



## Potvrda o akreditaciji Accreditation Certificate

1073

**Norma**  
Standard

**HRN EN ISO/IEC 17025:2017**  
*ISO/IEC 17025:2017; EN ISO/IEC 17025:2017*

**Akreditirano tijelo**  
Accredited body

**Bioinstitut d.o.o.**,  
Laboratorijska djelatnost  
R. Steinera 7, 40000 Čakovec  
**Ispitivanje hrane, hrane za životinje, vina, voda, otpada, tla, mulja, sedimenta, biote, uzoraka okoliša iz primarne proizvodnje, mikrobiološke čistoće površina, krutih oporabljenih goriva, naftnih proizvoda i predmeta opće uporabe.**

**Područje akreditacije**  
Scope of Accreditation

**Mikrobiološka i parazitološka ispitivanja u svrhu dijagnostike bolesti životinja. Hidrogeološki parametri. Biologija površinskih voda. Uzorkovanje voda, tla, otpada, mulja i sedimenta te krutih oporabljenih goriva.**

Analysis of food, animal feeding stuffs, wine, waters, waste, soil, sludge, sediment, biota, environmental samples from the primary production stage, microbiological cleanliness of facilities, solid recovered fuels, petroleum product and items of general use.

Microbiological and parasitological testing for diagnostic of animal diseases. Hydrogeological parameters. Surface water biology. Sampling of waters, soil, waste, sludge and sediment and solid recovered fuels.

**Akreditacija vrijedi do**  
Accreditation valid until

**2030-05-21**

**Akreditacija vrijedi od**  
Accreditation valid from

**2025-05-22**

**Prva akreditacija**  
Initial accreditation

**2005-04-21**

**HAA je potpisnica multilateralnog sporazuma s Europskom organizacijom za akreditaciju (EA MLA)**  
HAA is a signatory of the European co-operation for Accreditation Multilateral Agreement (EA MLA)

**Ravnateljica / Director General**  
mr. sc. Mirela Zečević

Klasa/Ref. No.: 383-02/24-30/2001  
Urbroj/Id. No.: 569-02/11-25-34  
Datum izdanja / Issued on: 2025-05-22

## PODRUČJE AKREDITACIJE SCOPE OF ACCREDITATION

| Br.<br>No.                                          | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                 | Metoda ispitivanja<br>Test method                                                                                                                                          |
|-----------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Veterinarska dijagnostika<br>Veterinary diagnostics |                                            |                                                                                                                                                                                     |                                                                                                                                                                            |
| 1.                                                  | Mišićno tkivo<br>Muscle tissue             | Dokazivanje prisutnosti<br><i>Trichinella Larvae</i> u mesu<br>metodom umjetne probave<br><br><i>Detection of Trichinella<br/>Larvae in meat by artificial<br/>digestion method</i> | HRN EN ISO 18743:2015<br>(EN ISO 18743:2015;<br>ISO 18743:2015)<br><br>HRN EN ISO<br>18743:2015/A1:2023<br>(EN ISO<br>18743:2015/A1:2023;<br>ISO 18743:2015/Amd<br>1:2023) |

| Br.<br>No.                                                                                   | Materijali/Proizvodi<br>Materials/Products                                                                 | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                                                                                                                                                                                         | Metoda ispitivanja<br>Test method                                                                            |
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| <b>Ispitivanje hidrogeoloških parametara</b><br><i>Testing of hydrogeological parameters</i> |                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                              |
| 1.                                                                                           | Otvoreni i zatvoreni<br>provodnici otpadnih voda<br><br><i>Open and closed canals for<br/>waste waters</i> | Određivanje protoka koristeći<br>prijenosni instrument za<br>kontinuirano mjerenje brzine i<br>dubine vode za stacionarno i<br>nestacionarno tečenje u<br>provodnicima sa slobodnim<br>vodnim licem<br><br><i>Determination of flow by using<br/>portable instrument for<br/>continuous measurement of<br/>speed and depth for stationary<br/>and nonstationary flow in<br/>canals with free water face</i> | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-33/187<br>III. izdanje / <i>edition</i><br>(2020-01-10) |
| 2.                                                                                           | Otvoreni kanali<br><br><i>Open channels</i>                                                                | Hidrometrija - Mjerenje protoka<br>u otvorenim kanalima<br>uporabom hidrometrijskih krila<br>ili plovaka<br><br><i>Hydrometry - Measurement of<br/>liquid flow in open channels<br/>using current-meters or floats</i>                                                                                                                                                                                      | HRN EN ISO 748:2021<br>(ISO 748:2021; EN ISO<br>748:2021)<br>+ Aneks/Anex A, B, D                            |
| 3.                                                                                           | Piezometri<br><i>Piezometer</i>                                                                            | Mjerenje razine podzemne<br>vode u piezometrima<br>primjenom potpuno graduirane<br>električne mjerne vrpce<br><br><i>Measuring of groundwater<br/>level in piezometer using<br/>electric tape</i><br><br>Raspon / <i>Range</i> 0,22-60 m                                                                                                                                                                    | HRN ISO 21413:2007<br>(ISO 21413:2005)<br>iz toč. 1-5                                                        |
| 4.                                                                                           | Otvoreni kanali<br><i>Open channels</i>                                                                    | Diskontinuirano mjerenje<br>volumnog protoka primjenom<br>mjerne posude i štoperice<br><br><i>Discontinuous volume flow<br/>measurment using a<br/>measuring vessel and<br/>stopwatch</i><br><br>Raspon / <i>Range</i> 0,02-2 l/s                                                                                                                                                                           | DIN 19559-1:1983-07<br>iz toč. 3.2.3a                                                                        |

| Br.<br>No.                                                                    | Materijali/Proizvodi<br>Materials/Products                                                                                                                                                                                                                                                                                                                                                                                                                        | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Metoda ispitivanja<br>Test method                                                                                                                                              |
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| <b>ISPITIVANJE VODA</b><br><i>TESTING OF WATERS</i>                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                |
| <b>Fizikalno kemijska ispitivanja</b><br><i>Physical and chemical testing</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                |
| 1.                                                                            | Voda za ljudsku uporabu, prirodne mineralne, prirodne izvorske, stolne vode, podzemne, površinske vode, morska voda (prijelazne i priobalne vode, teritorijalno more), procjedne vode, otpadne vode i eluati otpada<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, surface water, sea water (transitional and coastal water, territorial sea), and leachate water, waste eluates</i> | Određivanje polibromiranih difenil-etera (PBDE: BDE-028, BDE-047, BDE-099, BDE-100, BDE-153, BDE-154) metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS)<br><br><i>Determination of polybrominated diphenyl ethers (PBDE: BDE-028, BDE-047, BDE-099, BDE-100, BDE-153, BDE-154) – gas chromatographic method with mass spectrometry (GC-MS/MS)</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>BDE-028: 0,000059<br>BDE-047: 0,000041<br>BDE-099: 0,00011<br>BDE-100: 0,000068<br>BDE-153: 0,00093<br>BDE-154: 0,00014 | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-33;37/179<br>IV. izdanje / edition<br>(2022-03-07)<br><br>modificirana / modified<br>HRN EN 16694:2015<br>(EN 16694:2015) |
| 2.                                                                            | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne, površinske, procjedne i otpadne vode<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, surface water, leachate water and waste water</i>                                                                                                                                                                    | Određivanje polikloriranih bifenila (PCB 28, PCB 52, PCB 101, PCB 118, PCB 138, PCB 153, PCB 180, PCB 194) u vodama – metoda plinske kromatografije s masenom spektrometrijom (GC-MS)<br><i>Determination of polychlorinated biphenyls (PCB 28, PCB 52, PCB 101, PCB 118, PCB 138, PCB 153, PCB 180, PCB 194) in water – gas chromatographic method with mass spectrometry (GC-MS)</i><br><br>Granica kvantifikacije/<br><i>Quantification limit:</i><br>0,002 µg/L – PCB 28, PCB 52, PCB 101, PCB 118, PCB 138, PCB 153, PCB 180<br>0,01 µg/L – PCB 194     | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-31-33;37/02<br>II. izdanje / edition<br>(2021-02-26)                                                                      |

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| 3. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne, površinske, procjedne i otpadne vode</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, surface water, leachate water and waste water</i></p> | <p>Određivanje indeksa naftnih ugljikovodika</p> <p><i>Determination of hydrocarbon oil index</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>6,0 µg/L (vode, osim otpadnih voda / <i>water, except waste water</i>)<br/>0,1 mg/L (otpadne vode / <i>waste water</i>)</p> | <p>HRN EN ISO 9377-2:2002<br/>(ISO 9377-2:2000;<br/>EN ISO 9377-2:2000)</p> |
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| 4. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne, površinske vode, morska voda (prijelazne i priobalne vode, teritorijalno more), procjedne i otpadne vode</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, surface water, sea water (transitional and coastal water, territorial sea), leachate water and waste water</i></p> | <p>Određivanje policikličkih aromatskih ugljikovodika (PAH: naftalen; acenaftilen; acenaften; fluoren; fenantren; antracen; fluoranten; piren; benzo[a]antracen; krizen; benzo[b]fluoranten; benzo[k]fluoranten; benzo[a]piren; indeno[1,2,3-c,d]piren; dibenzo[a,h]antracen; benzo[g,h,i]perilen) u vodama metodom plinske kromatografije s masenom spektrometrijom</p> <p><i>Determination of 16 polycyclic aromatic hydrocarbons (PAH: Naphthalene; Acenaphthylene; Acenaphthene; Fluorene; Phenanthrene; Anthracene; Fluoranthene; Pyrene, Chrysene, Benzanthrane, Benzo [a]pyrene Benzo[b]fluoranthene; Benzo[k]fluoranthene; Indeno[1,2,3-cd]pyrene; Dibenzo[a,h]anthracene; Benzo[g,h,i]perylene) in water -- Method using gas chromatography with mass spectrometric detection</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,00005 µg/L<br/>voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne, površinske i morske vode<br/><i>water for human consumption, natural spring water, natural mineral water, table water, ground water, surface water and sea water</i><br/>0,000018 mg/L – procjedne i otpadne vode<br/><i>leachate water and waste water</i></p> | ISO 28540:2011 |
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| 5. | <p>Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske, stolne vode, podzemne površinske vode, morska voda (prijelazne i priobalne vode, teritorijalno more), procjedne vode, otpadne vode i eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water, sea water (transitional and coastal water, territorial sea), waste eluates</i></p> | <p>Određivanje određenih alkilfenola, njihovih etoksilata, bisfenola A i pentaklorfenola metodom plinske kromatografije s masenom spektrometrijom</p> <p><i>Determination of selected alkylphenols, their ethoxylates, bisphenol A and pentachlorophenol using gas chromatographic method with mass spectrometry</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i></p> <p>Bisfenol A/ <i>Bisphenol A</i>: 0,003 µg/L<br/> 4-(1,1,3,3-Tetrametilbutil)fenol (<i>4-tert-oktilfenol</i>)/ 4-(1,1,3,3-Tetramethylbutyl)phenol (<i>4-tert-Octylphenol</i>): 0,003 µg/L<br/> 4-Nonilfenol (<i>iso-nonilfenol</i>)/ 4-Nonylphenol (<i>iso-Nonylphenol</i>): 0,05 µg/L<br/> 4-(1,1,3,3-Tetrametilbutil)fenol-monoetoksilat, (<i>4-tert-oktilfenol-monoetoksilat</i>)/ 4-(1,1,3,3-Tetramethylbutyl)phenol-monoethoxylate (<i>4-tert-Octylphenol-monoethoxylate</i>): 0,005 µg/L<br/> 4-Nonilfenol-monoetoksilat (<i>iso-nonilfenol-monoetoksilat</i>)/ 4-Nonylphenol-monoethoxylate (<i>iso-Nonylphenol-monoethoxylate</i>) 0,015 µg/L<br/> 4-(1,1,3,3-Tetrametilbutil)fenol-dietoksilat (<i>4-tert-oktilfenol-dietoksilat</i>)/ 4-(1,1,3,3-Tetramethylbutyl)phenol-dietoxylate (<i>4-tert-Octylphenol-dietoxylate</i>) 0,003 µg/L<br/> 4-Nonilfenol-dietoksilat (<i>iso-nonilfenol-dietoksilat</i>)/ 4-Nonylphenol-dietoxylate (<i>iso-Nonylphenol-dietoxylate</i>) 0,015 µg/L<br/> Pentaklorfenol/<br/><i>pentachlorophenol</i> 0,01 µg/L</p> | <p>HRN EN ISO 18857-2:2012<br/>(ISO 18857-2:2009;<br/>EN ISO 18857-2:2011)</p> |
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| 6. | <p>Podzemna, površinska voda, morska voda (prijelazne i priobalne vode, teritorijalno more) i otpadna voda</p> <p><i>Surface, ground water, sea water (transitional and coastal water, territorial sea) and waste water</i></p>                                                                                                                                                                                                                                      | <p>Određivanje ftalat estera u vodi metodom GC-MS: dimetil ftalat (DMP), dibutil ftalat (DBP), butil benzil ftalat (BBzP), di (2-etilheksil) ftalat (DEHP), dietil ftalat (DEP), di-n-oktil ftalat (DNOP)</p> <p><i>Determination of phthalate esters in water, GC-MS method:</i><br/><i>dimethyl phthalate (DMP), dibutyl phthalate (DBP), butyl benzyl phthalate (BBzP), bis (2-ethylhexyl) phthalate (DEHP), diethyl phthalate (DEP), di-n-octil phthalate (DNOP)</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,30 µg/L</p> | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP- LEK-31-33,37/186<br/>V. izdanje / <i>edition</i><br/>(2022-03-15)</p>                                                                                                             |
| 7. | <p>Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske, stolne vode, podzemne, površinske vode, morska voda (prijelazne i priobalne vode, teritorijalno more), procjedne, otpadne vode i eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, surface water, sea water (transitional and coastal water, territorial sea), leachate water, waste water and waste eluates</i></p> | <p>Određivanje kratkolančanih polikloriranih alkana C10-C13 u vodi metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS)</p> <p><i>Determination of short-chain polychlorinated alkanes C10-C13 (SCCPs) in water by gas chromatography-mass spectrometry (GC-MS/MS)</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit:</i><br/>0,10 µg/L</p>                                                                                                                                                                                   | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LEK-31-33;37/209<br/>IV. izdanje / <i>edition</i><br/>(2022-03-08)</p> <p>modificirana / <i>modified</i><br/>HRN EN ISO 12010:2019<br/>(ISO 12010:2019;<br/>EN ISO 12010:2019)</p> |

