Potvrda o akreditaciji
Accreditation Certificate

Ovime se utvrđuje da je
This is to recognize that

Sveučilište u Zagrebu
Prehrambeno-biotehnološki fakultet
Centar za kontrolu namirnica
University of Zagreb
Faculty of food technology and biotechnology
Food control center
Jagićeva 31, HR-10000 Zagreb

osposobljen prema zahtjevima norme
is competent according to
HRN EN ISO/IEC 17025:2017
(ISO/IEC 17025:2017;
EN ISO/IEC 17025:2017)
za/to carry out

Ispitivanje hrane i predmeta opće uporabe
Testing of food and objects of common use

u području opisanom u prilogu koji je sastavni dio ove potvrde o akreditaciji.
for the scope described in the annex which is the constituent part of this accreditation certificate.

Br./No.: 1110
Klasa/Ref.No.: 383-02/22-30/001
Urbroj/Id.No.: 569-02/1-23-30
Zagreb, 2023-11-02

Akreditacija istječe·Accreditation expiry: 2027-03-27
Prva akreditacija·Initial accreditation: 2007-04-26

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Ravnateljica:
Director General:
mr. sc. Mirela Zečević

HAA **Hrvatska akreditacijska agencija**
Croatian Accreditation Agency

Hrvatska akreditacijska agencija
Croatian Accreditation Agency

PRILOG POTVRDI O AKREDITACIJI br: 1110
Annex to Accreditation Certificate Number:

Klasa/*Ref. No.*: 383-02/22-30/001
Urbroj/*Id. No.*: 569-02/1-23-29
Datum izdanja priloga /*Annex Issued on*: 2023-11-02

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Datum/*Date:* 2022-03-28

Norma: HRN EN ISO/IEC 17025:2017
Standard: (ISO/IEC 17025:2017; EN ISO/IEC 17025:2017)

Akreditacija istječe: 2027-03-27
Accreditation expiry:

Prva akreditacija: 2007-04-26
Initial accreditation:

Akreditirani laboratorij
Accredited Laboratory

Sveučilište u Zagrebu
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Centar za kontrolu namirnica
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Područje akreditacije:
Scope of Accreditation:

Ispitivanje hrane i predmeta opće uporabe
Testing of food and objects of common use

Važeće izdanje Priloga dostupno je na web adresi: www.akreditacija.hr /
Valid issue of the Annex is available at the web address: www.akreditacija.hr

Ravnateljica:
Director General:

mr. sc. Mirela Zečević

PODRUČJE AKREDITACIJE / *SCOPE OF ACCREDITATION*

Br. *No.*	**Materijali/Proizvodi** *Materials/Products*	**Vrsta ispitivanja/Svojstvo** *Type of test/Property* ***Raspon**/Range*	**Metoda ispitivanja** *Test method*
1.	Hrana *Food*	Određivanje acesulfama K, aspartama i saharina HPLC metodom *Determination of acesulfame-K, aspartame and saccharin by HPLC method*	HRN EN 12856:2000 *(EN 12856:1999)*
2.		Određivanje ciklamata HPLC metodom *Determination of cyclamate by HPLC method*	HRN EN 12857:2000 *(EN 12857:1999)*
3.		Detekcija zabranjenih boja Sudan I, II, III i IV HPLC metodom *Detection of illegal dyes Sudan I, II, III and IV by HPLC method*	Vlastita metoda *In-house method* RU-OK-M/05 izdanje/*edition* 2 2007-12-21
4.		Određivanje količine benzojeve i sorbinske kiseline HPLC metodom *Determination of benzoic and sorbic acid by HPLC method*	Vlastita metoda *In-house method* RU-OK-M/07 izdanje/*edition* 4 2021-09-15
5.		Određivanje udjela cis-, trans-, zasićenih, jednostruko i višestruko nezasićenih masnih kiselina plinskom kromatografijom *Determination of cis-, trans-, saturated, mono- and, polyunsaturated fatty acids by gas chromatography*	HRN EN ISO 12966-1:2015 (*ISO 12966-1:2014; EN ISO 12966-1:2014*) HRN EN ISO 12966-1:2015/Ispr.1 (*EN ISO 12966-1:2014/AC:2015*) HRN EN ISO 12966-2:2017 (*ISO 12966-2:2017; EN ISO 12966-2:2017)* *HRN EN ISO 12966*-4:2015 (*ISO 12966-4:2015; EN ISO 12966-4:2015)* HRN ISO 15885:2003 *(ISO 15885:2002)*

