

**FEC position on the use of natural fibers and flours thereof
in plastic resins in food contact articles**

The current general trend aiming at the development of more sustainable plastic materials shows in certain cases an increased use of natural materials and the flours/fibers thereof. They are used as fillers to reduce the plastic content and impart more sustainable properties.

Such filler materials for plastic resins consist of bamboo, rice husk, maize starch, wood flour, ground sunflower, sunflower seed husk and other materials.

Some of these materials are listed in the current union list of Regulation (EU) 10/2011, for example:

- FCM No. 24 Cotton fibers
- FCM No. 96 Wood flour and fibers, untreated
- FCM-No. 1060 Ground sunflower seed husks

The European Commission has recently expressed reservations to legitimize the use of certain natural materials in plastics, and in particular for “wood flour and fibers” (FCM 96), that are listed in the Regulation based on the assumption that they are considered inert. The basis for such assumption could not be established by the Commission, consequently the Commission mandated EFSA for a re-evaluation of FCM 96. In its opinion of 24 October 2019, EFSA concluded that “wood flour and fibers” cannot be considered inert materials and for such reason the Commission is now proposing to remove FCM 96 from the union list. The removal is expected to be enacted through the 16th amendment of Regulation (EU) 10/2011, which is due to be released later this year.

Based on the case of FCM96, we recommend precaution in the use of natural fibers as fillers in the manufacturing of plastic FCM. This is especially true if the article is foreseen for repeated use in contact with hot liquid foods. In any case, only authorized natural fibers included in the union list could be used, under conditions specified therein.

In addition to the above, over the last few years, there have been a number of notifications under the Rapid Alert System for Food and Feed (RASFF) concerning bamboo-based food contact materials and articles. In these products the bamboo fibers are stuck together by means of formaldehyde-melamine resins, whereas the migration of melamine and formaldehyde has been found in several occasions considerably above the Specific Migration Limits (SMLs) of 2.5 mg/kg and 15 mg/kg respectively. The reasons for these high migration values may be found in the alteration of the strength and the hydrolysis stability of the resin caused by the bamboo filler. In several cases, the non-compliance led to withdrawal of the products from the market, with strong economic and image impact. For such reason we recommend care in the use of natural materials in plastics, and we suggest to submit the final product to risk assessment in order to check any potential drawback.