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| 8. | <p>Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske, stolne vode, podzemne, površinske vode, procjedne, otpadne vode i eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, surface water, leachate water, waste water and waste eluates</i></p>                               | <p>Određivanje organokositrenih spojeva (tributilkositreni, dibutilkositreni, monobutilkositreni, difenilkositreni, monofenilkositreni, monooktilkositreni, tetrabutilkositreni, dioktilkositreni, tricikloheksilkositreni, trifenilkositreni spojevi) metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS)</p> <p><i>Determination of organotin compounds (tributyltin, dibutyltin, monobutyltin, diphenyltin, monophenyltin, monooctyltin, tetrabutyltin, dioctyltin, tricyclohexyltin, triphenyltin compounds) using gas chromatographic method with mass spectrometry (GC-MS/MS)</i></p> <p>Granica kvantifikacije/<br/>Quantification limit:<br/>0,05 ng/L</p> | <p>HRN EN ISO 17353:2008<br/>(ISO 17353:2004<br/>EN ISO 17353:2004)</p>                                               |
| 9. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluat otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water, waste eluate</i></p> | <p>Identifikacija organskih spojeva u vodama metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS)</p> <p><i>Identification of organic compounds in water- gas chromatographic method with mass spectrometry (GC-MS/MS)</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                      | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LEK-31-33; 37/212<br/>I. izdanje / edition<br/>(2019-01-25)</p> |

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| 10. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, podzemne, procjedne, površinske vode, otpadne vode, eluati i apsorpcijske tekućine</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, ground water, leachate water, surface water, waste water, eluates and absorption solution</i></p> | <p>Određivanje otopljenih fluorida, klorida, nitrita, ortofosfata, bromida, nitrata i sulfata ionskom kromatografijom</p> <p><i>Determination of dissolved fluoride, chloride, nitrite, orthophosphate, bromide, nitrate and sulfate ions, using liquid chromatography of ions</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>Fluoridi: 0,1 mg/L<br/>Kloridi: 5 mg/L<br/>Nitriti: 0,02 mg N/L<br/>Ortofosfati: 0,1 mg/L (0,03 mgP/L)<br/>Bromidi: 0,1 mg/L<br/>Nitrati: 5 mg/L (1,13 mg N/L)<br/>Sulfati: 5 mg/L (1,66 mg S/L)</p> | <p>HRN EN ISO 10304-1:2009<br/>(ISO 10304-1:2007;<br/>EN ISO 10304-1:2009)</p>                             |
| 11. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, vode za kupanje, otpadne, procjedne i površinske vode, eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, bathing water, waste water, surface water and leachate water, waste eluates</i></p>                                | <p>Određivanje sadržaja arsena – metoda atomske apsorpcijske spektrometrije</p> <p><i>Determination of arsenic - AAS method</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>1 µg/L</p>                                                                                                                                                                                                                                                                                                                                              | <p>Vlastita metoda<br/>In-house method<br/>SOP-LEK-31;37/7b<br/>VI. izdanje / edition<br/>(2022-04-04)</p> |
| 12. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, procjedne, površinske vode, otpadne vode i eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, leachate water, surface water, waste water and waste eluates</i></p>                                                           | <p>Određivanje sadržaja olova, kadmija, nikla, selena i antimona metodom GF-AAS</p> <p><i>Determination of Lead, Cadmium, Nickel, Selenium and Antimony - method GF-AAS</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>Cd: 0,05 µg/L<br/>Pb: 0,45 µg/L<br/>Ni: 1,61 µg/L<br/>Se: 0,42 µg/L<br/>Sb: 0,55 µg/L</p>                                                                                                                                                                                                                   | <p>HRN EN ISO 15586:2008<br/>(ISO 15586:2003;<br/>EN ISO 15586:2003)</p>                                   |

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| 13. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne, procjedne, površinske i podzemne vode, eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water and leachate water, waste eluates</i></p>                             | <p>Određivanje sadržaja ukupnog dušika i nitrata u vodama</p> <p><i>Determination of total nitrogen and nitrate</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,15 mg N/L</p> | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LEK-31-33, 37 i 38/09<br/>IV. izdanje / <i>edition</i><br/>(2020-7-29)</p> |
| 14. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne, procjedne, površinske i podzemne vode, eluati otpada, tekući otpad</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water and leachate water, waste eluates, liquid waste</i></p> | <p>Određivanje sadržaja nitrita</p> <p><i>Determination of nitrite</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,02 mg N/L</p>                                              | <p>HRN EN 26777:1998<br/>(ISO 6777:1984;<br/>EN 26777:1993)</p>                                                                  |
| 15. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, vode za kupanje, otpadne, procjedne i površinske vode, eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, bathing water, waste water, surface water and leachate water, waste eluates</i></p>          | <p>Određivanje sadržaja amonija</p> <p><i>Determination of ammonium</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,005 mg N/L</p>                                            | <p>HRN ISO 7150-1:1998<br/>(ISO 7150-1:1984)</p>                                                                                 |

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| 16. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water, waste eluates</i></p> | <p>Određivanje mutnoće</p> <p><i>Determination of turbidity</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>0,14 NTU</p>                                                                              | <p>HRN EN ISO 7027-1:2016<br/>(ISO 7027-1:2016;<br/>EN ISO 7027-1:2016)</p> |
| 17. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water, waste eluates</i></p> | <p>Procjena boje pomoću platina-kobalt ljestvice boja</p> <p><i>Estimation of colour by the platinum –cobalt colour scale</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>3 Pt/Co jedinice</p>        | <p>HRN EN ISO 6271:2016<br/>(ISO 6271:2015;<br/>EN ISO 6271:2015)</p>       |
| 18. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water, waste eluates</i></p> | <p>Određivanje indeksa kemijske potrošnje kisika (KPK)</p> <p><i>Determination of the chemical oxygen demand indeks (ST-COD)</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>4 mg O<sub>2</sub>/L</p> | <p>HRN ISO 15705:2003<br/>(ISO 15705:2002)</p>                              |

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| 19. | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, voda za kupanje, podzemne, otpadne, procjedne i površinske vode<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, leachate water and surface water</i>                  | Određivanje slobodnog i ukupnog klora kolorimetrijskom metodom<br><br><i>Determination of free and total chlorine - Colorimetric method</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,05 mg Cl <sub>2</sub> /L                      | HRN EN ISO 7393-2:2018<br>(ISO 7393-2:2017;<br>EN ISO 7393-2:2018)                                                     |
| 20. | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, otpadne, procjedne i površinske vode, eluati otpada<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water, waste eluates</i> | Određivanje ukupnih fenola<br><br><i>Determination of total phenols</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,01 mg/L                                                                                                           | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-31-33, 37 i 38/23<br>VI. izdanje / <i>edition</i><br>(2024-11-13) |
| 21. | Površinske, otpadne i podzemne vode<br><br><i>Surface water, waste water and ground water</i>                                                                                                                                                                                                                                     | Određivanje anionskih surfaktanata u vodi – kivetni test LCK 332, Hach Lange<br><br><i>Determination of anionic surfactants in water – cuvette test LCK 332, Hach Lange</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,05 mg/L       | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-31-33 i 37/62<br>V. izdanje / <i>edition</i><br>(2024-11-22)      |
| 22. | Površinske, otpadne i podzemne vode<br><br><i>Surface water, waste water and ground water</i>                                                                                                                                                                                                                                     | Određivanje neionskih surfaktanata u vodi – kivetni test LCK 333, Hach Lange<br><br><i>Determination of non-ionic surfactants in the water – cuvette test LCK 333, Hach Lange</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,30 mg/L | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-31-33 i 37/81<br>V. izdanje / <i>edition</i><br>(2020-07-10)      |

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| 23. | <p>Površinske, otpadne i podzemne vode</p> <p><i>Surface water, waste water and ground water</i></p>                                                                                                                                                                                                                                                    | <p>Određivanje kationskih surfaktanata u vodi – fotometrijski test Nanocolor 1-34, Macherey-Nagel</p> <p><i>Determination of cationic surfactants in the water – photometric test Nanocolor 1-34, Macherey-Nagel</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,05 mg/L</p> | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LEK-31-33 i 37/134<br/>III. izdanje / <i>edition</i><br/>(2020-07-10)</p> |
| 24. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, otpadne, procjedne i površinske vode<br/><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water</i></p>                                                 | <p>Određivanje sulfida u vodama</p> <p><i>Determination of sulfide in water</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,005 mg/L</p>                                                                                                                                     | <p>HRN ISO 10530:1998<br/>(ISO 10530:1992)</p>                                                                                  |
| 25. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, otpadne, procjedne i površinske vode, eluati otpada i otpad<br/><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water, waste eluates and waste</i></p> | <p>Određivanje Cr(VI) u vodama i otpadima</p> <p><i>Determination of Cr (VI) in water and waste</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,01 mg/L</p>                                                                                                                  | <p>HRN ISO 11083:1998<br/>(ISO 11083:1994)</p>                                                                                  |
| 26. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, otpadne, procjedne i površinske vode, eluati otpada i otpad<br/><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water, waste eluates and waste</i></p> | <p>Određivanje lako oslobodljivih cijanida</p> <p><i>Determination of easily liberatable cyanide</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,01 mg/L</p>                                                                                                                 | <p>HRN ISO 6703-2:2001<br/>(ISO 6703-2:1984)</p>                                                                                |

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| 27. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, otpadne, procjedne i površinske vode, eluati otpada i otpad</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water, waste eluates and waste</i></p> | <p>Određivanju ukupnih cijanida</p> <p><i>Determination of total cyanide</i></p> <p>Granica kvantifikacije/<br/>Quantification limit:<br/>0,01 mg/L</p>                                                                                                  | <p>HRN ISO 6703-1:1998<br/>(ISO 6703-1:1984)</p>                      |
| 28. | <p>Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske, stolne vode, podzemne površinske vode, procjedne vode, otpadne vode i eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water, waste eluates</i></p>               | <p>Određivanje ortofosfata u vodama (UV/VIS spektroskopija)</p> <p><i>Determination of orthophosphate and total phosphorus in water (UV/VIS spectroscopic measurement)</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>0,0045 mg P/L</p> | <p>HRN EN ISO 6878:2008<br/>(ISO 6878:2004;<br/>EN ISO 6878:2004)</p> |
| 29. | <p>Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske, stolne vode, podzemne površinske vode, procjedne vode, otpadne vode i eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water, waste eluates</i></p>               | <p>Određivanje ukupnog fosfora u vodama (UV/VIS spektroskopija)</p> <p><i>Determination of total phosphorus in water (UV/VIS spectroscopic measurement)</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>0,0045 mg P/L</p>                | <p>HRN EN ISO 6878:2008<br/>(ISO 6878:2004;<br/>EN ISO 6878:2004)</p> |

