



Scientific Association of European Talc Industry A.I.S.B.L.  
Member of IMA-Europe

## **Naturally occurring titanium and titanium dioxide presence in food grade talc - February 2024 -**

Food grade talc products have been specially selected for use as food additives and comply with the specifications for talc (E 553b) as laid down in Regulation (EU) No 231/2012.

Regulation (EU) No 2022/63 has withdrawn the authorisation of titanium dioxide/TiO<sub>2</sub> for use as a food additive (known as E 171). This ban concerns titanium dioxide as defined in Regulation (EU) No 231/2012 laying down specifications for food additives.

When an elemental analysis (e.g. X-ray fluorescence) is performed on talc, the total amount of titanium (Ti) is quantified; this typically reflects an ionic substitution of titanium for magnesium in the crystal lattice. The titanium is bound into the structure of the talc and is not necessarily present as titanium dioxide as such. The amount of titanium is expressed by convention of chemists as TiO<sub>2</sub> - and therefore a talc product may report a certain amount of TiO<sub>2</sub> by XRF - but it is important to note that this is not the "actual" titanium dioxide substance.

Natural talc may also contain trace amounts of naturally occurring titanium dioxide/TiO<sub>2</sub> in accessory minerals. The ban on titanium dioxide (E 171) as a food additive does not affect this naturally occurring titanium that may be present in talc in the form of dioxide. Therefore, food grade talc products are not affected by this E 171 ban, nor are the naturally occurring traces of titanium dioxide that may be present in talc.

As mentioned above, natural talc may contain trace amounts of naturally occurring titanium dioxide in accessory minerals, but this content would not be affected by the E 171 ban.

**In conclusion, food grade talc products and the possible naturally occurring traces of titanium or titanium dioxide that may be present in talc as a mineral impurity do not fall within the scope of Regulation (EU) No 2022/63 banning the use of titanium dioxide (E 171) as a food additive in food.**