

Detergents

2002/0216(COD) - 29/05/2015 - Follow-up document

In accordance with Regulation (EC) No 648/2004 on detergents, the Commission presents a report on the use of phosphorus in consumer automatic dishwasher detergents (CADD). It sets out its analysis of the impacts on the environment and health, on industry and on consumers of CADD with phosphorus levels above and below the limit value of 0.3 grams, taking into account matters such as the costs for producers, the availability of alternative substances to phosphates, the comparative cleaning efficiency of the detergents complying with this restriction and the impact on waste water treatment practices and efficiency. The Commission is required to state whether the limit value should be modified. The report is based on the CADD study carried out by the Commission. The limit value of 0.3 g will become effective from 1 January 2017.

The report recalls that phosphate in the form of Sodium Tri-Poly-Phosphate (“STPP”) is the most commonly used compound of modern domestic and industrial detergents due to its cleaning enhancing properties and the fact that it is cost-effective

Alternatives to phosphate: technical feasibility for phosphates-free automatic dishwashing detergent is confirmed by the CADD study which observes that a large number of patents have been placed on substitution approaches since 2012 for replacing phosphates. Moreover consumer associations from various Member States have performed tests comparing performance of phosphates-free and phosphates-containing CADD. Overall, phosphates-free CADD and phosphates-containing CADD perform similarly as regards their cleaning efficiency.

Market: many manufacturers already offer phosphate-free CADD in some Member States of the EU. The prices of CADD seem to be based mostly on performance and do not depend on the presence of STPP seeing as both types of CADD are sold within approximately the same price range. With a complete switch to phosphates-free CADD, the majority of the stakeholders expect prices for the alternative substances to further decline, in turn lowering phosphate-free CADD prices.

Analysis of impacts: approximately 78% of the 35 stakeholders who responded to the questionnaire survey said that it is possible to meet the requirement of limiting phosphorus content in CADD to 0.3 grams per dosage as of 2017 and 69% even found the limit desirable. No stakeholders claimed that the requirements were not possible to comply with.

Environmental impacts: the Commission recalls that a total ban of phosphate in detergent would be the most effective policy option for reducing the risk of phosphorus related eutrophication of surface water throughout the EU. While completely eliminating phosphorus in CADD would decrease the eutrophication risk even further, this is technically not feasible. However, the limit of 0.3% grams per standard dosage already reduces the amount of phosphorus in CADD by more than 75% on average. The report finds that only three alternatives (sodium gluconate; L-aspartic-N,N-diacetic acid, sodium salts and B-alaninediacetic acid) appeared to have data gaps. According to the CADD study, all the other alternatives that were assessed do not pose an unacceptable environmental risk based on current scientific knowledge.

With regard to **wastewater**, the Commission recalls that the [Urban Waste Water Directive](#) requires Member States to include removal of phosphorus in the wastewater treatment in sensitive areas under certain conditions. The CADD study estimates that phosphorus from CADD made up about 10% of the

phosphorus load in wastewater treatment in the EU in 2013. A limitation on phosphorus use in CADD to 0.3 grams per wash would lead to the conclusion that phosphorus coming from CADD would eventually account for ca. 1.6% of the total phosphorus load in wastewater in the EU in 2017.

Health impacts: a few data gaps exist relating to the health effects of certain alternatives. Data are lacking for the three substances cited above. Based on current scientific knowledge, the study concludes that for the remaining alternatives to STPP there is **no significant risk to human health**.

Conclusion: the Commission finds **no evidence that a revision is required** of the limit value for phosphorus in CADD of 0.3 grams/standard dosage which will become applicable as of 1 January 2017. In order to strengthen the hazard and risk assessment of the alternatives, the Commission encourages all manufacturers to generate further toxicity test data and assess all relevant scientific information once they are made available in the context of REACH and to share with the Commission any relevant risks that they could identify from a particular alternative substance to phosphates in CADD.