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| 30. | <p>Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske, stolne vode, podzemne površinske vode, procjedne vode, otpadne vode i eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water, waste eluates</i></p> | <p>Određivanje sulfita u vodama (spektrofotometrijski)</p> <p><i>Determination of sulfite in water (UV/VIS spectroscopic measurement)</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>0,2 mg/L</p>                     | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LEK-31-33,37,38/156<br/>III. izdanje / edition<br/>(2020-04-15)</p> |
| 31. | <p>Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske, stolne vode, podzemne površinske vode, procjedne vode, otpadne vode i eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, waste water, leachate water and surface water, waste eluates</i></p> | <p>Određivanje silikata u vodama (spektrofotometrijski)</p> <p><i>Determination of silicate in water (UV/VIS spectroscopic measurement)</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>0,02 mg/L</p>                  | <p>ASTM D859-16(2021)E<br/><i>Standard Test Method for Silica in Water</i></p>                                            |
| 32. | <p>Otpadne, procjedne, podzemne, površinske vode i eluati otpada</p> <p><i>Waste water, leachate water and surface water, waste eluates</i></p>                                                                                                                                                                                              | <p>Određivanje adsorbibilnih organski vezanih halogena (AOX) – kivetni test LCK 390</p> <p><i>Determination of adsorbable organically bound halogens (AOX)</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>15 µg/L</p> | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LEK-33,37 i 38/127<br/>IV. izdanje / edition<br/>(2021-02-15)</p>   |
| 33. | <p>Površinske vode</p> <p><i>Surface water</i></p>                                                                                                                                                                                                                                                                                           | <p>Spektrometrijsko određivanje koncentracije klorofila a u vodi</p> <p><i>Spectrometric determination of the chlorophyll-a concentration in water</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>0,2 µg/L</p>        | <p>HRN ISO 10260:2001<br/>(ISO 10260:1992)</p>                                                                            |

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| 34. | Otpadna i procjedna voda<br><i>Waste water and leachate water</i>                                                                                                                                                                                                                                                                                                 | Procjena potpune aerobne biološke razgradnje organskih tvari u vodi – statički test (Zahn-Wellensova metoda)<br><br><i>Evaluation of ultimate aerobic biodegradability of organic compounds in aqueous medium – static test Zahn-Wellens test)</i>              | HRN EN ISO 9888:2000<br>(EN ISO 9888:1999;<br>ISO 9888:1999)                                                    |
| 35. | Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske, stolne vode, podzemne, površinske vode, procjedne, otpadne vode i eluati otpada<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, surface water, leachate water, waste water and waste eluates</i>                                 | Određivanje formaldehida (UV/vis sprektrofotometrija)<br><br><i>Determination of formaldehyde (UV/vis spectroscopic measurement)</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,02 mg/L                                                 | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-31-33,37 i 38/77d<br>IV. izdanje / edition<br>(2024-11-29) |
| 36. | Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske stolne vode, vode za kupanje, podzemne, površinske, procjedne, otpadne vode i eluati otpada<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, ground water, surface water, leachate water, waste water and waste eluates</i>       | Ispitivanje i određivanje boje<br><br><i>Examination and determination of colour</i><br><br>Granica kvantifikacije/<br><i>Quantification limit:</i><br>0,1 m <sup>-1</sup> (Metoda/ Method B)                                                                   | HRN EN ISO 7887:2012<br>(ISO 7887:2011; EN ISO 7887:2011)<br>Metode/ Methods A i / and B                        |
| 37. | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluati otpada<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water, waste eluates</i> | Određivanje suspendiranih tvari-Metoda filtriranjem kroz filter od staklenih vlakana<br><br><i>Determination of suspended solids - Method by filtration through glass fibre filters</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>2 mg/L | HRN EN 872:2008<br>(EN 872:2005)                                                                                |

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| 38. | Površinske, podzemne, procjedne i otpadne vode<br><i>Surface water, ground water, leachate and waste water</i>                                                                                                                                                                                                                                                | Određivanje masti i ulja<br><i>Determination of grease and oil</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>5,0 mg/L                                 | <i>EPA Method 1664, Revision A, 2000.</i>                    |
| 39. | Površinske, podzemne, procjedne i otpadne vode<br><i>Surface water, ground water, leachate water waste water</i>                                                                                                                                                                                                                                              | Određivanje ukupnih čvrstih čestica (suhi ostatak)<br><i>Determination of total solids (dry weight)</i><br><br>do/till 20000 mg/L                                            | SM 24 <sup>th</sup> Ed. 2023.2540 B                          |
| 40. | Površinske, podzemne, procjedne i otpadne vode, eluat otpada<br><i>Surface water, ground water, leachate water and waste water, waste eluates</i>                                                                                                                                                                                                             | Određivanje ukupno otopljenih krutina (TDS)<br><i>Determination of total dissolved solids</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>200 mg/L      | HRN EN 15216:2021<br>(EN 15216:2021)                         |
| 41. | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne, procjedne, površinske i podzemne vode, eluati otpada<br><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water and leachate water, waste eluates</i>                    | Određivanje sadržaja klorida<br><i>Determination of chloride content</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>5 mg/L                             | HRN ISO 9297:1998<br>(ISO 9297:1989)                         |
| 42. | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluati otpada<br><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water, waste eluates</i> | Određivanje permanganatnog indeksa<br><i>Determination of permanganate indeks</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,32 mg O <sub>2</sub> /L | HRN EN ISO 8467:2001<br>(ISO 8467:1993;<br>EN ISO 8467:1995) |

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| 43. | Vode za ljudsku potrošnju, površinske, podzemne, otpadne i procjedne vode<br><br><i>Water for human consumption, surface water, ground water, waste water and leachate water</i> | Određivanje taloživih tvari u vodi volumetrijskom metodom<br><br><i>Determination of settleable solids in water – volumetric method</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,1 mL/L h | SM 24thEd.2023.2540 F                                                                                              |
| 44. | Voda za ljudsku potrošnju, površinska, podzemna i otpadna voda<br><br><i>Water for human consumption, surface water, ground water and waste water</i>                            | Određivanje alkaliteta vode<br><br><i>Determination of alkalinity</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>25 mg CaCO <sub>3</sub> /L                                                   | HRN EN ISO 9963-1:1998<br>(ISO 9963-1:1994;<br>EN ISO 9963-1:1995)                                                 |
| 45. | Voda za ljudsku potrošnju, površinske i podzemne vode<br><br><i>Water for human consumption, surface water and groundwater</i>                                                   | Određivanje tvrdoće vode<br><br><i>Determination of water hardness</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>10 mg CaCO <sub>3</sub> /L (0,5 °dH)                                        | HRN ISO 6059:1998<br>(ISO 6059:1984)                                                                               |
| 46. | Površinske vode, podzemne vode, procjedne vode, otpadne vode, eluati otpada<br><i>Surface water, ground water, leachate water, waste eluat</i>                                   | Određivanje adsorbibilnih organski vezanih halogena (AOX)<br><br><i>Determination of adsorbable organically bound halogens (AOX)</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>6 µg/l        | HRN EN ISO 9562:2008<br>(ISO 9562:2004; EN ISO 9562:2004)                                                          |
| 47. | Voda za ljudsku potrošnju, površinska, podzemna, otpadna i morska voda<br><br><i>Water for human consumption, surface water, ground, waste and sea water</i>                     | Određivanje saliniteta vode<br><br><i>Determination of salinity</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,11 ‰                                                                         | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-31-33 i 37/175<br>V. izdanje / <i>edition</i><br>(2023-09-07) |

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| 48. | <p>Voda za ljudsku potrošnju, prirodne mineralne, prirodne izvorske, stolne vode, vode za kupanje, podzemne, površinske, procjedne i otpadne vode</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, ground water, surface water, leachate water and waste water</i></p>                                                                | <p>Određivanje oksidacijsko-redukcijskog potencijala</p> <p><i>Oxidation-Reduction Potential Measurement</i></p> <p>Raspon/ Range: <math>\pm 1\ 200\ \text{mV}</math></p>                   | SM 24 <sup>th</sup> Ed. 2023.2580 B                             |
| 49. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluati otpada, tekući otpad</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water, waste eluates, liquid waste</i></p> | <p>Određivanje pH vrijednosti</p> <p><i>Determination of pH</i></p> <p>Raspon/ Range: pH 2,0 -14,0</p>                                                                                      | HRN EN ISO 10523:2012<br>(ISO 10523:2008;<br>EN ISO 10523:2012) |
| 50. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluati otpada, tekući otpad</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water, waste eluates, liquid waste</i></p> | <p>Određivanje električne vodljivosti</p> <p><i>Determination of electrical conductivity</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>10 <math>\mu\text{S/cm}</math></p> | HRN EN 27888:2008<br>(ISO 7888:1985;<br>EN 27888:1993)          |

|     |                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                    |                                            |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 51. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluati otpada</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water, waste eluates</i></p> | <p>Određivanje ukupnog organskog ugljika (UOU) i otopljenog organskog ugljika (OOU)</p> <p><i>Determination of total organic carbon and dissolved organic carbon</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>0,188 mg/L</p>                                                                                                                    | <p>HRN EN 1484:2002<br/>(EN 1484:1997)</p> |
| 52. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, voda za kupanje, podzemne, površinske vode, procjedne i otpadne vode</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, ground water, waste water, leachate water and surface water</i></p>                               | <p>Određivanje otopljenog kisika i zasićenja kisikom pomoću optičke sonde</p> <p><i>Determination of Dissolved Oxygen and Oxygen Saturation by Instrumental Probe with Luminescence-Based Sensor</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>Otopljeni kisik / dissolved oxygen 0,10 mg/L;<br/>Zasićenje kisikom / oxygen saturation 1,0 %</p> | <p>ASTM: D888-18<br/>Test Method C</p>     |
| 53. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, podzemne, procjedne, površinske vode, otpadne i morska voda</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, ground water, leachate water, surface water, waste water and sea water</i></p>            | <p>Određivanje temperature</p> <p><i>Determination of temperature</i><br/>Od/ from 0°C do/ till 50°C</p>                                                                                                                                                                                                                                                           | <p>SM 24<sup>th</sup>Ed.2023.2550B</p>     |

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| 54. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, otpadne vode, površinske, procjedne i podzemne vode, eluati otpada</p> <p>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, waste water, surface water, leachate water and ground water</p> | <p>Određivanje ukupnoga vezanog dušika (TNb) i otopljenoga vezanog dušika (DNb), te ukupnog organskog ugljika (TOC) i otopljenog organskog ugljika (DOC) nakon visokotemperaturne katalitičke oksidacije</p> <p><i>Determination of total bound nitrogen (TNb) and dissolved bound nitrogen (DNb), and total organic carbon (TOC) and dissolved organic carbon (DOC) after high temperature catalytic oxidative combustion</i></p> <p>Granica kvantifikacije/<br/>Quantification limit (TNb/DNb)<br/>0,009 mg/L<br/>Granica kvantifikacije/<br/>Quantification limit (TOC/DOC)<br/>0,13 mg/L</p> | <p>Vlastita metoda<br/>SOP-LEK-31-33,37 i 38/253<br/>I. izdanje / edition<br/>2023-12-08</p> <p>HRN EN ISO 20236:2021<br/>(ISO 20236:2018; EN ISO 20236:2021)</p> |
| 55. | <p>Površinske, podzemne, procjedne i otpadne vode</p> <p>Surface water, ground water, leachate and waste water</p>                                                                                                                                                                                                                                 | <p>Određivanje biokemijske potrošnje kisika u vodi nakon 5 dana – Metoda razrijeđivanja i naciepljivanja uz dodatak aliltiouree</p> <p><i>Determination of biochemical oxygen demand after 5 days (BOD<sub>5</sub>) - Dilution and seeding method with allylthiourea addition</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>1 mg O<sub>2</sub>/L</p>                                                                                                                                                                                                                           | <p>HRN EN ISO 5815-1:2019<br/>(ISO 5815-1:12019; EN ISO 5815-1:2019)</p>                                                                                          |
| 56. | <p>Površinske, podzemne, procjedne i otpadne vode</p> <p>Surface water, ground water, leachate and waste water</p>                                                                                                                                                                                                                                 | <p>Određivanje biokemijske potrošnje kisika u vodi nakon 5 dana – Metoda za nerazrijeđene uzorke</p> <p><i>Determination of biochemical oxygen demand after 5 days (BOD<sub>5</sub>) - Method for undiluted samples</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>0,5 mg O<sub>2</sub>/L</p>                                                                                                                                                                                                                                                                                   | <p>HRN EN 1899-2:2004<br/>(ISO 5815:1989, modified; EN 1899-2:1998)</p>                                                                                           |

