

Titanium dioxide's classification will negatively impact the EU's circular economy

The proposed classification of titanium dioxide (TiO₂) as a carcinogen (cat. 2) would be harmful to the EU's circular economy and burdensome to Member States as waste containing over 1% of TiO₂ will automatically be classified as hazardous under the EU waste legislation¹ making it more difficult to recycle and reuse.

Classification of TiO₂ will significantly increase the amount of hazardous waste

TiO₂ is present in a concentration of above 1% in a wide array of waste streams, from plastics and paint remnants to standard construction waste². These waste streams alone represent an enormous volume of material which risks not reentering the circular economy as the additional requirements would make recycling and reuse not only more expensive but also technically demanding. The handling of hazardous waste includes additional requirements for plant permits, transport, monitoring and traceability. Thereby in cases where inhalation of TiO₂ cannot occur the waste would still fill up space in hazardous waste disposal facilities, and consequently valuable environmental resources would be depleted. Any phasing out of hazardous substances in products would not solve the issue as it continues to be present in waste for years.

The circular economy aims to promote reuse and recycling over forms of disposal. If the waste fails to meet the requirements for recycling or reuse because of a hazardous classification, then it should either be incinerated or disposed of in a hazardous waste landfill. The risk of pushing large amounts of waste down the waste hierarchy is critical at a time where the Council of the EU and the European Parliament have recently ambitious new targets for reuse and recycling to promote the EU's Circular Economy.

The Commission already recognised the potential impact of classification on the circular economy

Since the proposed classification of TiO₂ is limited to the inhalation exposure route, waste where TiO₂ is bound in a matrix and cannot be inhaled would not warrant a hazard classification. While the possibility of granting exemptions from the automatic classification of waste containing TiO₂ exists under Article 7(3) of the Waste Framework Directive, a 2015 analysis for the European Commission reported the contributions of 22 Member States of which none had used the exemption possibility³. Moreover, an analysis of 6 Member States⁴ legislation finds that route of exposure is unlikely to be accounted for when classifying waste as hazardous or not.

Accordingly, waste could be (mis)classified as hazardous although there is no potential for inhalation exposure of unbound TiO₂, preventing the uptake of secondary raw materials containing it in the circular economy. This is supported by the Commission's on the interface between chemicals, product and waste which identifies the misalignment of rules and the way that rules on classification of waste are implemented and enforced as important barriers for the uptake of secondary raw materials.

The European Federation of Waste Management and Environmental Services (FEAD) in their submission to the CARACAL have also raised concerns about the impacts of the classification on waste. To avoid these unnecessary impacts, TDMA proposes that the inclusion of TiO₂ on the draft ATP should be put on hold until further information is considered which TDMA is committed to bringing forward.

¹ Annex III of the List of Waste ()

² Analysis of the socio-economic impacts of a harmonized classification of Suspected Carcinogen Category 2 for titanium dioxide (TiO₂), Updated Final Report, 27 November 2017, RPA

³ Final Implementation Report for the Directive 2008/98/EC on waste, Bristol: Eunomia Research and Consulting et al, 2015

⁴ France, Germany, Italy, Poland, Sweden and the United Kingdom

TDMA

Avenue E. van Nieuwenhuysse 4 B-1160 Brussels Belgium
Tel. +32.2.792.75.13 src@cefic.be <https://tdma.info/>