Br. *No.*	**Materijali/Proizvodi** *Materials/Products*	**Vrsta ispitivanja/Svojstvo** *Type of test/Property* ***Raspon**/Range*	**Metoda ispitivanja** *Test method*
6.	Hrana *Food*	Određivanje dušika metodom po Kjeldahlu *Determination of nitrogen by the Kjeldahl method*	ISO 1871:2009
7.		Određivanje aflatoksina B_1, B_2, G_1 i G_2 metodom tekućinske kromatografije s masenom detekcijom (LC-MS/MS) *Determination of aflatoxins B_1, B_2, G_1 and G_2 by LC-MS/MS method*	Vlastita metoda *In-house method* RU-OK-M/13 izdanje/*edition* 5 2018-03-30
8.		Određivanje žive *Determination of mercury*	Vlastita metoda *In-house method* RU-OK-M/16 izdanje/*edition* 3 2016-08-29
9.		Određivanje olova i kadmija tehnikom grafitne atomske apsorpcijske spektrometrije nakon mikrovalne razgradnje *Determination of lead and cadmium by technique of graphite atomic absorption spectrometry after microwave digestion*	HRN EN 14084:2005 *(EN 14084:2003)*
10.		Odredivanje akrilamida metodom tekućinske kromatografije s masenom detekcijom (LC-MS/MS) *Determination of acrylamide by LC-MS/MS method*	Vlastita metoda *In-house method* RU-OK-M/28 izdanje/*edition* 1 2018-04-05 modificirana/*modified* HRN EN 16618:2015 *(EN 16618:2015)*
11.	Voćni proizvodi *Fruit products*	Određivanje patulina - HPLC metoda s proćišćavanjem i razdiobom tekuće/tekuće i ekstrakcijom na krutoj fazi i UV detekcijom *Determination of patulin - HPLC method with liquid/liquid partition cleanup and solid phase extraction and UV detection*	Vlastita metoda *In-house method* RU-OK-M/19 izdanje/*edition 4* 2021-09-15 modificirana/*modified* HRN EN 15890:2010 *(EN 15890:2010)*

Br. *No.*	**Materijali/Proizvodi** *Materials/Products*	**Vrsta ispitivanja/Svojstvo** *Type of test/Property* ***Raspon**/Range*	**Metoda ispitivanja** *Test method*
12.	Ulja, masti i maslo *Oils, fats and butter oil*	Određivanje količine fenolnih antioksidansa HPLC metodom *Determination of phenolic antioxidants by HPLC method*	AOAC, 18th Ed, 2005 Official Method 983.15 Phenolic Antioxidants in Oils, Fats and Butter Oil – Liquid Chromatographic Method
13.		Određivanje benzo(a)pirena HPLC metodom *Determination of benzo(a)pyrene by HPLC method*	Vlastita metoda *In-house method* RU-OK-M/14 izdanje/*edition* 3 2019-03-19
14.	Bezalkoholna osvježavajuća pića i alkoholna pića *Non-alcoholic beverages and alcoholic drinks*	Određivanje količine kinina HPLC metodom *Determination of quinine by HPLC method*	Vlastita metoda *In-house method* RU-OK-M/06 izdanje/*edition* 5 2021-09-15
15.	Mlijeko i mliječni proizvodi *Milk and milk products*	Određivanje sadržaja aflatoksina M1 *Determination of aflatoxin M1 content*	Vlastita metoda *In-house method* RU-OK-M/25 izdanje/*edition 4* 2022-02-21 modificirana/*modified* HRN EN ISO 14501:2021 *(ISO 14501:2021 EN ISO 14501:2021)*
16.	Med *Honey*	Određivanje vode refraktometrijski *Determination of moisture by refractomete*	AOAC, 18th Ed., 2005 Official method No. 969.38*
17.		Određivanje hidroksimetilfurfurala (HMF) - Spektrofotometrijska metoda *Determination of hydroxymethylfurfural in honey-Spectrofotometric method*	AOAC, 18th Ed., 2005 Official method No. 980.23*
18.		Određivanje slobodnih kiselina u medu titracijom *Determination of free acidity by titraton*	Harmonised methods of the International Honey Commission, IHC 2009. Method No. 4