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| 57. | Vode za ljudsku potrošnju, površinske, podzemne, otpadne vode, vode za kupanje, oborine i morska voda<br><br><i>Water for human consumption, surface water, ground water, waste water, bathing water, wet deposition and sea water</i>                                                                                                                                             | Određivanje vidljive otpadne tvari u vodi<br><br><i>Determination of visible waste matter in water</i>                                                                                                                                                   | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-31-33 i 37/89<br>V. izdanje / <i>edition</i><br>(2024-07-04) |
| 58. | Površinska voda<br><br><i>Surface water</i>                                                                                                                                                                                                                                                                                                                                        | Određivanje prozirnosti vode - polukvantitativna metoda sa Secchijevim diskom<br><br><i>Determination of transparency of water - Semiquantitative method with Secchi disc</i>                                                                            | HRN EN ISO 7027-2:2019<br>(ISO 7027-2:2019;<br>EN ISO 7027-2:2019)                                                |
| 59. | Podzemne, površinske, procjedne, otpadne vode i tekući otpad<br>Vodeni ekstrakti i eluati<br>Eluati otpada, slatkovodnog sedimenta i tla<br>Kemijske tvari<br><br><i>Ground water, surface water, leachate water, waste water and liquid waste</i><br><i>Aqueous extracts and leachates</i><br><i>Eluates of waste, freshwater sediment and soil</i><br><i>Chemical substances</i> | Određivanje inhibicije pokretljivosti<br><i>Daphnia magna</i> Straus (Cladocera, Crustacea) – test akutne toksičnosti<br><br><i>Determination of the inhibition of the mobility of Daphnia magna Straus (Cladocera, Crustacea) – Acute toxicity test</i> | HRN EN ISO 6341:2013<br>(ISO 6341:2012;<br>EN ISO 6341:2012)                                                      |

| Br. No.                                                            | Materijali/Proizvodi<br><i>Materials/Products</i> | Vrsta ispitivanja/Svojstvo<br><i>Type of test/Property</i><br><i>Raspon/Range</i> | Metoda ispitivanja<br><i>Test method</i> |
|--------------------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------|
| <b>Mikrobiološka ispitivanja</b><br><i>Microbiological testing</i> |                                                   |                                                                                   |                                          |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, vode za kupanje i površinske vode<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, bathing water and surface water</i> | Brojenje uzgojenih mikroorganizama - Broj kolonija naciepljivanjem na hranjivi agar<br><br><i>Enumeration of culturable micro-organisms - Colony count by inoculation in a nutrient agar culture medium</i>                                                                  | HRN EN ISO 6222:2000<br>(ISO 6222:1999;<br>EN ISO 6222:1999)                                                                                                                                                      |
| 2. | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, vode za kupanje i površinske vode<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, bathing water and surface water</i> | Detekcija i brojenje <i>Escherichia coli</i> , koliformnih bakterija i fekalnih koliformnih bakterija - Metoda membranske filtracije<br><br><i>Detection and enumeration of Escherichia coli, coliform bacteria and fecal coliform bacteria - Membrane filtration method</i> | HRN EN ISO 9308-1:2014/A1:2017<br>(ISO 9308-1:2014/Amd 1:2016;<br>EN ISO 9308-1:2014/A1:2017)<br><br>Vlastita metoda<br><i>In-house method</i><br>SOP-MO-MF-05/4;6;15/VP<br>VI. izdanje / edition<br>(2015-03-16) |
| 3. | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, vode za kupanje i površinske vode<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, bathing water and surface water</i> | Detekcija i brojenje <i>Pseudomonas aeruginosa</i> membranskom filtracijom<br><br><i>Detection and enumeration of Pseudomonas aeruginosa by membrane filtration</i>                                                                                                          | HRN EN ISO 16266:2008<br>(ISO 16266:2006;<br>EN ISO 16266:2008)                                                                                                                                                   |
| 4. | Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, vode za kupanje i površinske vode<br><br><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, bathing water and surface water</i> | Detekcija i brojenje fekalnih streptokoka - Metoda membranske filtracije<br><br><i>Detection and enumeration of faecal streptococci - Method by membrane filtration</i>                                                                                                      | HRN EN ISO 7899-2:2000<br>(ISO 7899-2:2000;<br>EN ISO 7899-2:2000)                                                                                                                                                |

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| 5. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, podzemne vode, vode za kupanje i površinske vode</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, ground water, bathing water and surface water</i></p>                                                                     | <p>Detekcija i brojenje spora sulfitoreducirajućih anaeroba (klostridija) - Metoda membranske filtracije</p> <p><i>Detection and enumeration of the spores of sulfite-reducing anaerobes (clostridia) - Method by membrane filtration</i></p> | <p>HRN EN 26461-2:2008<br/>(ISO 6461-2:1986;<br/>EN 26461-2:1993)</p> |
| 6. | <p>Voda za ljudsku potrošnju, prirodne izvorske, prirodne mineralne, stolne vode, vode za kupanje, podzemne, procjedne, površinske, otpadne vode i morska voda</p> <p><i>Water for human consumption, natural spring water, natural mineral water, table water, bathing water, ground water, leachate water, surface water, waste water and sea water</i></p> | <p>Brojenje <i>Legionella</i> u uzorcima pitke vode</p> <p><i>Enumeration of Legionella in potable water samples</i></p>                                                                                                                      | <p>HRN EN ISO 11731:2017<br/>(ISO 11731:2017; EN ISO 11731:2017)</p>  |



| Br.<br>No.                                             | Materijali/Proizvodi<br>Materials/Products                                                                                                                                                                                                                                                                                             | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range      | Metoda ispitivanja<br>Test method  |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------|
| <b>Senzorska ispitivanja</b><br><i>Sensory testing</i> |                                                                                                                                                                                                                                                                                                                                        |                                                                          |                                    |
| 1.                                                     | Voda za ljudsku potrošnju,<br>prirodne izvorske, prirodne<br>mineralne, stolne vode,<br>podzemne vode, otpadne,<br>procjedne<br>i površinske vode<br><br><i>Water for human<br/>consumption, natural spring<br/>water, natural mineral water,<br/>table water, ground water,<br/>waste water, leachate water<br/>and surface water</i> | Određivanje mirisa u vodama<br><br><i>Determination of odor in water</i> | HRN EN 1622:2008<br>(EN 1622:2006) |
| 2.                                                     | Voda za ljudsku potrošnju,<br>prirodne izvorske, prirodne<br>mineralne, stolne vode,<br>podzemne vode,<br>i površinske vode<br><br><i>Water for human<br/>consumption, natural spring<br/>water, natural mineral water,<br/>table water, ground water<br/>and surface water</i>                                                        | Određivanje okusa u vodama<br><br><i>Determination of taste in water</i> | HRN EN 1622:2008<br>(EN 1622:2006) |

| Br.<br>No.                            | Materijali/Proizvodi<br>Materials/Products                                                                                              | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range | Metoda ispitivanja<br>Test method                                                                                                                 |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Uzorkovanje</b><br><i>Sampling</i> |                                                                                                                                         |                                                                     |                                                                                                                                                   |
| 1.                                    | Voda za ljudsku potrošnju<br><i>Water for human consumption</i>                                                                         | Uzorkovanje<br><i>Sampling</i>                                      | HRN ISO 5667-5:2011<br>(ISO 5667-5:2006)<br><br>HRN EN ISO 19458:2008<br>(ISO 19458:2006;<br>EN ISO 19458:2006)                                   |
| 2.                                    | Površinske vode<br>(rijeke i potoci)<br><i>Surface water<br/>(rivers and streams)</i>                                                   | Uzorkovanje<br><i>Sampling</i>                                      | HRN EN ISO 5667-6:2016 +<br>A11:2020<br>(EN ISO 5667-6:2016 +<br>A11:2020)<br><br>HRN EN ISO 19458:2008<br>(ISO 19458:2006;<br>EN ISO 19458:2006) |
| 3.                                    | Površinske vode<br>(vode prirodnih i umjetnih jezera)<br><i>Surface water<br/>(natural and man made lakes)</i>                          | Uzorkovanje<br><i>Sampling</i>                                      | HRN ISO 5667-4:2016<br>(ISO 5667-4:2016)<br><br>HRN EN ISO 19458:2008<br>(ISO 19458:2006;<br>EN ISO 19458:2006)                                   |
| 4.                                    | Morska voda (prijelazne i priobalne vode, teritorijalno more)<br><i>Sea water<br/>(transitional and coastal water, territorial sea)</i> | Uzorkovanje<br><i>Sampling</i>                                      | HRN EN ISO 5667-9:2001<br>(ISO 5667-9:1992)                                                                                                       |
| 5.                                    | Podzemne vode<br><i>Ground water</i>                                                                                                    | Uzorkovanje<br><i>Sampling</i>                                      | HRN ISO 5667-11:2011<br>(ISO 5667-11:2009)<br><br>HRN EN ISO 19458:2008<br>(ISO 19458:2006;<br>EN ISO 19458:2006)                                 |
| 6.                                    | Otpadne, procjedne i oborinske vode<br><i>Waste water and leachate water</i>                                                            | Uzorkovanje<br><i>Sampling</i>                                      | HRN ISO 5667-10:2020<br>(ISO 5667-10:2020)                                                                                                        |
| 7.                                    | Oborine<br><i>Wet deposition</i>                                                                                                        | Uzorkovanje<br><i>Sampling</i>                                      | HRN ISO 5667-8:2000<br>(ISO 5667-8:1993)                                                                                                          |
| 8.                                    | Voda za kupanje<br><i>Bathing water</i>                                                                                                 | Uzorkovanje<br><i>Sampling</i>                                      | DIN 38402-19:1988<br><br>HRN EN ISO 19458:2008<br>(ISO 19458:2006;<br>EN ISO 19458:2006)                                                          |

| Br.<br>No.                                               | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                             | Metoda ispitivanja<br>Test method                                                                      |
|----------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Biološka ispitivanja</b><br><i>Biological testing</i> |                                            |                                                                                                                                                                                                                                        |                                                                                                        |
| 1.                                                       | Površinske vode<br><i>Surface water</i>    | Uzorkovanje slatkovodnih bentoskih makrobescraljeznjaka prema zastupljenosti razlicitih staništa u tekućicama (Multi-Habitat pristup)<br><br><i>Pro-rata Multi-Habitat sampling of benthic macroinvertebrates from wadeable rivers</i> | HRN EN 16150:2012<br>(EN 16150:2012)                                                                   |
| 2.                                                       | Površinske vode<br><i>Surface water</i>    | Uzorkovanje i prethodna obrada riječnih i jezerskih bentoskih dijatomeja<br><br><i>Sampling and preparation of benthic diatoms from rivers and lakes</i>                                                                               | HRN EN 13946:2014<br>(EN 13946:2014)                                                                   |
| 3.                                                       | Površinske vode<br><i>Surface water</i>    | Biološka analiza i statistička evaluacija makrobescraljeznjaka površinskih voda<br><br><i>Biological analysis and statistical evaluation of macroinvertebrates in surface waters</i>                                                   | Vlastita metoda<br><i>In-house method</i><br>SOP- LEK-37/102b<br>IV. izdanje / edition<br>(2024-08-27) |

