



Industry regrets the EU classifying titanium dioxide

CEPE (European Council of the Paint, Printing Ink and Artists' Colours industry) notes the European Commission decision to classify titanium dioxide as suspected of causing cancer by inhalation under the regulation for classification, labelling and packaging. This classification is only for the powder form of the substance, the dust, and thereby applies to powder-based mixtures. This classification does not apply to liquid mixtures of paints, coatings, or printing inks containing titanium dioxide.

With this classification the European Commission responds to an observation that the carcinogenic hazard of this substance arises when respirable titanium dioxide dust is inhaled in excessive quantities leading to significant impairment of particle clearance mechanisms in the lungs of rats only. Such effects were observed in a study when the rats were exposed to levels of titanium dioxide that would mean approximately 40 times the maximum a worker might be exposed to in his job.

The exact nature of the regulators' concern is explained in Note W of the classification, which reads as follows: 'It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung'.

The concern focuses on the respirable form and addresses such forms whatever they may look like. This comes after an unprecedented level of debate at EU level because it is the first time that such a dust effect is considered to fall under the EU legislation. The effect is not caused by the chemistry of titanium dioxide but by the simple presence of dust particles in excessive quantities in the lungs causing chronic inflammation of the lung cells. The decision was not made due to new toxicological studies, but due to new interpretation.

CEPE considers the use of titanium dioxide in paints, coatings, printing inks and artists colours to be safe for consumers, professional painters, and workers. 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.

Exposure to titanium dioxide powder may occur during manufacturing of our member's products, however both at EU and Member State level regulations exists that protect workers from dust exposure. Studies over many years have not found any correlation between workers exposed to titanium dioxide, and the risk of lung cancer. Also, for consumers and professional painters, it is unreasonable to consider that they will ever be exposed to relevant concentrations.



For this reason, we believe that the existing occupational dust limits are sufficient to tackle the concern. The CLP regulation (1272/2008) should not have been applied, while the industry is now obliged to warn users for dangers that do not really occur. Further the classification of titanium dioxide sets a precedent for many other substances with similar properties. Which would burden the hazard communication with over-classification and may result in label fatigue with the consumer. Also, the classification will have an impact on downstream legislation. Especially the impact on waste handling is unclear which could jeopardize national recycling targets.

The paint, coatings and inks industry has always, and will continue to take its responsibility for health, safety and the environment as its highest priority and has ensured that products meet the highest health and safety standards.