THIS NOTE REFLECTS DISCUSSIONS OF THE EXPERT WORKING GROUP ON FOOD CONTACT MATERIALS OF THE STANDING COMMITTEE ON PLANTS, ANIMALS, FOOD AND FEED. IT HAS NOT BEEN ADOPTED OR ENDORSED BY THE EUROPEAN COMMISSION. THE VIEWS MAY NOT IN ANY CIRCUMSTANCES BE REGARDED AS STATING AN OFFICIAL POSITION OF THE EUROPEAN COMMISSION. THIS NOTE IS INTENDED ONLY TO REFLECT A SUMMARY OF DISCUSSIONS IN THE CONTEXT OF THE APPLICATION OF REGULATION (EC) NO 1935/2004 AND COMMISSION REGULATION (EU) NO 10/2011. ONLY THE COURT OF JUSTICE OF THE EUROPEAN UNION IS COMPETENT TO AUTHORITATIVELY INTERPRET UNION LAW.

Brussels, 27 June 2019

## Summary of discussions of the Expert Working Group on Food Contact Materials on the use and placing on the market of plastic food contact materials and articles containing ground bamboo or other similar constituents

Investigations by Member States have shown that in recent years an increasing number of food contact materials and articles is placed on the market that are manufactured from plastic and to which bamboo and/or other 'natural' substances are added<sup>1</sup>. One common example is kitchenware or tableware, such as reusable plates, bowls and coffee beakers. These materials and articles are often similar in appearance and function to melamine tableware or kitchenware as they typically also consist of melamine plastic as the main structural component but also contain ground bamboo ('bamboo-melamine') or other similar constituents such as corn, as an additive, often functioning as a filler. They are less shiny however. Other examples include, but are not restricted to, bamboo fibres that are added to a polymer resin binder to form a composite product.

These investigations also established that a number of these bamboo-melamine food contact materials and articles placed on the market are sold on the premise of being sustainable, recyclable and natural. They are labelled and marketed as 'biodegradable', 'eco-friendly', 'organic' or 'natural' or even in some cases '100% bamboo', which does not reflect the true nature of the product. In many cases their trade name and description is used in support of that marketing approach and they are not readily identified as consisting of plastic.

The Working Group notes that Article 3(2) of Regulation (EC) No  $1935/2004^2$  requires that *'the labelling, advertising and presentation of a material or article shall not mislead consumers'*. Business operators should therefore ensure that the labelling and advertising of such products are consistent with the product that is placed on the market, taking into account the actual composition of the products. In cases where melamine or other types of plastics are used as the main structural component in materials and articles, which also consist of other components such as bamboo, such promotional statements, especially those implying that the products are composed only of non-plastic material or do not contain any plastic, may be

<sup>&</sup>lt;sup>1</sup> The types of materials and articles that are the subject of these discussions are noticeably different from those in which the bamboo or other natural products such as wood are used in or close to their natural form. Although adhesives and coatings may still be present on or in these materials and articles, the composition of the product does not involve the use of other filler materials or resin.

<sup>&</sup>lt;sup>2</sup> http://data.europa.eu/eli/reg/2004/1935/oj

considered misleading by enforcement authorities of the Member States and therefore noncompliant with Regulation (EC) No 1935/2004<sup>3</sup>.

Over the last few years, there have been a number of notifications under the Rapid Alert System for Food and Feed (RASFF)<sup>4</sup> concerning bamboo-melamine food contact materials and articles. Migration of melamine and formaldehyde has been found on a number of occasions to be considerably above the Specific Migration Limits (SMLs) of 2,5 mg/kg and 15 mg/kg respectively, laid down in Commission Regulation (EU) No 10/2011<sup>5</sup>, leading to the withdrawal of the product from the market. In addition it was observed that the migration could go up in subsequent tests.

The migration of melamine and formaldehyde above the respective SMLs indicates noncompliance with the restrictions with the use and presence of melamine and formaldehyde. The Working Group has therefore discussed and highlighted the need for enforcement authorities and business operators to pay special attention to such products, taking into consideration possible mislabelling, insofar as these products may also migrate levels of melamine or formaldehyde in quantities above the SMLs laid down in the legislation.