| Br.<br>No.                                                      | Materijali/Proizvodi<br>Materials/Products                                        | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Metoda ispitivanja<br>Test method                                                                       |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| ISPITIVANJE OTPADA<br>TESTING OF WASTE                          |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                         |
| Fizikalno-kemijska ispitivanja<br>Physical and chemical testing |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                         |
| 1.                                                              | Otpadna ulja i izolacijske<br>tekućine<br><br>Waste oils and insulating<br>fluids | <p>Određivanje polikloriranih bifenila (PCB 18, PCB 28, PCB 31, PCB 44, PCB 52, PCB 101, PCB 118, PCB 138, PCB 149, PCB 153, PCB 170, PCB 180, PCB 194, PCB 209) u otpadnim uljima i izolacijskim tekućinama metodom plinske kromatografije s masenom spektrometrijom (GC-MS)</p> <p><i>Determination of polychlorinated biphenyls (PCB 18, PCB 28, PCB 31, PCB 44, PCB 52, PCB 101, PCB 118, PCB 138, PCB 149, PCB 153, PCB 170, PCB 180, PCB 194, i PCB 209) in used oils and insulating liquids using gas chromatographic method with mass spectrometry (GC-MS)</i></p> <p>Granica kvantifikacije/<br/>Quantification limit:<br/>0,2 mg/kg</p> | <p>Vlastita metoda<br/>In-house method<br/>SOP-LEK-38/02a<br/>II. izdanje / edition<br/>(2021-2-16)</p> |

| Br.<br>No. | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Metoda ispitivanja<br>Test method    |
|------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 2.         | Otpad<br>Waste                             | <p>Određivanje policikličkih aromatskih ugljikovodika (PAH: naftalen; acenaftilen; acenaften; fluoren; fenantren; antracen; fluoranten; piren; benzo[a]antracen; krizen; benzo[b]fluoranten; benzo[k]fluoranten; benzo[a]piren; indeno[1,2,3-c,d]piren; dibenzo[a,h]antracen; benzo[g,h,i]perilen) s uporabom plinske kromatografije sa masenom spektrometrijom (GC/MS)</p> <p><i>Determination of polycyclic aromatic hydrocarbons (PAH: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Chrysene, Benzanthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Indeno[1,2,3-cd]pyrene, Dibenzo[a,h]anthracene, Benzo[g,h,i]perylene) using gas chromatography mass spectrometry (GC/MS)</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,009 mg/kg</p> | HRN EN 17503:2022<br>(EN 17503:2022) |

| Br.<br>No. | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                                                                                                                        | Metoda ispitivanja<br>Test method                                                                   |
|------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 3.         | Otpad<br>Waste                             | <p>Određivanje polikloriranih bifenila (PCB 28, PCB 52, PCB 101, PCB 118, PCB 138, PCB 141, PCB 153, PCB 180) metodom plinske kromatografije s masenom spektrometrijom (GC-MS)</p> <p><i>Determination of polychlorinated biphenyls (PCB 28, PCB 52, PCB 101, PCB 118, PCB 141, PCB 138, PCB 153, PCB 180) by using capillary gas chromatography with mass spectrometric detection (GC-MS)</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,010 mg/kg</p> | HRN EN 17322:2020<br>(EN 17322:2020)                                                                |
| 4.         | Otpad<br>Waste                             | <p>Određivanje sadržaja ugljikovodika u rasponu C10 (n-dekan) do C40 (n-tetrakontan) metodom plinske kromatografije</p> <p><i>Determination of content of hydrocarbon in the range C10 (n-Decane) to C40 (n-Tetracontane) by gas chromatography</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>125 mg/kg</p>                                                                                                                                              | HRN EN ISO 16703:2012<br>(ISO 16703:2009)<br>HRN EN 14039:2005<br>(EN 14039:2004)                   |
| 5.         | Otpad<br>Waste                             | <p>Određivanje suhog ostatka i sadržaja vode</p> <p><i>Determination of dry residue or water content</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,07 % (suhi ostatak / dry residue)<br/>0,26 % (sadržaj vode / water content: metoda A - sušenje / method A –drying)<br/>0,15 % (sadržaj vode / water content: metoda B – Karl Fischer titracija / method B - Karl Fischer Titration)</p>                                                             | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-38/90<br>VI. izdanje / edition<br>(2022-11-03) |

| Br.<br>No. | Materijali/Proizvodi<br>Materials/Products  | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                                                                      | Metoda ispitivanja<br>Test method                                                                            |
|------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 6.         | Tekući otpad<br><i>Liquid waste</i>         | Određivanje masti i ulja<br><br><i>Determination of grease and oil</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>400,0 mg/kg                                                                                                                                                                                                                                                                             | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-38/192<br>III. izdanje / <i>edition</i><br>(2020-03-16) |
| 7.         | Otpad, biotpad<br><i>Waste and biowaste</i> | Određivanje gubitka žarenjem<br>suhe tvari i pepela u otpadu,<br>mulju, sedimentima, tlu i<br>biotpadu<br><br><i>Determination of loss on<br/>ignition in waste, sludge,<br/>sediment, soil and biowaste</i><br><br>Granica kvantifikacije/<br><i>Quantification limit:</i><br><br>2,04 % ( <i>mulj/ sludge</i> )<br>8,70 % ( <i>sediment/ sediment</i> )<br>4,90 % ( <i>tlo/ soil</i> )<br>3,07 % ( <i>biotpad/ biowaste</i> ) | HRN EN 15935:2021<br>( <i>EN 15935:2021</i> )                                                                |
| 8.         | Otpad<br><i>Waste</i>                       | Određivanje organskog i<br>ukupnog ugljika suhim<br>spaljivanjem<br><br><i>Determination of organic and<br/>total carbon after dry<br/>combustion</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,26 %                                                                                                                                                                                                   | HRN EN 15936:2022 ( <i>EN<br/>15936:2022</i> )                                                               |
| 9.         | Otpad<br><i>Waste</i>                       | Određivanje sadržaja ugljika,<br>dušika i sumpora<br><br><i>Determination of carbon,<br/>nitrogen and sulfur</i><br><br>Granica kvantifikacije/<br><i>Quantification limit:</i><br>0,010 %                                                                                                                                                                                                                                      | HRN ISO 13878:2004<br>( <i>ISO 13878:2004</i> )                                                              |

| Br. No. | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                     | Metoda ispitivanja<br>Test method                                                                                                                                      |
|---------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.     | Otpad<br>Waste                             | <p>Određivanje gornje kalorijske vrijednosti i izračun donje kalorijske vrijednosti pri stalnom volumenu u krutom i tekućem otpadu</p> <p><i>Determination of gross calorific value and calculation of net calorific value at constant volume in solid and liquid waste</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>691,83 J/kg</p> | DIN 51900-1:2000<br>DIN 51900-2:2003                                                                                                                                   |
| 11.     | Otpad<br>Waste                             | <p>Određivanje točke paljenja u otpadima metodom u zatvorenoj posudi po Pensky-Martensu</p> <p><i>Determination of flash point of waste – Pensky-Martens closed cup method</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>40,5°C</p>                                                                                                   | <p>HRN EN ISO 2719:2016<br/>(ISO 2719:2016;<br/>EN ISO 2719:2016)</p> <p>HRN EN ISO 2719:2016/A1:2021<br/>(ISO 2719:2016/Amd 1:2021;<br/>EN ISO 2719:2016/A1:2021)</p> |

Priprema analitičkih uzorka / Preparation of analytical samples:

- Otpad /Waste: HRN EN 12457-4:2005 (EN 12457-4:2002), HRI CEN/TR 16192:2020 (CEN/TR 16192:2020)
- Eluat: CEN/TR 16192:2020

| Br. No.                        | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                            | Metoda ispitivanja<br>Test method                |
|--------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>Uzorkovanje</b><br>Sampling |                                            |                                                                                                                                                                                                                       |                                                  |
| 1.                             | Otpad<br>Waste                             | <p>Karakterizacija otpada – Uzorkovanje otpadnih materijala – 2.dio: Upute za tehnike uzorkovanja</p> <p><i>Characterization of waste - Sampling of waste materials - Part 2: Guidance on sampling techniques</i></p> | HRI CEN/TR 15310-2:2008<br>(CEN/TR 15310-2:2006) |

| Br.<br>No.                                                                                             | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Metoda ispitivanja<br>Test method                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ISPITIVANJE TLA, MULJA, SEDIMENTA I BIOTE</b><br><i>TESTING OF SOIL, SLUDGE, SEDIMENT AND BIOTA</i> |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                   |
| <b>Fizikalno-kemijska ispitivanja</b><br><i>Physical and chemical testing</i>                          |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                   |
| 1.                                                                                                     | Sediment<br><br><i>Sediment</i>            | Određivanje organokositrenih spojeva metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS) (tributilkositreni, dibutilkositreni, monobutilkositreni, difenilkositreni, monofenilkositreni, monooktilkositreni, tetrabutilkositreni, dioktilkositreni, tricikloheksilkositreni, trifenilkositreni spojevi)<br><br><i>Determination of organotin compounds using gas chromatographic method with mass spectrometry (GC-MS/MS) (tributyltin, dibutyltin, monobutyltin, diphenyltin, monophenyltin, monoctyltin, tetrabutyltin, dioctyltin, tricyclohexyltin, triphenyltin compounds)</i><br><br>Granica kvantifikacije/<br><i>Quantification limit:</i><br>0,5 µg/kg | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-38/204<br>II. izdanje / <i>edition</i><br>(2021-06-14)<br><br>modificirana / <i>modified</i><br>HRN EN ISO 23161:2018<br>(ISO 23161:2018; EN ISO 23161:2018) |

| Br. No. | Materijali/Proizvodi<br>Materials/Products              | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Metoda ispitivanja<br>Test method                                                 |
|---------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2.      | Mulj, sediment, tlo<br><i>Sludge, sediment and soil</i> | <p>Određivanje policikličkih aromatskih ugljikovodika (PAH: naftalen; acenaftilen; acenaften; fluoren; fenantren; antracen; fluoranten; piren; benzo[a]antracen; krizen; benzo[b]fluoranten; benzo[k]fluoranten; benzo[a]piren; indeno[1,2,3-c,d]piren; dibenzo[a,h]antracen; benzo[g,h,i]perilen) s uporabom plinske kromatografije sa masenom spektrometrijom (GC/MS)</p> <p><i>Determination of polycyclic aromatic hydrocarbons (PAH: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Chrysene, Benzantracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Indeno[1,2,3-cd]pyrene, Dibenzo[a,h]anthracene, Benzo[g,h,i]perylene) using gas chromatography mass spectrometry (GC/MS)</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,009 mg/kg</p> | HRN EN 17503:2022<br>(EN 17503:2022)                                              |
| 3.      | Mulj, sediment, tlo<br><i>Sludge, sediment and soil</i> | <p>Određivanje sadržaja ugljikovodika u rasponu C10 (n-dekan) do C40 (n-tetrakontan) metodom plinske kromatografije</p> <p><i>Determination of content of hydrocarbon in the range C10 (n-Decane) to C40 (n-Tetracontane) by gas chromatography</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>125 mg/kg</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | HRN EN ISO 16703:2012<br>(ISO 16703:2009)<br>HRN EN 14039:2005<br>(EN 14039:2004) |

| Br. No. | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Metoda ispitivanja<br>Test method                                                                                                                                                      |
|---------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.      | Sediment, mulj<br><i>Sediment, sludge</i>  | <p>Određivanje ftalat estera metodom plinske kromatografije s masenom spektrometrijom (GC-MS): dimetil ftalat (DMP), dibutil ftalat (DBP), butil benzil ftalat (BBzP), di (2-etilheksil) ftalat (DEHP), dietil ftalat (DEP), di-n-oktil ftalat (DNOP)</p> <p><i>Determination of phthalate esters, GC-MS method: dimethyl phthalate (DMP), dibutyl phthalate (DBP), butyl benzyl phthalate (BBzP), bis (2-ethylhexyl) phthalate (DEHP), diethyl phthalate (DEP), di-n-octil phthalate (DNOP)</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,01 mg/kg</p> | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP- LEK-38/186<br/>I. izdanje / <i>edition</i><br/>(2023-03-10)</p> <p>Modificirana / <i>modified</i> HRS<br/>CEN/TS 16183:2012</p> |
| 5.      | Sediment, mulj<br><i>Sediment, sludge</i>  | <p>Određivanje polibromiranih difenil-etera (PBDE: BDE-028, BDE-047, BDE-099, BDE-100, BDE-153, BDE-154) metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS)</p> <p><i>Determination of polybrominated diphenyl ethers (PBDE: BDE-028, BDE-047, BDE-099, BDE-100, BDE-153, BDE-154) – gas chromatography method with mass spectrometry (GC-MS/MS)</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,001 mg/kg</p>                                                                                                                           | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LEK-38/179<br/>Izdanje / <i>edition</i> (2022-12-08)</p> <p>Modificirana / <i>modified</i> HRN<br/>EN ISO 22032:2009</p>         |

