

## ECHA prepared a restriction report on

1,4-dichlorobenzene used in air fresheners and toilet blocks<sup>1</sup>

### SUMMARY

The European Chemicals Agency (ECHA) has, on the request of the European Commission, submitted a report proposing a restriction on the placing on the market and use of 1,4-dichlorobenzene-based air fresheners and toilet blocks. These products are mainly used to deodorise public and domestic toilets.

The air fresheners and toilet blocks targeted by this restriction typically contain up to 99% 1,4-dichlorobenzene, the remaining 1% being dye and/or perfume. Consumers are exposed to the substance when they use 1,4-dichlorobenzene-based products at home or when they visit public toilets deodorised with these products. In addition, professional workers employed in the public toilets are also exposed.

1,4-dichlorobenzene has been classified as a category 2 carcinogen (liver tumours). It also affects the kidneys and respiratory tract. The dossier demonstrates that consumers using 1,4-dichlorobenzene products at home, and professionals employed in public toilets where 1,4-dichlorobenzene products are used are exposed above safe levels, i.e. the risks from the substance in these population groups are not adequately controlled.

It is estimated that the benefits of the restriction would be between 9 and 22 times higher than the costs. Given the costs to society and estimated health benefits the proposed restriction is considered proportional to the risks.

ECHA today starts the public consultation on the restriction report, which will end on 19 December 2012. However, ECHA encourages interested parties to give their comments by 1 September 2012.

### SUGGESTED RESTRICTION

ECHA has submitted a report (a so called Annex XV report) proposing to restrict 1,4-dichlorobenzene in air fresheners and toilet blocks. In the report, it is proposed that *1,4-dichlorobenzene shall not be placed on the market or used in:*

- i. Toilet blocks*
- ii. Air fresheners to be used in toilets or other domestic or public indoor areas, or offices*

The proposed restriction will apply 12 months after the amendment of the REACH Annex XVII comes into force.

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<sup>1</sup> The information note has been prepared based on the Annex XV report prepared by ECHA.

## **1,4-DICHLOROBENZENE IN AIR FRESHENERS AND TOILET BLOCKS**

1,4-dichlorobenzene is produced as a by-product of the production of monochlorobenzene. Air fresheners and toilet blocks are produced after addition of dye and perfume, and compression to the required shape. The final products typically contain 99% of 1,4-dichlorobenzene.

1,4-dichlorobenzene air fresheners are used to deodorise both at home and in public premises. They are most commonly used in toilets and bathrooms. 1,4-dichlorobenzene toilet blocks are used in the form of urinal blocks in public toilets where urinal bowls are present or in the form of toilet rim blocks.

The amount of 1,4-dichlorobenzene used in the EU for the manufacturing of air fresheners and toilet blocks is estimated at 800 ton/year. The estimated tonnage used in the manufacturing of consumer products is 100 ton/year and the rest is allocated to professional uses. These estimates refer to the substance itself and do not include imports of finished products containing 1,4-dichlorobenzene from non-EU countries. It is assumed that 6% of the urinals in public toilets in the EU use 1,4-dichlorobenzene toilet blocks.

## **REASONS FOR ACTION**

1,4-dichlorobenzene has been classified as a category 2 carcinogen (liver tumours). It also affects the kidneys and respiratory tract. The dossier demonstrates that the risks to the following population groups are not adequately controlled:

- Consumers using 1,4-dichlorobenzene products at home
- Professionals employed in public toilets where 1,4-dichlorobenzene products are used:
  - Cleaning personnel
  - Toilet attendants

The use of 1,4-dichlorobenzene in air fresheners and toilet blocks may cause health impacts in the exposed population. In socio-economic analysis the following health impacts were estimated to occur:

- Risk for lesions in the nasal (respiratory and olfactory) epithelium which is considered to be linked to the decreased lung volume seen in exposed humans. The decrease in lung functioning is estimated to cause approximately two hundred premature deaths per year.
- Possibly some extra cancer cases due to the mitogenic properties of 1,4-dichlorobenzene (a threshold effect).
- Mild liver and/or kidney lesions in some sensitive individuals and/or individuals with the highest exposures.

## **CONSEQUENCES OF THE ACTION**

The proposed restriction would remove the human health risks associated with the use of 1,4-dichlorobenzene in air fresheners and toilet blocks from all populations. The alternative products are already commonly used and are considered safer in relation to human health.

The exposure from 1,4-dichlorobenzene in the above products will cease when all air fresheners and toilet blocks currently on the market are used up, i.e. very soon after the implementation of the restriction. The effect of the proposed restriction on health impacts related to the exposure to 1,4-dichlorobenzene may also be visible shortly after

## **PUBLIC CONSULTATION**

implementation. However, it is not possible to predict exactly when all negative health impacts would disappear.

The costs to society from the restriction have been estimated. According to the restriction proposal, these costs are outweighed by the avoided mortality burden related to the estimated decrease in lung function. It is concluded that the benefits of the restriction would be between 9 and 22 times higher than the costs.

Given the costs to society and estimated health benefits the proposed restriction is considered proportional to the risks.

## **COMMENTS PREFERABLY BY 1<sup>ST</sup> SEPTEMBER**

The opinion forming process of the ECHA Committees for Risk Assessment (RAC) and Socio-economic Analysis (SEAC) starts with a public consultation on 19 June 2012. Interested parties can comment on the proposal and the restriction report using the ECHA website. Although the public consultation concludes on 19 December 2012, the rapporteurs of RAC and SEAC would appreciate receiving comments by 1 September 2012 to assist them in the detailed discussion of the restriction proposal in September 2012.

The final opinions of both Committees are scheduled to be available by June 2013. ECHA will send these two opinions to the European Commission, which will take the decision whether to include new restrictions in Annex XVII of the REACH Regulation.