by harmful microorganisms, animals or plants. Today, everyday products are increasingly being treated with biocides, which is not only positive. The active substances in biocides may however pose a risk to humans and the environment, and also influence the development of bacteria resistance to biocides used as disinfectants and preservatives. In September 2013, the new EU Biocidal Products Regulation (No 528/2012) enters into force, placing large responsibilities on manufacturers and importers. In brief, articles that are treated with biocides may only be placed on the market if the active substances contained have been approved in accordance with biocide legislation. This will apply also to articles imported from outside the EU. If an article is claimed to have biocidal properties, e.g. antibacterial, it shall also be labeled with information about this claim and about the active substance(s) contained. Furthermore, the claimed biocidal property of the treatment will have to be substantiated.

The present study aimed to find out the level of knowledge about biocides in consumer articles among the stakeholder groups of companies, municipalities and consumers, providing a basis for further work and preparations for the new regulation (KemI 2012).

METHODS

Telephone interviews were conducted with selected representatives from importing companies representing five product groups (see Figure 1) with a substantial net inflow of products to Sweden. Apart from background information about the company, the questions covered six different aspects of the survey topic: (1) Biocides and biocide treatment of consumer articles, (2) Aim, need and efficiency of biocide treatment, (3) Risks associated with biocide treatment, (4) Alternatives to biocide treatment, (5) Information in the supply chain and (6) Laws and regulations. The interviews were adapted to whether or not the informant responded that they do import biocide treated articles. If a company did not import such goods, a shorter version of the interview was conducted, covering only topics (1), (5) and (6). After completion of the interview, the respondents were offered additional information on the Biocidal Products Regulation from the Swedish Chemicals Agency. In total, 30 interviews (five to seven interviews for each product category) were conducted. Electronic questionnaires were sent to offices for land use planning and/or environment as well as to offices for consumer advice in all municipalities in Sweden. The questions were developed in cooperation with the Swedish Chemicals Agency and comprised both open-ended and closed-ended questions. A similar electronic questionnaire was sent to representatives of the Swedish Society for Nature Conservation and the Swedish Consumers' Association. An e-mail with a short presentation of the survey, the aim and a link to an electronic questionnaire was sent to all the e-mail addresses provided. A reminder was sent after 13 days and after another seven day the questionnaire was closed. The data was then compiled and analysed according to basic principles of thematic content analysis (Weber, 1990), i.e. classified into content based categories, enabling the search for patterns regarding knowledge about biocides and the companies' views on these issues.

RESULTS

Importing companies

Ten out of the total 30 companies stated that they do import biocide treated products, hence they were asked the full set of questions. Twelve informants said that their company had chosen not to import biocide treated goods. Eight informants did not know whether articles in their product range are treated with biocides or not.

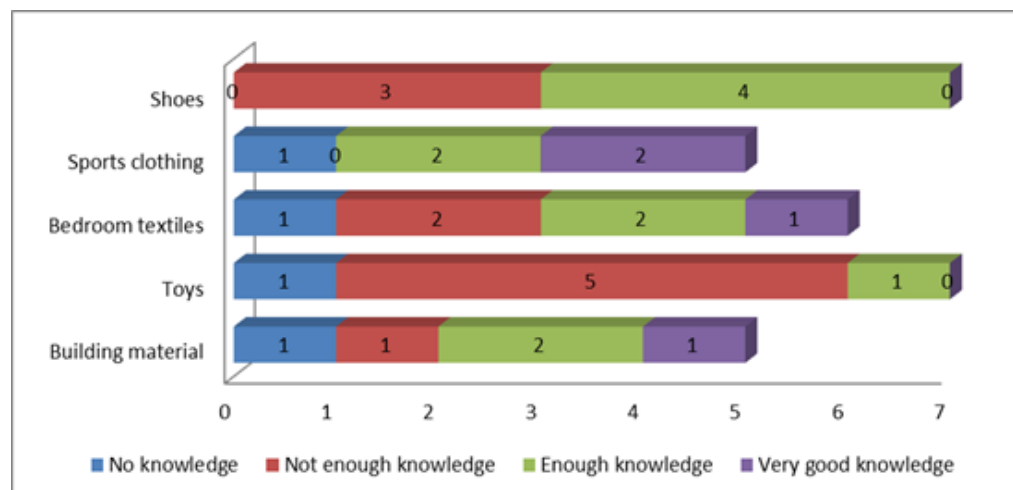


Figure 1 Answers to the interview question “What is your level of knowledge about biocides?” (Number of informants)