| Br. No. | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                                                                                                | Metoda ispitivanja<br>Test method                                                                                      |
|---------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| 6.      | Biota<br><br>Biota                         | <p>Određivanje policikličkih aromatskih ugljikovodika u bioti metodom GC-MSMS</p> <p><i>Determination of polycyclic aromatic hydrocarbons (PAH) in biota using GC/MSMS</i></p> <p>Granica kvantifikacije /<br/><i>Quantification limit</i><br/>1,1 µg/kg benzo[a]piren /<br/><i>benzo[a]pyrene</i><br/>10 µg/kg fluoranten /<br/><i>fluoranthene</i></p>                                                                                                  | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP- LEK-44/65<br/>I. izdanje / <i>edition</i><br/>(2024-07-01)</p>  |
| 7.      | Sediment<br><br>Sediment                   | <p>Određivanje pentaklorfenola u sedimentu metodom GC-MS</p> <p><i>Determination of pentachlorophenol using GC/MS</i></p> <p>Granica kvantifikacije /<br/><i>Quantification limit</i><br/>0,1 mg/kg</p>                                                                                                                                                                                                                                                   | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP- LEK-38/180<br/>I. izdanje / <i>edition</i><br/>(2024-08-30)</p> |
| 8.      | Biota<br><br>Biota                         | <p>Određivanje polibromiranih difenil-etera (PBDE: BDE-028, BDE-047, BDE-099, BDE-100, BDE-153, BDE-154) metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS)</p> <p><i>Determination of polybrominated diphenyl ethers (PBDE: BDE-028, BDE-047, BDE-099, BDE-100, BDE-153, BDE-154) – gas chromatography method with mass spectrometry (GC-MS/MS)</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,0020 µg/kg</p> | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LEK-44/179<br/>Izdanje / <i>edition</i><br/>(2024-10-22)</p>     |

| Br.<br>No. | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                       | Metoda ispitivanja<br>Test method                                                                                                                                                                                                 |
|------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9.         | Sediment<br><br><i>Sediment</i>            | <p>Određivanje kratkolančanih polikloriranih alkana C10-C13 u sedimentu metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS)</p> <p><i>Determination of short-chain polychlorinated alkanes C10-C13 (SCCPs) in sediment by gas chromatography-mass spectrometry (GC-MS/MS)</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit:</i><br/>0,03 mg/kg</p> | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LEK-38/209<br/>I. izdanje / <i>edition</i><br/>(2024-11-04)</p> <p>modificirana / <i>modified</i><br/>HRN EN ISO 18635:2016<br/>(ISO 18635:2016;<br/>EN ISO 18635:2016)</p> |
| 10.        | Mulj<br><br><i>Sludge</i>                  | <p>Određivanje suhog ostatka i sadržaja vode</p> <p><i>Determination of dry residue and water content</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>2,7 % (suhi ostatak / <i>dry residue</i>)<br/>2,6 % (sadržaj vode / <i>water content</i>)</p>                                                                                                       | <p>HRN EN 12880:2005<br/>(EN 12880:2000)</p>                                                                                                                                                                                      |
| 11.        | Tlo<br><br><i>Soil</i>                     | <p>Određivanje suhog ostatka i sadržaja vode</p> <p><i>Determination of dry matter and water content</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>76,6 % (suhi ostatak / <i>dry residue</i>)<br/>4,5 % (sadržaj vode / <i>water content</i>)</p>                                                                                                       | <p>HRN ISO 11465:2004<br/>(ISO 11465:1993+Cor 1:1994)</p>                                                                                                                                                                         |

| Br.<br>No.                                                           | Materijali/Proizvodi<br>Materials/Products                 | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                              | Metoda ispitivanja<br>Test method                                                                                                                                                                      |
|----------------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12.                                                                  | Mulj, sediment i tlo<br><i>Sludge, sediment and soil</i>   | <p>Određivanje gubitka žarenjem suhe tvari i pepela u otpadu, mulju, sedimentima, tlu i biootpadu</p> <p><i>Determination of loss on ignition in waste, sludge, sediment, soil and biowaste</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit:</i></p> <p>2,04 % (mulj/ sludge)<br/>8,70 % (sediment/ sediment)<br/>4,90 % (tlo/ soil)<br/>3,07 % (biootpad/ biowaste)</p> | HRN EN 15935:2021<br>(EN 15935:2021)                                                                                                                                                                   |
| 13.                                                                  | Biota (ribe i mekušci)<br><i>Biota (fish and molluscs)</i> | <p>Određivanje sadržaja ukupne masti</p> <p><i>Determination of total fat</i></p>                                                                                                                                                                                                                                                                                                       | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LKH-01;12;44/10<br/>IX. izdanje/ <i>edition</i> (2024-11-13)</p> <p>modificirana / <i>modified</i><br/>HRN ISO 1443:1999<br/>(ISO 1443:1973)</p> |
| 14.                                                                  | Mulj, sediment, tlo<br><i>Sludge, sedimen and soil</i>     | <p>Određivanje organskog i ukupnog ugljika suhim spaljivanjem</p> <p><i>Determination of organic and total carbon after dry combustion</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit</i><br/>0,26 %</p>                                                                                                                                                                | <p>HRN ISO 10694:2004<br/>(ISO 10694:1995)</p> <p>HRN EN 15936:2022<br/>(EN 15936:2022)</p>                                                                                                            |
| 15.                                                                  | Mulj, sediment, tlo<br><i>Sludge, sedimen and soil</i>     | <p>Određivanje sadržaja ugljika, dušika i sumpora</p> <p><i>Determination of carbon, nitrogen and sulfur</i></p> <p>Granica kvantifikacije/<br/><i>Quantification limit:</i><br/>0,010 %</p>                                                                                                                                                                                            | HRN ISO 13878:2004<br>(ISO 13878:2004)                                                                                                                                                                 |
| Metode kalorimetrijske analize / <i>Calorimetry analisys methods</i> |                                                            |                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                        |

| Br. No. | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                                                                                                   | Metoda ispitivanja<br>Test method                            |
|---------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| 16.     | Mulj<br>Sludge                             | <p>Određivanje gornje kalorijske vrijednosti i izračun donje kalorijske vrijednosti pri stalnom volumenu u mulju</p> <p><i>Determination of gross calorific value and calculation of net calorific value at constant volume in sludge</i></p> <p>Granica kvantifikacije/<br/>Quantification limit<br/>691,83 J/kg</p> | HRN EN 15170:2010<br>(EN 15170:2008)                         |
| 17.     | Tlo i mulj<br>Soil and sludge              | <p>Određivanje pH vrijednosti tla i mulja</p> <p><i>Determination of pH - soil and sludge</i></p> <p>Raspon/ Range: pH 4,0-10,0</p>                                                                                                                                                                                   | HRN EN ISO 10390:2022<br>(EN ISO 10390:2022; ISO 10390:2021) |

**Priprema analitičkih uzorka / Preparation of analytical samples:**

- Tlo / Soil: modificirana / modified HRN EN ISO 54321:2021 (ISO 54321:2020; EN ISO 54321:2021); HRN ISO 14869-2:2004 (ISO 14869-2:2002)
- Muljevi, sedimenti, biota / Sludges, sediments, biota: modificirana / modified HRN EN ISO 54321:2021 (ISO 54321:2020; EN ISO 54321:2021)
- Mineralne sirovine / Mineral raw materials: HRN ISO 14869-2:2004 (ISO 14869-2:2002)

| Br. No.                        | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range | Metoda ispitivanja<br>Test method                                     |
|--------------------------------|--------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>Uzorkovanje</b><br>Sampling |                                            |                                                                     |                                                                       |
| 1.                             | Mulj<br>Sludge                             | Uzorkovanje<br>Sampling                                             | HRN EN ISO 5667-13:2011<br>(ISO 5667-13:2011;<br>EN ISO 5667-13:2011) |
| 2.                             | Tlo<br>Soil                                | Uzorkovanje<br>Sampling                                             | HRN ISO 18400-102:2017<br>(ISO 18400-102:2017)                        |
| 3.                             | Sediment<br>Sediment                       | Uzorkovanje<br>Sampling                                             | HRN ISO 5667-12:2017 (ISO 5667-12:2017)                               |

| Br.<br>No.                                                                                                                                                                      | Materijali/Proizvodi<br>Materials/Products               | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                     | Metoda ispitivanja<br>Test method                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ISPITIVANJE ULJA I GORIVA (UKLJUČUJUĆI KRUTA OPORABLJIVA GORIVA, ČVRSTA BIOGORIVA)</b><br><b>TESTING OF OILS AND FUELS (INCLUDING SOLID RECOVERED FUELS, SOLID BIOFUELS)</b> |                                                          |                                                                                                                                                                                                                |                                                                                                                                                                            |
| <b>Fizikalno-kemijska ispitivanja</b><br><b>Physical and chemical testing</b>                                                                                                   |                                                          |                                                                                                                                                                                                                |                                                                                                                                                                            |
| 1.                                                                                                                                                                              | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Određivanje sadržaja klora<br><i>Determination of chlorine content</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>1000 mg/kg                                                             | HRN EN 15408:2011<br>(EN 15408:2011)                                                                                                                                       |
| 2.                                                                                                                                                                              | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Određivanje sadržaja pepela<br><i>Determination of the ash content</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,01 %                                                                 | HRN EN ISO 21656:2021<br>(ISO 21656: 2021;<br>EN ISO 21656:2021)                                                                                                           |
| 3.                                                                                                                                                                              | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Određivanje sadržaja vlage<br><i>Determination of the moisture content</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,01 %                                                             | HRN EN ISO 21660-3:2021<br>(ISO 21660-3:2021; EN ISO 21660-3:2021)<br>HRS CEN/TS 15414-1:2010<br>(CEN/TS 15414-1:2010)<br>HRS CEN/TS 15414-2:2010<br>(CEN/TS 15414-2:2010) |
| 4.                                                                                                                                                                              | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Određivanje sadržaja biomase<br><i>Determination of the biomass content</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,10 %                                                            | HRN EN ISO 21644:2021<br>(ISO 21644:2021; EN ISO 21644:2021)                                                                                                               |
| 5.                                                                                                                                                                              | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Određivanje udjela ugljika, vodika, dušika i sumpora<br><i>Determination of carbon, hydrogen, nitrogen and sulfur</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>CHN 0,01 %<br>S: 0,05 % | HRN EN ISO 21663:2021<br>(ISO 21663:2020;<br>EN ISO 21663:2020)                                                                                                            |

| Br. No. | Materijali/Proizvodi<br>Materials/Products               | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                        | Metoda ispitivanja<br>Test method                                                                                                                                                       |
|---------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.      | Naftni proizvodi<br><i>Petroleum products</i>            | Određivanje sadržaja ugljika, vodika i dušika u otpadnim uljima<br><br><i>Determination of carbon, hydrogen and nitrogen content in petroleum products</i><br><br>Područje /Range<br>C: 75-87%, H: 9-16%; N: 0,1-2%                                                                               | Vlastita metoda<br><i>In-house method</i><br>SOP-LEK-43/171<br>VII. izdanje / edition<br>(2023-10-05)<br><br>modificirana / <i>modified</i><br>ASTM D5291-21<br>Metoda/ <i>Method</i> D |
| 7.      | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Određivanje raspodjele veličine čestica<br><br><i>Determination of particle size distribution</i>                                                                                                                                                                                                 | HRN EN 15415-1:2011<br>( <i>EN 15415-1:2011</i> )                                                                                                                                       |
| 8.      | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Određivanje gornje kalorijske vrijednosti i izračun donje kalorijske vrijednosti pri stalnom volumenu<br><br><i>Determination of gross calorific value and calculation of net calorific value at constant volume</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>691,83 J/kg | HRN EN ISO 21654:2021<br>( <i>ISO 21654:2021; EN ISO 21654:2021</i> )                                                                                                                   |

Pripreme analitičkih uzorka / *Preparation of analytical samples:*

- Kruta oporabljena goriva / *Solid recovered fuels*: HRN EN ISO 21646:2022 (*EN 21646:2022; EN ISO 21646:2022*)

| Br. No.                               | Materijali/Proizvodi<br>Materials/Products               | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i> | Metoda ispitivanja<br>Test method                                     |
|---------------------------------------|----------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>Uzorkovanje</b><br><i>Sampling</i> |                                                          |                                                                            |                                                                       |
| 1.                                    | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Uzorkovanje iz skladišta<br><br><i>Sampling from warehouses</i>            | HRN EN ISO 21645:2021<br>( <i>ISO 21645:2021; EN ISO 21645:2021</i> ) |

| Br.<br>No.                                                                                                                                       | Materijali/Proizvodi<br>Materials/Products                                                                  | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                              | Metoda ispitivanja<br>Test method                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ISPITIVANJE HRANE I HRANE ZA ŽIVOTINJE (UKLJUČIVO VINO, ULJE..)</b><br><i>TESTING OF FOOD, ANIMAL FEEDING STUFFS (INCLUDING WINE, OIL...)</i> |                                                                                                             |                                                                                                                                  |                                                                                                                                                                                     |
| <b>Fizikalno-kemijska ispitivanja</b><br><i>Physical and chemical testing</i>                                                                    |                                                                                                             |                                                                                                                                  |                                                                                                                                                                                     |
| 1.                                                                                                                                               | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i>                                         | Određivanje vlakana<br><i>Determination of fibre</i>                                                                             | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-01-28;36/30<br>II. izdanje/edition<br>(2019-12-04)                                                                             |
| 2.                                                                                                                                               | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i>                                         | Određivanje sadržaja sirovih vlakana u hrani i hrani za životinje (ANKOM)<br><i>Determination of crude fiber content (ANKOM)</i> | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-01-28;36/260<br>I. izdanje/edition<br>(2024-10-14)                                                                             |
| 3.                                                                                                                                               | Hrana i hrana za životinje (kruti uzorci)<br><i>Food and animal feeding stuffs (solid samples)</i>          | Određivanje sadržaja ukupne masti<br><i>Determination of total fat content</i>                                                   | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-1-28;36/231<br>II. izdanje/ edition<br>(2021-06-16)                                                                            |
| 4.                                                                                                                                               | Meso i mesni proizvodi<br><i>Meat and meat products</i>                                                     | Određivanje sadržaja vode<br><i>Determination of moisture content</i>                                                            | ISO 1442:2023                                                                                                                                                                       |
| 5.                                                                                                                                               | Meso i mesni proizvodi, ribe i školjkaši (biota)<br><i>Meat and meat products, fish and mussels (biota)</i> | Određivanje sadržaja ukupne masti<br><i>Determination of total fat</i>                                                           | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-01;12;44/10<br>IX. izdanje/ edition (2024-10-15)<br><br>modificirana / <i>modified</i><br>HRN ISO 1443:1999<br>(ISO 1443:1973) |
| 6.                                                                                                                                               | Meso i mesni proizvodi<br><i>Meat and meat products</i>                                                     | Određivanje sadržaja pepela<br><i>Determination of total ash</i>                                                                 | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-01/15<br>VII. izdanje/ edition (2019-12-09)<br><br>modificirana / <i>modified</i><br>ISO 936:1998                              |

| Br. No. | Materijali/Proizvodi<br>Materials/Products             | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range     | Metoda ispitivanja<br>Test method                                                                                                                                                                                                                                                         |
|---------|--------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.      | Mlijeko i mliječni proizvodi<br>Milk and milk products | Određivanje sadržaja vode<br>Determination of moisture content          | Pravilnik o metodama uzorkovanja i analiza ugušćenog (kondenziranog) mlijeka i mlijeka u prahu namijenjenih za konzumaciju (NN 112/09), Prilog II<br>Ordinance on Methods of Sampling and Analysis of Condensed Milk and Milk Powder intended for Human Consumption (NN 112/09), Annex II |
| 8.      | Mlijeko i mliječni proizvodi<br>Milk and milk products | Određivanje sadržaja pepela<br>Determination of total ash               | Vlastita metoda<br>In-house method<br>SOP-LKH-02/15<br>VI. izdanje / edition (2019-12-09)<br><br>modificirana / modified<br>HRN ISO 5984:2023<br>(ISO 5984:2022)                                                                                                                          |
| 9.      | Mlijeko i mliječni proizvodi<br>Milk and milk products | Određivanje sadržaja ukupne masti<br>Determination of total fat content | Vlastita metoda<br>In-house method<br>SOP-LKH-02/10<br>VI. izdanje / edition (2019-12-09)<br><br>modificirana / modified<br>HRN ISO 1443:1999<br>(ISO 1443:1973)                                                                                                                          |
| 10.     | Hrana za životinje<br>Animal feeding stuffs            | Određivanje sadržaja vode<br>Determination of moisture content          | Vlastita metoda<br>In-house method<br>SOP-LKH-36/08<br>V. izdanje / edition (2019-12-09)<br><br>modificirana / modified HRN<br>ISO 6496:2001<br>(ISO 6496:1999)                                                                                                                           |
| 11.     | Hrana za životinje<br>Animal feeding stuffs            | Određivanje sadržaja ukupne masti<br>Determination of total fat content | Vlastita metoda<br>In-house method<br>SOP-LKH-36/10<br>VI. izdanje / edition (2019-12-09)<br><br>modificirana / modified HRN<br>ISO 6492:2001<br>(ISO 6492:1999)                                                                                                                          |
| 12.     | Hrana za životinje<br>Animal feeding stuffs            | Određivanje sadržaja pepela<br>Determination of crude ash               | HRN ISO 5984:2023<br>(ISO 5984:2022)                                                                                                                                                                                                                                                      |

| Br. No. | Materijali/Proizvodi<br>Materials/Products                                     | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                         | Metoda ispitivanja<br>Test method                                                                                                                                                                                             |
|---------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13.     | Vino<br>Wine                                                                   | Određivanje pepela<br><i>Determination of ash content</i>                                                   | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-11/15<br>V. izdanje / <i>edition</i><br>(2019-12-09)<br><br>Commission Regulation EEC<br>2676/90<br>Annex 9.<br>9. Ash content<br>modificirana / <i>modified</i>         |
| 14.     | Životinjske i biljne masti i ulja<br><i>Animal and vegetable fats and oils</i> | Određivanje kiselinskog broja i kiselosti<br><i>Determination of acid value and acidity</i>                 | HRN EN ISO 660:2020<br>(ISO 660:2020;<br>EN ISO 660:2020)                                                                                                                                                                     |
| 15.     | Životinjske i biljne masti i ulja<br><i>Animal and vegetable fats and oils</i> | Određivanje peroksidnog broja<br><i>Determination of peroxide value</i>                                     | HRN EN ISO 3960:2017<br>(ISO 3960:2017,<br>EN ISO 3960:2017)                                                                                                                                                                  |
| 16.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i>            | Određivanje sadržaja dušika Kjeldahlovom metodom<br><i>Determination of nitrogen by the Kjeldahl method</i> | HRN ISO 1871:2017<br>(ISO 1871:2009)                                                                                                                                                                                          |
| 17.     | Proizvodi od voća i povrća<br><i>Fruit and vegetable products</i>              | Određivanje količine klorida<br><i>Determination of chloride content</i>                                    | HRN ISO 3634:2001<br>(ISO 3634:1979)                                                                                                                                                                                          |
| 18.     | Proizvodi od voća i povrća<br><i>Fruit and vegetable products</i>              | Određivanje kiselosti titracijom<br><i>Determination of tiratable acidity</i>                               | HRN ISO 750:2001<br>(ISO 750:1998)                                                                                                                                                                                            |
| 19.     | Vino<br>Wine                                                                   | Određivanje reducirajućih šećera<br><i>Determination of reducing sugars</i>                                 | Commission Regulation EEC<br>2676/90 (modif.)<br>Annex 5.<br>5. Reducing sugars<br>Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-11/34<br>VII. izdanje / <i>edition</i> (2019-12-10)<br>modificirana / <i>modified</i> |
| 20.     | Vino<br>Wine                                                                   | Određivanje ukupne kiselosti<br><i>Determination of total acidity</i>                                       | Commission Regulation EEC<br>2676/90<br>Annex 13.<br>13. Total acidity                                                                                                                                                        |

| Br. No. | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                            | Metoda ispitivanja<br>Test method                                                                                                                                                                                                                                                            |
|---------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 21.     | Vino<br>Wine                               | Određivanje hlapive kiselosti<br><i>Determination of volatile acidity</i>                                                                                                                             | Commission Regulation EEC 2676/90<br>Annex 14.<br>14. Volatile acidity<br>Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-11/36<br>V. izdanje / <i>edition</i><br>(2019-12-10)                                                                                                          |
| 22.     | Vino<br>Wine                               | Određivanje sumpornog dioksida<br><i>Determination of sulphur dioxide</i>                                                                                                                             | Commission Regulation EEC 2676/90<br>Annex 25.<br>Vlastita metoda<br><i>In-house method</i><br>25. Sulphur dioxide<br>SOP-LKH-11/37<br>VIII. izdanje / <i>edition</i> (2019-12-10)                                                                                                           |
| 23.     | Vino<br>Wine                               | Određivanje slobodnog sumpornog dioksida<br><i>Determination of free sulphur dioxide</i>                                                                                                              | Commission Regulation EEC 2676/90<br>Annex 25.<br>25. Sulphur dioxide<br>referentna metoda<br><i>reference method</i><br>Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-11/38<br>VIII. izdanje / <i>edition</i> (2019-12-10)                                                           |
| 24.     | Vino<br>Wine                               | Piknometrijsko određivanje relativne gustoće na 20°C, količine alkohola i ukupnog suhog ekstrakta<br><i>Picnometric determination of specific gravity at 20°C, alcoholic strength and dry extract</i> | Commission Regulation EEC 2676/90<br>Annex 1.<br>Density and specific gravity at 20 °C<br>Annex 3.<br>3. Alcoholic strenght by volume<br>Annex 4.<br>4. Total dry extract<br><br>Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-11/31<br>VII. izdanje / <i>edition</i><br>(2019-12-10) |

| Br. No. | Materijali/Proizvodi<br>Materials/Products                                                       | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Metoda ispitivanja<br>Test method                                                                                    |
|---------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 25.     | Hrana<br><br>Food                                                                                | <p>Određivanje policikličkih aromatskih spojeva (PAH) metodom GC-MS/MS: (naftalen; acenaftilen; acenaften; fluoren; fenantren; antracen; fluoranten; piren; benzo[a]antracen; krizen; benzo[b]fluoranten; benzo[k]fluoranten; benzo[a]piren; indeno[1,2,3-c,d]piren; dibenzo[a,h]antracen; benzo[g,h,i]perilen)</p> <p><i>Determination of polycyclic aromatic hydrocarbons (PAH) using GC-MS/MS technique (Naphthalene; Acenaphthylene; Acenaphthene; Fluorene; Phenanthrene; Anthracene; Fluoranthene; Pyrene, Chrysene, Benzanthrane, Benzo[b]fluoranthene; Benzo[k]fluoranthene; benzo[a]pyrene; Indeno[1,2,3-cd]pyrene; Dibenzo[a,h]anthracene; Benzo[g,h,i]perylene)</i></p> | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LKH-1-28/65<br/>IX. izdanje / edition<br/>(2022-05-04)</p>     |
| 26.     | Hrana<br><br>Food                                                                                | <p>Određivanje 3-monokloropropan-1,2-diola GC-MS tehnikom</p> <p><i>Determination of 3-monochloropropane-1,2-diol by GC-MS technique</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>HRN EN 14573:2005<br/>(EN 14573:2004)</p>                                                                         |
| 27.     | Hrana<br>(životinjske i biljne masti i ulja)<br><br>Food<br>(Animal and vegetable fats and oils) | <p>Određivanje estera masnih kiselina 3-monokloropropandiola (3-MCPD) i glicidilnih estera masnih kiselina metodom plinske kromatografije (GC-MS)</p> <p><i>Determination of fatty-acid-bound 3-chloropropanediols (3-MCPDs) and glycidol esters using GC/MS</i></p>                                                                                                                                                                                                                                                                                                                                                                                                               | <p>HRN EN ISO 18363-1:2022<br/>(ISO 18363-1:2015; EN ISO 18363-1:2021)</p>                                           |
| 28.     | Hrana biljnog podrijetla<br><br>Food of plant origin                                             | <p>Određivanje pentaklorfenola u hrani biljnog podrijetla metodom plinske kromatografije sa masenom spektrometrijom (GC-MS)</p> <p><i>Determination of pentachlorophenol in food of plant origin by gas chromatography method with mass spectrometry (GC-MS)</i></p>                                                                                                                                                                                                                                                                                                                                                                                                               | <p>Vlastita metoda<br/><i>In-house method</i><br/><br/>SOP-LKH-41/180<br/>II. izdanje / edition<br/>(2022-09-06)</p> |

