

ECHA, on a request by the Commission, prepared a restriction report on Cadmium and its compounds in paints with TARIC codes [3208][3209]¹

SUMMARY

ECHA, as requested by the Commission, has submitted a proposal recommending an amendment to an existing restriction (entry 23 in the Annex XVII in the REACH legislation) to extend the restriction such that cadmium and its compounds shall not be used, or placed on the markets in paints [3208][3209] if the concentration of cadmium (expressed as Cd metal) is greater than 0.01% by weight.

In the current entry, only "use" is restricted and there is no concentration limit. The reason for the amendment is that "use" could be interpreted to mean only intentional use, thus the restriction might be understood as not covering potentially present cadmium impurities. Secondly, as the current entry does not provide a limit value for cadmium in those paints, the enforcement of the restriction is challenging.

According to consultation with Member States and industry although cadmium is no longer intentionally used in paints in those TARIC codes, it has been found to exist in small amounts as impurity in copper-based anti-fouling paints used for boats and marine structures.

Cadmium and its compounds have generally been assessed to be carcinogenic, mutagenic, reproductive toxic, toxic to the kidney, and in general hazardous to human health in a number of EU level assessments. In one of these assessments, EFSA has stressed the need to reduce exposure to cadmium at the population level because of the limited safety margin.

The main benefits from the proposal would come via improved clarity of the restriction and improved effectiveness of any enforcement activities. The direct benefits and costs from the proposed restriction are expected to be low. The main costs are due to preparation of the dossier and due to handling of the dossier through the REACH process.

The restriction report is concise with a total of 18 pages and it is called „Amendment to a restriction“ reflecting the fact, that it is a minor modification to an existing restriction with minor impacts.

ECHA starts the public consultation on the restriction report 17 December, and the consultation ends 17 June 2014. ECHA encourages interested parties to provide their comments by 28 February 2014, to assist in the first discussion of the restriction proposal potentially in committee meetings in March 2014.

SUGGESTED RESTRICTION

ECHA, as requested by the Commission, has submitted a proposal recommending an amendment to an existing restriction entry 23 in the Annex XVII in the REACH

¹ The information note is prepared on the basis of the Annex XV report.

legislation. In the restriction report it is proposed that (text to be deleted is stroked out and new text is underlined):

Cadmium and its compounds.

2. ~~*Shall not be used in paints [3208] [3209].*~~

Shall not be used, or placed on the markets, in paints [3208] [3209], if the concentration of cadmium (expressed as Cd metal) is greater than 0.01% by weight.

For paints with a zinc content exceeding 10% by weight of the paint, the concentration of cadmium (expressed as Cd metal) shall not be equal to or greater than 0.1% by weight.

Painted articles shall not be placed on the market if the concentration of cadmium (expressed as Cd metal) is equal to or greater than 0.1% by weight of the paint on the painted article.

It is not proposed that the current derogation for zinc-based paint and the restriction on painted articles be revised.

PRESENCE OF CADMIUM AND ITS COMPOUNDS IN PAINTS WITH TARIC CODES [3208][3209]

Based on ECHA's investigation there is no intentional use of cadmium in paints covered by Entry 23; indeed, it appears only as impurity in antifouling paints. Neither the European Council of the Paint, Printing Ink and Artists' Colour Industry (CEPE) nor the International Cadmium Association (ICdA) reported any awareness of paints currently placed on the market in the EU which contain cadmium with an intentional use. Furthermore ECHA in their consultation has not find evidence of intentional use of cadmium in paints. Therefore, it is concluded that there is no intentional use in the EU of cadmium in the paints covered by Entry 23 Paragraph 2 of REACH Annex XVII.

Cadmium can still be present in anti-fouling paints containing copper, as copper may include cadmium as an impurity. Anti-fouling paints are used on ships and other marine equipment. The environmental exposure and indirect human exposure via the environment take place through leaching. This leaching is estimated to be very small.

REASONS FOR ACTION

Since 1988, the EU has had a common aim of substituting the use of cadmium as far as possible. This goal has resulted in, *inter alia*, Entry 23 of Annex XVII of REACH.

There is high concern regarding the toxicity of cadmium and its compounds. According to the 2007 EU Risk Assessment Report (RAR), cadmium is a non-threshold carcinogen although it has been later reported that 'the mechanism of the carcinogenic activity of Cd is not exactly known, but involves, at least in part, genotoxic events mediated by indirect mechanisms for which a threshold can be identified'. EFSA has concluded that 'newer data on human exposure to cadmium in the general population have found statistical associations with increased risk of cancer such as in the lung, endometrium, bladder, and breast.

In the CLP Regulation (EC) No 1272/2008 Annex VI, cadmium has been classified as a category 1B carcinogen, as well as a category 2 mutagen and reproductive toxicant. Recent assessments show that subgroups of the EU population, such as children and

vegetarians, can significantly exceed the tolerable intake of cadmium, and suggest that exposure to cadmium at the population level should be reduced. Similarly, EFSA has stressed the need to reduce exposure to cadmium at the population level because of the limited safety margin.

Entry 23 Paragraph 2 in REACH Annex XVII prohibits the use of cadmium and cadmium compounds in the formulation of paints (TARIC codes 3208, 3209). However, "use" is considered intentional, whereas cadmium can also be present in paints unintentionally. In ECHA's consultation with Member States (MS) in 2012, only very few reports of cadmium in paints were received (see ECHA (2012)). In those cases where it was reported, the cadmium content was either related to the use of zinc (where a derogation already exists) or the impurity occurred at very low levels from the use of other metals, for example from the use of copper in antifouling paints.

CONSEQUENCES OF THE ACTION

The main objective of the proposal is to improve implementability and enforceability of the restriction, which should bring benefits in terms of reduced compliance and enforcement costs, whilst maintaining the original intention of the restriction in terms of the health and environmental effects of cadmium and its compounds.

The proposed Entry 23 Paragraph 2 in REACH Annex XVII is comprehensive, covers also the importation, and given a specific limit value it is more easily enforced. Paints which might contain cadmium as an impurity would be identifiable as falling within the scope of the restriction. This further ensures, that any potential risks from cadmium impurities in paints are treated equivalently to any generated by paints where cadmium is intentionally used. Paint formulators inside and outside of the EU are treated equally under the proposed modified entry. The addition of a specific limit value permits enforcement in a cost-effective manner. Based on information available, no direct benefits are expected. Given reported levels of cadmium in paints, and in anti-fouling paints in particular, neither negative impacts on industry nor on the consumers will be generated. No separate limit value for anti-fouling paints is necessary.

Neither the extension of the scope nor the proposed concentration limit of 0.01% are estimated to have in practise any economic impacts on European industry or impacts on human health or the environment from cadmium releases. The only costs are expected to relate to the REACH legislative process.

COMMENTS PREFERABLY BY 28TH FEBRUARY

The opinion forming process of the ECHA Committees for Risk Assessment (RAC) and Socio-economic Analysis (SEAC) starts with a public consultation 17 December 2013. Interested parties can comment on the proposal and the restriction report using the ECHA website. Although the public consultation concludes on 17 June 2014, the rapporteurs of RAC and SEAC would appreciate receiving comments by 28 February 2014 to assist them in the detailed discussion of the restriction proposal in March 2014.

The final opinions of both Committees are scheduled to be available by December 2014. ECHA will send these two opinions to the European Commission, which will take the decision whether to include the new restriction in Annex XVII of the REACH Regulation.