

In response to the question - Don't Panic! EU Classification of Titanium Dioxide

The British Coatings Federation (BCF) has urged the printing industry “not to be alarmed” by a new EU classification of Titanium Dioxide as a suspected carcinogen.

You may have seen recently in the newly-published EU delegated regulation classifies the substance as a suspected carcinogen (category 2) by inhalation of TiO₂ powder. This does sound really serious – and it is concerning, but not for the reasons that one might initially think, the BCF stated.

It goes without saying that the coatings, printing inks and wallcovering industries have always taken their responsibility for health, safety and the environment as their highest priority and have ensured that products meet the highest health and safety standards.

For the non-scientists amongst you, titanium dioxide is an inert inorganic compound that is used as a white pigment in many industrial applications. These applications include the manufacture of paints, coatings, printing inks and wallcoverings where titanium dioxide plays a critical role in providing essential product properties: whiteness, covering power, brightness, stability, and durability of colour that cannot be achieved with other raw materials. Titanium dioxide is also used in many other consumer products such as toothpaste, sunscreen, and plastic food packaging – should we be concerned as manufacturers using the compound, or even as end users?

We are advised by the British Coatings Federation that the answer is ‘NO, we shouldn’t be concerned’



Titanium dioxide is used in a wide range of products. Image: TDMA

The powder form of titanium dioxide presents no risk to consumers when incorporated in a finished product. Consumers and professionals using ink products cannot be exposed to the powder form of titanium dioxide, once it is embedded into a printing ink. Yet the “hazard” based nature of the CLP labelling rules will mean that consumer products like paint and inks containing titanium dioxide (and that’s most of them) would have to be labelled as “suspected of causing cancer”, unless industry can lobby for an exemption or a reversal of the decision.

Workers using TiO₂ powder should also not panic. During the manufacturing process, it is true that exposure to titanium dioxide powder might occur. However, both at the EU and national level, regulations exist concerning dust exposure and protection of workers. Studies over many years have not found any correlation between workers exposed to titanium dioxide, and the risk of lung cancer.

In addition, the tests cited by ECHA used unrealistically high amounts of titanium dioxide that would not be allowed in a manufacturing environment, and these tests would not even be permitted under current testing standards. Based on this, British Coatings Federation (BCF) and The European Council of the Paint, Printing Ink and Artists' Colours Industry (CEPE) consider the use of titanium dioxide in paints, coatings, printing inks and wallcoverings to be safe for workers during the manufacturing process. This is further supported by the ongoing commitment of BCF and CEPE member companies to take every precaution to ensure the safety of their products and workers throughout their supply chain.

The above information has been gathered from articles presented by;

- British Coatings Federation (BCF);
- The European Council of the Paint, Printing Ink and Artists' Colours Industry (CEPE);
- Workplace Health Expert Committee (incl. HSE);

Further reference articles can be found here;

<https://www.coatings.org.uk/article/ceo-blog-titanium-dioxide-its-about-the-risk-not-the-hazard-263.aspx>

<https://prontopaints.co.uk/wp-content/uploads/2016/07/CEPE-TiO2-TF-customers-QA-communication-final-July-2016.pdf>

[file:///C:/Users/User/Downloads/The summary of WHEC expert workshop on titanium dioxide June 2017.pdf](file:///C:/Users/User/Downloads/The%20summary%20of%20WHEC%20expert%20workshop%20on%20titanium%20dioxide%20June%202017.pdf)

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