Fraunhofer IVV

Certificate

Food regulatory evaluation of ViskoTeepak's Wienie-Pak® cellulose casing "code 200, Transferable Color Red"

Customer:	ViskoTeepak Belgium NV 3920 Lommel Belgium
Order No:	PA/5311/20
Samples:	Wienie-Pak® casings, cellulose based Sample No. 12: code 200, Transferable Color Red
Total pages of certificate:	3
Date of certificate:	20.12.2021

The sample material to which this certificate relates to was investigated within Fraunhofer IVV order PA/5311/20. Within this order, the color release of the casing was determined (Fraunhofer IVV test report PA/5311/20 dated 17.03.2021).

Scope

ViskoTeepak's Wienie-Pak® casings are cellulose based casings. The casings shall be used at different processing and storage conditions including e.g. stuffing, reddening, drying smoking, cooking and ripening as described in detail in test reports PA/5311/20. The intended applications include the packaging of meat and sausage products (e.g. dry sausages).

The food regulatory status of the components used in the formulation of Wienie-Pak® cellulose casing "code 200, Transferable Color Red" was assessed. For this purpose, ViskoTeepak disclosed the formulation of the Wienie-Pak® casings to Fraunhofer IVV. Furthermore, the color release from the casing was investigated.

Food regulatory status of the used components of the casing

Based on ViskoTeepak's information on the formulation of the Wienie-Pak® casings the food regulatory status of the used components and raw materials was evaluated according to the following European and US American legislative requirements for food contact materials:

- Plastics Regulation (EU) No 10/2011 (last amendment by Regulation (EU) No 2020/1245) - Strictly speaking cellulose based casings are not covered by the Plastics Regulation (EU) No 10/2011. However, this regulation may also be used for the assessment of other materials than plastics that are not yet regulated on EU level.

- BfR Recommendations on Food Contact Materials, e.g. XXXVI. "Paper and Board for Food Contact" (as of 01.04.2021) and XXXVI/1. "Cooking Papers, Hot Filter Papers and Filter Layers"
- 21 Code of Federal Regulations, e.g. 21 CFR § 176.170 "Components of paper and paperboard in contact with aqueous and fatty foods" and 21 CFR § 178.3400 "Emulsifiers and/or surface-active agents" and evaluation of GRAS (Generally recognized as safe) status

Determination of color release:

To date, there are no specific regulations established for cellulose or fibrous materials used in direct contact to food neither at the European level nor at the level of the EU member states. In order to evaluate compliance with the inertness requirements of Article 3 of the Framework Regulation (EC) No 1935/2004, the potential transfer of colors from the casings onto contacting food was tested. The color transfer was assessed based on the requirements set out by BfR Recommendation IX and the Council of Europe Resolution AP (89)1.

According to the BfR Recommendation No IX "Colorants for plastics and other polymers used in commodities" (dated 01.06.2019) and to the Council of Europe Resolution AP (89) "On the use of colorants in plastic materials coming into contact with food" colorants may be used for coloring plastics[1] provided that not even traces are transferred to foodstuffs during proper use of the commodity.

Color release was determined for the red colored casing according to BfR Recommendation BII IX (Fraunhofer IVV test report PA/5311/20 dated 17.03.2021). For the investigated sample No 12 "Wienie-Pak® casing, code 200, Transferable Color Red" a distinct coloring was observed when the sample material was brought into contact with the water soaked filter paper.

Food regulatory assessment:

Based on the description of the client, the Wienie-Pak® casing "code 200, Transferable Color Red" is colored with the food colorant "Allura Red AC / FD&C Red # 40" (E 129; CAS: 25956-17-6) and shall intentionally release its color onto the surface of the meat product.

Due to this deliberate transfer of color onto the contacting food, the material must be classified as an "active packaging" as defined in Article 2 of the European Framework Regulation (EC) No 1935/2004 (see recital 5 and Commission guidance on active and intelligent food contact materials) and Regulation (EC) No 450/2009[2]). Such active food contact materials may change the composition or the organoleptic properties of the food only if the changes comply with the European provisions applicable to food.

[1] In BfR Recommendation IX the term "other polymers" refers to elastomers, as well as high-polymer substances used as coatings and binders in the paint and varnish industry. Cellulose-based materials are not included in this definition.

[2] Commission Regulation (EC) No 450/2009 on active and intelligent materials and articles intended to come into contact with food

Consequently, the transfer of colors in and onto the food must be in accordance with the relevant food law, i.e. Regulation (EC) No 1333/2008 on food additives and Regulation (EU) No 231/2012 laying down specifications for food additives.

It should be noted that for the used colorant E 129, specific restrictions apply with regard to food types and maximum use levels in food. The colorant E 129 may only be used in breakfast sausages and burger meat and luncheon meat at a maximum of 25 mg/kg food. In addition, specific labelling requirements apply.

Furthermore, the colorant FD&C Red No. 40 is also approved as direct color additive to food according to US-American 21 CFR § 74.340 "FD&C Red No. 40". Specific restrictions apply with regard to purity requirements and good manufacturing practices for its use.

Conclusion:

Based on the results of the determination of the color release as well as on the information on the used raw materials provided by the client ViskoTeepak, we come to the conclusion that the investigated Wienie-Pak® casing "code 200, Transferable Color Red" is in compliance with the demands of Regulation (EC) No 450/2009 for the intended packaging of breakfast sausages and burger meat and luncheon meat with regard to the intentionally transferable food color.

Furthermore, all other components used in the formulation of Wienie-Pak® casing "code 200, Transferable Color Red" are authorized for the use in food contact materials according to German BfR Recommendations XXXVI and XXXVI/1 or according to the European Plastics Regulation (EU) No 10/2011 without specific restrictions.

In addition, all components used in the formulation of Wienie-Pak® casing "code 200, Transferable Color Red", as disclosed by the client, are authorized either for the use in food contact materials or for the direct use in food, respectively, according to US-American legislation of 21 Code of Federal Regulations (21 CFR).

Fraunhofer Institute
Process Engineering
and Packaging

Diana Kemmer
Digital unterschrieben von Diana Kemmer
Datum: 2021.12.21 11:12:33 +01'00'

Dr. Diana Kemmer
(Head of Department Product Safety and Analytics)

Freising, 20.12.2021

Petra Anne Schmid
Digital unterschrieben von Petra Anne Schmid
Datum: 2021.12.20 13:41:32 +01'00'

Petra Schmid
(Scientist)