Br. *No.*	**Materijali/Proizvodi** *Materials/Products*	**Vrsta ispitivanja/Svojstvo** *Type of test/Property* ***Raspon**/Range*	**Metoda ispitivanja** *Test method*
19.	Proizvodi od voća i povrća *Fruits and vegetables products*	Određivanje količine topljive suhe tvari-refraktometrijska metoda *Detrmination of soluble solids – Refractometric method*	HRN ISO 2173:2008 *(ISO 2173:2003*
20.	Riba i proizvodi ribarstva *Fish and fishery products*	Određivanje histamina HPLC metodom *Determination of histamine by HPLC method*	J. AOAC International Vol. 79, No. 1 (1996) 43-49
21.	Materijali i predmeti u kontaktu s namirnicama *Materials and objects in contact with food*	Određivanje globalne migracije plastičnih materijala u vodenim model otopinama hrane pomoću migracijske ćelije *Determination of overall migration of plastic materials into aqueous food simulants by cell*	HRN EN 1186-3:2022 *(EN 1186-3:2022)*
22.	Žitarice i proizvodi od žitarica, hrana za dojenčad i malu djecu na bazi žitarica *Cereals and cereals products, cereal based food for infants and young children*	Određivanje zearalenona HPLC-FLD metodom *Determination of zearalenone by HPLC-FLD method*	HRN EN 15850:2011 *(EN 15850:2010)*
23.		Određivanje deoksinivalenola HPLC metodom *Determination of deoxynivalenol by HPLC method*	HRN EN 15891:2010 *(EN 15891:2010)*
24.	Hrana *Food*	Horizontalna metoda za dokazivanje prisutnosti i određivanja broja *Listeria monocytogenes* i drugih *Listeria spp.* – 1. dio: Metoda dokazivanja prisutnosti *Horizontal method for the detection and enumeration of Listeria monocytogenes and other Listeria spp. spp – Part 1: Detection method*	HRN EN ISO 11290-1:2017 (ISO 11290-1:2017; EN ISO 11290-1:2017*)*