As shown in the table below, the informants that did not know whether their company imports biocide treated products rated their knowledge about biocides as being insufficient. Companies that do not import biocide treated products generally reported having sufficient knowledge. Most of these respondents also reported the exclusion of treated products to be an informed decision. Such decisions were reported from all product categories, except building material.

Table 1 Combined answers regarding level of knowledge and import of biocide treated products: “Is your level of knowledge about biocides sufficient?”

Product category	Import	No import	Unsure of import
Shoes	No	Yes	Not available
Sports clothing	Yes	Yes	No
Bedroom textiles	Not available	Yes/No	No
Toys	No	Yes	No
Building material	Yes	Not available	No

The new requirements for treated articles in the upcoming Biocidal Products Regulation were recognised by 12 of the 30 interviewed companies. The informants were also asked to rate their level of knowledge about chemicals in products in general. In this case, the results indicate that companies claim to have better knowledge than about biocides. Throughout the interviews, it was however apparent that informants mixed the topic of biocide treated articles with the more general topic of chemicals in products.

Municipal functions for environment and consumer advice

Questionnaires were sent to municipal offices for planning/environment and consumer advice. Only planning/environment respondents were asked to rate their level of knowledge concerning biocides in consumer articles. The majority of them, 83 percent, reported having no or insufficient knowledge, while 16 percent said that they had enough or very good knowledge. Despite this low rating of knowledge, a majority of both groups answered “yes” when asked whether they knew of any types of consumer articles that may be treated with biocides. 77 percent of the planning/environment respondents and 46 percent of the consumer advice respondents could give examples of such articles. The most frequently mentioned categories included clothing, hygiene products and domestic detergents.

Only a small portion of the municipality respondents thought that biocide treated consumer articles were perceived as a problem in their municipality, with a greater level of uncertainty in the consumer guidance group. A clear majority in both groups (93 percent of the planning/environment respondents and 94 percent of the adviser respondents) reported that they very rarely or never get questions about biocide treated consumer articles, and pointed out that very little attention is paid to these issues by the public and the media in general.

Consumer organisations

The respondents from consumer organisations had a higher level of knowledge than the municipality representatives, and also considered biocides in consumer articles to be a

problem to a greater extent. Both respondents worked to spread knowledge among consumers, and they were aware of the upcoming Biocidal Products Regulation.

DISCUSSION

The company respondents' ratings of their biocide knowledge are distributed over the entire scale, also within most of the product categories. Due to this, and to the limited number of respondents, it is difficult to point out a specific product category where knowledge level stands out in positive or negative direction. There seems to be a higher estimated knowledge level among the respondents who do not import biocide treated products, which is consistent with the finding that most of these report the exclusion to be an informed and conscious choice. Such decisions were reported from most of the product categories. However, there are representatives from all product categories, except shoes, who claim to have no knowledge at all about biocides.

The results from the municipal planning/environment and consumer adviser questionnaires show that environment respondents generally have some knowledge about biocides in products and awareness about the associated risks while consumer advisers are less familiar with the issue. Both groups estimate that biocide treated consumer articles are perceived as a problem by the public only to a small extent and report that little activity and effort is directed to these issues in their municipality. This is quite different from the consumer organisations, which perceive the issue as a problem and put considerable efforts into informing the public.

CONCLUSIONS

The main conclusions relating to knowledge levels concerning biocides and treated articles among importing companies, municipalities and the general public can be summarised as follows:

- The topic of biocides in consumer products is generally conceived as important, within importing companies as well as consumer organisations and municipalities.
- Importing companies and consumer organisations work more actively with this issue than the municipalities.
- The new requirements for treated articles in the Biocidal Products Regulation are recognised by 40 percent of companies, 25 percent of environment officers and 11 percent of consumer advisers.

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