For such materials and articles consisting of plastic as the main structural component but also containing ground bamboo or other similar constituents as an additive, the Working Group considers that Regulation (EU) No. 10/2011 applies. This Regulation requires that only substances included in the Union list of authorised substances, set out in Annex I to that Regulation, may be used intentionally in the manufacture of plastic layers in plastic materials and articles, including additives. Neither the Regulation nor the associated guidelines<sup>6</sup> provide a maximum (or minimum) content of additives that a final material or article could contain under the definition of a plastic.

The use of bamboo or other similar constituents as additives in the manufacture of plastic food contact materials and articles, for example to fill or reinforce the plastic, requires an authorisation in accordance with Articles 9 - 11 of Regulation (EC) No 1935/2004. Such an authorisation must be given before these additives can be used in the manufacture of plastic food contact materials and articles and the resulting product placed on the market.

No such authorisation has been given explicitly for bamboo. Such an authorisation has been given for FCM no. 96 "wood flour and fibers, untreated". However, the extent to which bamboo falls within this authorisation is unclear since bamboo is from the Poaceae (grass) family, whereas wood is derived from the trunk or branches of a various other families of the tree or shrub. The Commission has requested an updated risk assessment from the European Food Safety Authority<sup>7</sup> as regards FCM no. 96 "wood flour and fibers, untreated" which should help to clarify the status of this substance as a plastic additive under Article 9 of Regulation (EC) No 1935/2004.

The Working Group has discussed that the use of additives from a natural origin such as bamboo in a plastic matrix may not necessarily constitute a direct health risk. Health risks may arise however if the quality of those natural additives is poor, if they contain impurities

<sup>&</sup>lt;sup>3</sup> Related to this issue but <u>not the subject of this note</u> are polymeric materials manufactured from bio-sourced starting substances, which are also erroneously not marketed as plastics such as PLA (polylacticacid) and PHA (polyhydroxyalkanoates) but are nevertheless subject to Regulation (EU) No 10/2011. Here the marketing may assume a different definition of plastics based on the notation that plastics are manufactured from fossil sources only.

<sup>&</sup>lt;sup>4</sup> <u>https://ec.europa.eu/food/safety/rasff\_en</u>

<sup>&</sup>lt;sup>5</sup> <u>http://data.europa.eu/eli/reg/2011/10/oj</u>

<sup>&</sup>lt;sup>6</sup> <u>https://ec.europa.eu/food/sites/food/files/safety/docs/cs\_fcm\_plastic-guidance\_201110\_en.pdf</u>

<sup>&</sup>lt;sup>7</sup> <u>http://registerofquestions.efsa.europa.eu/roqFrontend/wicket/page?2</u>

or contaminants, if they contain or contribute to the formation of reaction or decomposition products which constitute a health risk, or if the material swells and thus result in adverse surface alterations. Indeed, recent investigations on bamboo-melamine food contact materials and articles have shown such effects. In such cases the material may not be fit for purpose.

The Working Group agrees that it is the responsibility of business operators to ensure that such food contact materials and articles and the substances used for their production are suitable for the intended and foreseeable use of the materials or articles, as required under Article 8 of Regulation (EU) No 10/2011. For instance, if an article can foreseeably contain foods such as soups that are hot, liquid, and fatty, they should also be compliant when in contact with such foods. In Accordance with Article 16 of that Regulation, documentary evidence shall be presented to the competent authorities upon their request that supports the Declaration of Compliance (DoC). This evidence shall be sufficient to allow the competent authorities to establish that these articles were produced using good manufacturing practices, as required under Regulation (EC) No 2023/2006.

Manufacturers or importers of bamboo-melamine food contact materials and articles may not consider these materials as being plastic materials and articles by mistake or by lack of knowledge over the applicable legislation. Consequently, no verification of compliance with Regulation (EU) No 10/2011 is undertaken. This may lead to the placing on the market of materials and articles from which substances, such as of melamine or formaldehyde contained in the plastic, migrate in quantities above the SMLs.

Finally, the working group has noted that if a melamine resin is used in a plastic, Regulation (EU) No 284/2011 applies for those materials and articles that fall within the scope of this Regulation.