Br. *No.*	**Materijali/Proizvodi** *Materials/Products*	**Vrsta ispitivanja/Svojstvo** *Type of test/Property* ***Raspon**/Range*	**Metoda ispitivanja** *Test method*
25.	Hrana *Food*	Horizontalna metoda za dokazivanje prisutnosti, određivanje broja i serotipizaciju *Salmonella* — 1. dio: Dokazivanje prisutnosti *Salmonella spp.* *Horizontal method for the detection, enumeration and serotyping of Salmonella – Part 1: Detection of Salmonella spp.*	HRN EN ISO 6579-1:2017 *(ISO 6579-1:2017 EN ISO 6579-1:2017)* HRN EN ISO 6579-1:2017/A1:2020 *(ISO 6579-1:2017/Amd1:2020 EN ISO 6579-1:2017/A1:2020)*
26.		Horizontalna metoda za određivanje broja mikroorganizama – Tehnike određivanja broja kolonija na 30°C *Horizontal method for the enumeration of microorganisms – Colony count techniques at* 30°C	HRN EN ISO 4833-1:2013 *(ISO 4833-1:2013, EN ISO 4833-1:2013)* HRN EN ISO 4833-1:2013 / A1:2022 *(ISO 4833-1:2013/ Amd1:2022; (EN ISO 4833-1:2013/A1:2022)* HRN EN ISO 4833-2:2013 *(ISO 4833-2:2013) EN ISO 4833-2:2013* HRN EN ISO 4833-2:2013/Ispr.1:2014 *(ISO 4833-2:2013/Cor.1:2014; EN ISO 4833-2:2013/AC:2014)* HRN EN ISO 4833-2:2013 /A1:2022 *(ISO 4833-2:2013 /Amd1:2022 1:2014;; (EN ISO 4833-2:2013 /A1:2022)*

Br. *No.*	**Materijali/Proizvodi** *Materials/Products*	**Vrsta ispitivanja/Svojstvo** *Type of test/Property* ***Raspon**/Range*	**Metoda ispitivanja** *Test method*
27.	Hrana *Food*	Horizontalna metoda za dokazivanje prisutnosti i određivanje broja *Enterobacteriaceae* – 2. dio: Postupak određivanja broja kolonija *Horizontal method for the detection and enumeration of Enterobacteriaceae – Part 2: Colony-count technique*	HRN EN ISO 21528-2:2017 *(EN ISO 21528-2:2017 ISO 21528-2:2017)*
28.		Horizontalna metoda za određivanje broja kvasaca i plijesni - 1. dio: Tehnika brojenja kolonija u proizvodima s aktivitetom vode većim od 0,95 2. dio: Tehnika brojenja kolonija u proizvodima s aktivitetom vode manjim ili jednakim 0,95 *Horizontal method for the enumeration of yeasts and moulds Part 1: Colony count technique in products with water activity greater than 0,95 Part 2: Colony count technique in products with water activity less than or equal to 0,95*	HRN ISO 21527-1:2012 *(ISO 21527-1: 2008)* HRN ISO 21527-2:2012 *(ISO 21527-2: 2008)*
29.		Horizontalna metoda za dokazivanje i određivanje broja *Clostridium spp.* – 1.dio: Određivanje broja sulfitreducirajućih *Clostridium spp.* tehnikom brojenja kolonija *Horizontal method for the detection and enumeration of Clostridium spp. – Part 1: Enumeration of sulfite-reducing Clostridium spp. by colony count technique*	HRN EN ISO 15213-1:2023 *(ISO 15213-1:2023; EN ISO 15213-1:2023)*

Br. *No.*	**Materijali/Proizvodi** *Materials/Products*	**Vrsta ispitivanja/Svojstvo** *Type of test/Property* ***Raspon**/Range*	**Metoda ispitivanja** *Test method*
30.	Hrana *Food*	Horizontalna metoda određivanja broja koagulaza pozitivnih stafilokoka (*Staphylococcus aureus* i ostale vrste) – 1. dio: Postupak primjene Baird-Parker agara *Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species)- Part 1: Technique using Baird-Parker agar medium*	HRN EN ISO 6888-1:2021 (*ISO 6888-1:2021; EN ISO 6888-1:2021*)
31.		Horizontalna metoda brojenja beta-glukoronidasa pozitivne *Escherichia coli* - 2. dio: Brojenje kolonija pri 44°C uporabom 5-bromo-4-chloro-3-indolyl beta-D-glucuronide *Horizontal method for the enumeration of beta-glucuronidase - positive Escherichia coli – Part* 2: *Colony-count technique* at 44°C *using* 5-bromo-4-chloro-3-indolyl beta-D-glucuronide	HRN ISO 16649-2:2001 *(ISO 16649-2:2001)*
32.		Horizontalna metoda za dokazivanje prisutnosti i određivanje broja *Listeria monocytogenes* i drugih *Listeria spp.* - 2. dio: Metoda određivanja broja *Horizontal method for the detection and enumeration of Listeria monocytogenes and of Listeria spp. -- Part 2: Enumeration method*	HRN EN ISO 11290-2:2017 *(ISO 11290-2:2017; EN ISO 11290-2:2017)*
33.	Kozmetika *Cosmetics*	Određivanje broja kvasaca i plijesni *Enumeration of yeast and mould*	HRN EN ISO 16212:2017 *(ISO 16212:2017; EN ISO 16212:2017)* HRN EN ISO 16212:2017/A1:2022 *(ISO 16212:2017/Amd1:2022; EN ISO 16212:2017/A4:2022)*

