

**The Appendix is an integral part of
Certificate of Accreditation No: 418/2024 of 21/08/2024**

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Vysoká škola chemicko-technologická v Praze
CAB number 1316, Independent Packaging Laboratory of UCT Prague
Technická 1903/3, 166 28 Praha 6

The laboratory applies a flexible approach to the scope of accreditation.

The current list of activities carried out within the flexible scope is available on the laboratory's website <https://nol.vscht.cz/> in the form of the "List of activities within the flexible scope of accreditation".

Detailed information on activities within the scope of accreditation (determined analytes / calculations) is given in the section "Specification of the scope of accreditation".

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of total migration from packaging materials into evaporable food simulants (gravimetry)	ZM-01 (ČSN EN 1186; U.S.FDA, Code of Federal Regulations, Title 21, chapter 175.300, d, e))	Product for direct contact with food, toys and child care products	-
2	Determination of migration of formaldehyde from food contact materials into evaporable food simulants by method with chromotropic acid (spectrometry)	ZM-05 (ČSN EN ISO 4614, method A)	Products for direct contact with food, toys and child care products	-
3	Determination of water vapour transmission rate of packaging materials (gravimetry)	ZM-23 (ČSN 77 0332)	Polymeric packaging materials	-
4	Determination of oxygen transmission rate of packaging materials (coulometry)	ZM-24 (ASTM F1307; DIN 53380; ASTM D3985; ASTM F1927)	Polymeric packaging materials	-
5	Determination of acrylonitrile migration into evaporable food simulants (HPLC/UV/VIS, DAD detector)	ZM-25 (EPA Method 8316)	Products for direct contact with food, toys and child care products	-
6	Determination of acetaldehyde and formaldehyde migration into evaporable food simulants (HPLC/UV/VIS, DAD detector)	ZM-26 (Bischoff firm documentation, 2004)	Products for direct contact with food, toys and child care products	-
7	Determination of glucose, fructose, sucrose and sorbitol (HPLC/refractometric detector)	ZM-27 (ČSN EN 12630)	Food	-
8	Determination of phosphorus (spectrometry)	ZM-28 (ČSN EN 1136)	Food	-
9	Determination of formol number (titration)	ZM-29 (ČSN EN 1133)	Food	-
10	Determination of refractometric dry matter (refractometry)	ZM-30a (ČSN EN 12143)	Food	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
11	Determination of titratable acidity (titration)	ZM-30b (ČSN EN 12147)	Food	-
12	Determination of floridzin (HPLC/UV/VIS, DAD detector)	ZM-53 (Certified method, Certificate SZPI 1/2012)	Food	-
13	Determination of organic acids (HPLC/UV/VIS detector)	ZM-54 (Internal method of the Department of Food Preservation; Scherer R. et al.: Food Chem, 135:150-154, 2012; Rajchl A. et al.: J Food Nutr Res, 52:71-77, 2013)	Food	B
14	Determination of fruit or vegetable content by calculation from measured values ⁴	ZM-55 (The AIJN Code of Practice, 2003, revision 2019, chap. 6.1–6.22)	Food – fruit and vegetable products	B
15	Determination of refractometric dry matter introduced by tomato material by calculation from measured values ⁵	ZM-56 (The AIJN Code of Practice, 2003, revision 2019, chap. 6.10)	Food – tomato purées, ketchups	B
16	Determination of D-isocitric acid (Megazyme enzyme set)	ZM-70 (Internal method of the Department of Food Preservation; Wallrauch S., et al.: Flüss Ob, 44:241-245, 1977; Podskalská T. et al.: Chemické Listy, 115:615-622, 2021)	Food	-

¹ asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

² if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

³ degrees of freedom: A – Flexibility concerning materials/products (subject of the test), B – Flexibility concerning components/parameters/characteristics, C – Flexibility concerning the performance of the method, D – Flexibility concerning the method

The laboratory can modify the test procedures with the specified degree(s) of freedom in the scope of accreditation while maintaining the principle of measurement. If no degree of freedom is specified, the laboratory cannot apply a flexible approach to the scope of accreditation for the test.

⁴ laboratory determination of ash, potassium, magnesium and calcium is carried out by an external test provider within the scope of its accreditation

⁵ laboratory determination of potassium and magnesium is carried out by an external test provider within the scope of its accreditation

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Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
13	malic acid, citric acid and pyrrolidonecarboxylic acid

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (calculations)
14	calculated from the results of the determination according to the test procedure ZM-27, ZM-28, ZM-29, ZM-30a, ZM-30b, ZM-53, ZM-54, ZM-70 (determination of glucose, fructose, sucrose, sorbitol, phosphorus, formol number, refractometric dry matter, titratable acidity, floridzin, organic acids and D-isocitric acid)
15	calculated from the results of the determination according to the test procedure ZM-28, ZM-29, ZM-30a, ZM-54 (determination of phosphorus, formol number, refractometric dry matter and organic acids)

Explanations:

ZM Test Method
AIJN European Fruit Juice Association
SZPI Czech Agriculture and Food Inspection Authority
FDA Food and Drug Administration
HPLC High-Performance Liquid Chromatography
UV/VIS Ultraviolet-visible spectroscopy for the wavelength range from 190 to 800 nm
DAD Diode Array Detector

"This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself."