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Expert Opinion

Report No	2002060e	Date 2021-09-13
Client	Adler-Werk Lackfabrik Johann Berghofer GmbH & Co KG Bergwerkstrasse 22 A-6130 Schwaz AUSTRIA	
Test item	ADLER Aduro Vento coating system	
Test specifications	Expert opinion regarding Austrian food legislation	
Contract	In accordance with order of 3 Nov. 2020	
Date of sampling	—	
Location of sampling	No samples taken by OFI staff. Samples provided by OFI's client.	
Receipt of samples	1 Oct. 2020	

1 SCOPE OF WORK / TASK DESCRIPTION

The ADLER Aduro Vento coating system was to be examined in accordance with the applicable food legislation with regard to its safety concerning indirect food contact, particularly if used as a coating for shop fittings in the food processing and/or grocery sectors.

The test panels coated with the ADLER Aduro Vento coating system that had been provided were therefore tested on the basis of the applicable regulations for food contact materials with regard to the migration potential of volatile compounds that might be present (see OFI Test Report 2002060/12417).

2 SCOPE OF APPLICATION

This Expert Opinion serves the purpose of establishing, on behalf of OFI's client, the admissibility of the coating system tested for use for shop fittings in the food processing and/or grocery sector.

The original of this Expert Opinion has been drawn up in German. The German version shall be the authentic one and prevail over the English one in all matters of interpretation and construction. The English version shall be deemed to be only a translation for information purposes.

3 LEGAL BASIS

- Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC;
- Commission Regulation (EU) No 10/2011 of 14 January 2011 on plastic materials and articles intended to come into contact with food, as amended;
- Council of Europe Resolution AP (2004) 1 of 1 December 2004 (version 3 of February 2009) on coatings intended to come into contact with foodstuffs;
- German Environment Agency Guideline of 7 March 2016 on the hygienic assessment of organic materials in contact with drinking water;
- Swiss Federal Department of Home Affairs Ordinance 817.023.21 (Utensils Ordinance) of 16 December 2016 on food contact materials and objects (as of 1 May 2017);

- Austrian Federal Act on Food Safety and Consumer Protection (LMSVG), Federal Collection of Statutes BGBl. I No 13/2006, as amended;
- Authorisation by the Austrian Federal Ministry of Health relating to the permission to carry out tests and to draw up expert opinions in accordance with Art. 73 of the LMSVG (Reference No BMG-75120/0036-II/B/7/2009 of 24 April 2009).

4 FINDINGS

4.1 Samples/documents handed over

OFI's client provided the following samples for experimental tests to be performed for this Expert Opinion:

- 4.1.1 Glass panel samples: 10 samples coated with Aduro Vento G10 and 10 samples coated with ADLER Aduro Vento G50; quantity applied in each case: 130 g/m².

Other documents submitted by OFI's client

- Formulation of the coating system, with current versions of the safety data sheets of all raw materials used and additional technical data sheets.

The formulation disclosed will be treated as strictly confidential by OFI, and kept under lock and key.

4.2 Assessment of formulation

In contrast to plastics in food contact, no harmonised legally binding European positive lists regarding admissible ingredients have so far been made available for paints, varnishes and coatings.

The components of the formulation of the coating system in question have therefore been assessed on the basis of the national and international legislation listed in section 3, even though the positive lists included in this legislation are relevant only to a limited extent (due to different scopes of application). In this context, ingredients with specific migration limits, as well as ingredients that must not be detectable in the final product, were also identified.

These data were used as a basis for the subsequent experimental tests regarding the migration behaviour of ingredients (see OFI Test Report No 2002060/12417).

5 TESTS AND RESULTS

Testing took place from 3 November to 12 December 2020.

The tests were carried out in the technical departments in charge, within the scope of competence of the authorised signatories, in accordance with OFI's QM manual.

5.1 Tests with regard to the migration potential of possible volatile compounds

The migration storage of the test panels of Sample 4.1.1 was carried out on the basis of EN 1186-13 and Reg. (EU) No 10/2011 respectively, with food simulant E (Tenax®), under the test conditions of 2 hours at 70 °C. Then the overall migration was determined gravimetrically for the individual Tenax® migration substances, and headspace GC/MS tests were performed to detect possible volatile compounds. In addition, the PAH 16 content was determined directly in the coating.

For further details on the test parameters please consult OFI Test Report No 2002060/12417.

Results

Under the test conditions applied (2 hours / 70 °C), the overall migration result was considerably below the limit of 10 mg/dm² given in Reg. (EU) 10/2011.

Under the test conditions applied (2 hours / 70 °C), the migration tests followed by GC-MS screening did not reveal any relevant amounts of volatile organic compounds.

The results of the gas chromatographic headspace analyses reveal that after the migration test, and taking into account the detection and quantification limits of the types of analysis performed, individual ingredients identified in the simulants have, without exception, been detected in concentrations considerably below the applicable specific migration limits (see assessment criteria given in section 3).

Furthermore, no polycyclic aromatic hydrocarbons (PAH) were detectable in the coating.

6 EXPERT OPINION

The coating system referred to as

ADLER Aduro Vento

in the composition disclosed and under the condition of proper processing, is considered an admissible material in accordance with Art. 16 of the Austrian Federal Act on Food Safety and Consumer Protection (LMSVG) for the purpose of use described below.

In addition, the results of the tests regarding the migration behaviour of the coating system reveal that the individual ingredients identified have, without exception, been detected in concentrations considerably below the applicable specific migration limits (see assessment criteria given in section 3).

With regard to the LMSVG, **use of this product as a coating for shop fittings in the food processing and/or grocery sectors** (indirect food contact through air in the room) is thus regarded as safe provided that it is produced in consistent and perfect quality and processed in a way suitable for the intended purpose, so that it does not adversely affect, neither directly nor indirectly, any food that could temporarily be in contact with the coated surfaces.

Any statements given shall only apply to the product mentioned, in the composition disclosed. Any change in the formulation shall be communicated to OFI immediately.

In accordance with Art. 17 of Regulation (EC) No 178/2002, food business operators shall ensure by means of self-checks that their products satisfy the requirements of food law and verify that such requirements are met. If necessary, they shall take appropriate measures to remedy any shortcomings or minimise risks. In addition, they shall ensure traceability of their products at all stages of production, processing and distribution within the meaning of Art. 17 of Regulation (EC) No 1935/2004.

This Expert Opinion has been drawn up by OFI Technologie & Innovation GmbH on the basis of OFI's authorisation by the Austrian Federal Ministry of Health and Women, in accordance with section 73 of the LMSVG.

With regard to Art. 17(2) of the LMSVG, the validity of this Expert Opinion shall be limited to 5 years. In the case of changes in general conditions that are relevant for the quality of the product in question (e.g., material composition), changes in relevant legislation and/or new risk assessments by the European Food Safety Authority (EFSA), this Expert Opinion shall no longer be valid.

This Expert Opinion No **2002060** comprises
7 sheets with 0 table(s), 0 figure(s), 0 appendix(es).

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