Br. *No.*	**Materijali/Proizvodi** *Materials/Products*	**Vrsta ispitivanja/Svojstvo** *Type of test/Property* ***Raspon**/Range*	**Metoda ispitivanja** *Test method*
34.	Kozmetika *Cosmetics*	Određivanje broja i dokazivanje aerobnih mezofilnih bakterija *Enumeration and detection of aerobic mesophilic bacteria*	HRN EN ISO 21149:2017 *(ISO 21149:2017; EN ISO 21149:2017),* HRN EN ISO 21149:2017/A1:2022 *(ISO 21149:2017/Amd1:2022; EN ISO 21149:2017/A1:2022)*

* Uz pripremu ispitnih uzoraka prema / *With preparation of test samples according to* AOAC, 18th Ed., 2005 Official method No. 920.180

FLEKSIBILNO PODRUČJE AKREDITACIJE
FLEXIBLE SCOPE OF ACCREDITATION

Oznaka/ *Identification*	**Materijali/Proizvodi** *Materials/Products*	**Vrsta ispitivanja/Svojstvo** *Type of test/Property* ***Raspon**/Range*	***Tehnika ispitivanja*** *Test technique*	**Metoda ispitivanja** *Test method*
B	**Hrana** *Food*	**Određivanje okratoksina A** *Determination of ochratoxin A*	Tekućinska kromatografija visokog učinka (HPLC- FLD) s čišćenjem na imunoafinitetnoj koloni *HPLC method with immunoaffinity column clean-up*	Prema popisu na www.ckn.pbf.hr *According to the list on* www.ckn.pbf.hr
C		**Određivanje kofeina** *Determination of caffeine*	HPLC-UV	
D	**Hrana** *Food*	**Određivanje vode** *Determination of moisture*	Gravimetrija *gravimetric determination*	
		Određivanje pepela ***Determination of ash***		
		Određivanje ukupne količine masti ***Determination of total fat***	Soxhlet	
E	**Hrana i dodaci prehrani** *Food and food suplement*	**Određivanje vitamina** ***Determination of vitamines***	HPLC	

HPLC: tekućinska kromatografija visoke djelotvornosti / *High-performance liquid chromatography*
HPLC-FLD: tekućinska kromatografija visoke djelotvornosti uz flouorescentnu detekciju /*High-performance liquid chromatography with fluorescence detection*
HPLC-UV: tekućinska kromatografija visoke djelotvornosti uz UV detekciju/ *High-performance liquid chromatography with UV detection*
LC-MS/MS: tekućinska kromatografija / tandemska spektrometrija masa / *Liquid chromatography- tandem mass spectrometry*

Fleksibilnim područjem akreditacije dopušta se laboratoriju primjena metoda ispitivanja na materijale/proizvode, vrstu ispitivanja/svojstvo i raspone unutar područja, u skladu s dokumentiranim i odobrenim postupcima laboratorija. */ Flexible scope allows laboratory application of test methods for materials/products, type of test/property and ranges within the scope, in accordance with the laboratory's documented and approved procedures*."
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