| Br. No. | Materijali/Proizvodi<br>Materials/Products                                                                                                                                                                                                                                                                                                                                                                                                                   | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                                                                                                                                | Metoda ispitivanja<br>Test method                                                                    |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 29.     | Hrana, životinjske i biljne masti i ulja<br><i>Food, animal and vegetable fats and oils</i>                                                                                                                                                                                                                                                                                                                                                                  | Određivanje metilnih estera masnih kiselina plinskom kromatografijom<br><i>Gas chromatography of fatty acids methyl esters</i>                                                                                                                                                                                                            | HRN EN ISO 12966-2:2017<br>(ISO 12966-2:2017;<br>EN ISO 12966-2:2017)                                |
| 30.     | Mlijeko, mliječni proizvodi, hrana za dojenčad<br><i>Milk, milk products, infant formula</i>                                                                                                                                                                                                                                                                                                                                                                 | Određivanje zasićenih, jednostruko nezasićenih i višestruko nezasićenih masnih kiselina u mlijeku, mliječnim proizvodima i hrani za dojenčad tehnikom plinske kromatografije<br><i>Determination of saturated, monounsaturated, and polyunsaturated fatty acids in milk, milk products and infant formula –gas chromatographic method</i> | HRN EN ISO 16958:2020<br>(ISO 16958:2015;<br>EN ISO 16958:2020)                                      |
| 31.     | Voće i povrće s visokim udjelom vode<br><i>Fruits and vegetables – high water content</i><br><br>Voće i povrće s visokim udjelom kiseline i visokim udjelom vode<br><i>Fruits and vegetables – high acid content and high water content</i><br><br>Žitarice i proizvodi od žitarica – visoki udio škroba i/ili proteina te niski udio vode i masti<br><i>Cereals and cereals products – high starch and/or protein content and low water and fat content</i> | Određivanje ditiokarbamatnih i tiuram disulfidnih ostataka u hrani biljnog podrijetla – GC-MS/MS metoda<br><i>Determination of dithiocarbamates and thiuram disulfide residues in food of plant origin - GC-MS/MS method</i>                                                                                                              | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-41/202<br>IV. izdanje / edition<br>(2022-06-09) |

| Br. No. | Materijali/Proizvodi<br>Materials/Products                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                                                                                                     | Metoda ispitivanja<br>Test method                                                                            |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 32.     | <p>Voće i povrće s visokim udjelom vode<br/><i>Fruits and vegetables – high water content</i></p> <p>Voće i povrće s visokim udjelom kiseline i visokim udjelom vode<br/><i>Fruits and vegetables – high acid content and high water content</i></p> <p>Žitarice i proizvodi od žitarica – visoki udio škroba i/ili proteina te niski udio vode i masti<br/><i>Cereals and cereals products – high starch and/or protein content and low water and fat content</i></p> <p>Voće i povrće s visokim udjelom ulja i srednjim te niskim udjelom vode<br/><i>Fruits and vegetables – high oil content and intermediate or low water content</i></p> | <p>Određivanje ukupnih anorganskih bromida u hrani GC-ECD metodom</p> <p><i>Determination of inorganic bromide residues in food by GC-ECD method</i></p>                                                                                                                                                                | <p>Vlastita metoda<br/>In-house method<br/>SOP-LKH-41/232<br/>II. izdanje / edition<br/>(2021-10-11)</p>     |
| 33.     | <p>Hrana<br/><i>Food</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>Određivanje etilen oksida i 2-kloroetanola u hrani metodom analize para iznad otopine (Headspace) plinskom kromatografijom sa masenom spektrometrijom (GC-MS/MS)</p> <p><i>Determination of Ethylene oxide and 2-chloroethanol in food by headspace method gas chromatography / mass spectrometry (GC-MS/MS)</i></p> | <p>Vlastita metoda<br/>In-house method<br/>SOP-LKH-2,14,41/244<br/>II. izdanje / edition (2023-10-11)</p>    |
| 34.     | <p>Hrana<br/><i>Food</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p>Određivanje šećera u hrani HPLC-RID metodom (pojedinačni i ukupni), pojedinačni šećeri (fruktoza, glukoza, saharoza, maltoza, laktoza)</p> <p><i>Determination of sugars in food - liquid chromatographic method with RI detector (fructose, glucose, sucrose, maltose, lactose)</i></p>                             | <p>Vlastita metoda:<br/>In-house method<br/>SOP-LKH-1-28/174<br/>III. izdanje / edition<br/>(2021-05-20)</p> |

| Br. No. | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                                                         | Metoda ispitivanja<br>Test method                                                                                                                                                                     |
|---------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 35.     | Hrana<br>Food                              | Određivanje konzervansa, sladila i kofeina u hrani<br><br><i>Determination of preservatives, sweeteners and caffeine in food</i>                                                                                                                                            | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-01-28/19,27,69,76<br>III. izdanje / <i>edition</i><br>(2019-09-04)<br><br>modificirana / <i>modified</i><br>HRN EN 12856:2000<br>(EN 12856:1999) |
| 36.     | Hrana<br>Food                              | Određivanje akrilamida LC-MS/MS tehnikom<br><br><i>Determination of acrylamide LC-MS/MS technique</i>                                                                                                                                                                       | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-1-28/188<br>V. izdanje / <i>edition</i><br>(2025-01-14)                                                                                          |
| 37.     | Hrana<br>Food                              | Određivanje sadržaja histamina metodom tekućinske kromatografije s masenom spektrometrijom (LC-MS/MS)<br><br><i>Determination of histamine content by liquid chromatography method with mass spectrometry (LC-MS/MS)</i>                                                    | Vlastita metoda<br><i>In-house method</i><br><br>SOP- LKH-12/74<br>II. izdanje / <i>edition</i><br>(2023-12-07)                                                                                       |
| 38.     | Hrana<br>Food                              | Određivanje količine nitrata metodom tekućinske kromatografije visokog učinka (HPLC) i/ili metodom kromatografije s ionskim izmjenjivačem<br><br><i>Determination of nitrate by high performance liquid chromatography (HPLC) and/or ion exchange chromatography method</i> | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-1-28,41/199<br>V. izdanje/ <i>edition</i><br>(2022-02-14)<br><br>modificirana / <i>modified</i><br>HRN EN 12014-2:2018<br>(EN 12014-2:2017)      |

| Br. No. | Materijali/Proizvodi<br>Materials/Products                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                    | Metoda ispitivanja<br>Test method                                                                                                                                             |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 39.     | <p>Voće i povrće s visokim udjelom vode<br/><i>Fruits and vegetables – high water content</i></p> <p>Voće i povrće s visokim udjelom kiseline i visokim udjelom vode<br/><i>Fruits and vegetables – high acid content and high water content</i></p> <p>Voće i povrće s visokim udjelom šećera i niskim udjelom vode<br/><i>Fruits and vegetables – high sugar and low water content</i></p> <p>Voće i povrće s visokim udjelom ulja i srednjim te niskim udjelom vode<br/><i>Fruits and vegetables – high oil content and intermediate or low water content</i></p> <p>Žitarice i proizvodi od žitarica – visoki udio škroba i/ili proteina te niski udio vode i masti<br/><i>Cereals and cereals products – high starch and/or protein content and low water and fat content</i></p> <p>“Teške ili jedinstvene sirovine”<br/><i>“Difficult or unique commodities”</i></p> | <p>Određivanje kvarternih amonijevih spojeva LC-MS/MS tehnikom</p> <p><i>Determination of quaternary ammonium compounds LC-MS/MS technique</i></p>     | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LKH-41/196<br/>III. izdanje / <i>edition</i><br/>(2021-11-15)</p>                                                       |
| 40.     | <p>Hrana za životinje<br/>Meso i mesni proizvodi</p> <p><i>Animal feeding stuffs</i><br/><i>Meat and meat products</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p>Određivanje masti, vlage i proteina NIR spektrofotometrijom</p> <p><i>Determination of fat, moisture and protein with NIR Spectrophotometry</i></p> | <p>AOAC, Method 2007.04</p>                                                                                                                                                   |
| 41.     | <p>Meso i mesni proizvodi</p> <p><i>Meat and meat products</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>Određivanje sadržaja nitrita</p> <p><i>Determination of nitrite content</i></p>                                                                     | <p>Vlastita metoda<br/><i>In-house method</i><br/>SOP-LKH-01/11<br/>VII. izdanje/ <i>edition</i><br/>(2023-03-13)</p> <p>modificirana / <i>modified</i><br/>ISO 2918:1975</p> |

| Br. No. | Materijali/Proizvodi<br>Materials/Products                          | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                      | Metoda ispitivanja<br>Test method                                                                         |
|---------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| 42.     | Meso i mesni proizvodi<br><i>Meat and meat products</i>             | Određivanje sadržaja hidroksiprolina<br><i>Determination of hydroxyproline content</i>                                                                                   | HRN ISO 3496:1999<br>(ISO 3496:1994)                                                                      |
| 43.     | Vino<br><i>Wine</i>                                                 | Određivanje pH<br><i>Determination of pH</i>                                                                                                                             | Commission Regulation EEC 2676/90<br>Annex 24.<br>24. pH                                                  |
| 44.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Određivanje udjela dušika u hrani i hrani za životinje analizatorom dušika<br><i>Determination of nitrogen content in food and animal feed using a nitrogen analyzer</i> | Vlastita metoda<br><i>In-house method</i><br>SOP-LKH-01-28;36/258<br>III. izdanje/edition<br>(2025-03-13) |

Pripreme analitičkih uzorka / *Preparation of analytical samples:*

- Hrana / *Food*: HRN EN 13805:2014 (*EN 13805:2014*)
- Hrana biljnog podrijetla / *Food of plant origin*: HRN EN 15662:2018 (*EN 15662:2018*)
- Hrana biljnog podrijetla / *Food of plant origin*: HRN EN 15662:2018 modificirana sa alkalnom hidrolizom / *modified (EN 15662:2018) with alkaline hydrolysis*
- Hrana biljnog podrijetla / *Food of plant origin*: QuPPE-PO-Method

| Br. No.                                                            | Materijali/Proizvodi<br>Materials/Products                                                                                                                                                                      | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                     | Metoda ispitivanja<br>Test method                                                                                                                                                                          |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mikrobiološka ispitivanja</b><br><i>Microbiological testing</i> |                                                                                                                                                                                                                 |                                                                                                                                                                                                                                         |                                                                                                                                                                                                            |
| 1.                                                                 | Hrana<br><i>Food</i>                                                                                                                                                                                            | Metoda za brojenje <i>Bacillus cereus</i> - postupak brojenja kolonija<br><i>Method for enumeration of Bacillus cereus - Colony count technique</i>                                                                                     | HRN EN ISO 7932:2005 + A1:2020<br>(ISO 7932:2004/Amd 1:2020, ispravljena verzija 2020-08; EN ISO 7932:2004/A1:2020)                                                                                        |
| 2.                                                                 | Hrana i hrana za životinje<br>Životinjski izmet i uzorci okoliša iz primarne proizvodnje<br><i>Food and animal feeding stuffs<br/>Animal faeces and environmental samples from the primary production stage</i> | Horizontalna metoda za otkrivanje <i>Salmonella spp.</i><br><i>Horizontal method for the detection of Salmonella sp.</i>                                                                                                                | HRN EN ISO 6579-1:2017<br>(ISO 6579-1:2017; EN ISO 6579-1:2017)<br>HRN EN ISO 6579-1:2017 + A1:2020<br>(ISO 6579-1:2017/Amd 1:2020; EN ISO 6579-1:2017/A1:2020)                                            |
| 3.                                                                 | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i>                                                                                                                                             | Horizontalna metoda za dokazivanje <i>Listeria monocytogenes</i><br><i>Horizontal method for the detection of Listeria monocytogenes</i>                                                                                                | Vlastita metoda<br><i>In-house method</i><br>SOP-MO-1;2;3/11/KL<br>VI. izdanje / edition (2017-11-10)<br><br>modificirana / modified<br>HRN EN ISO 11290-1:2017<br>(ISO 11290-1:2017; EN ISO 11290-1:2017) |
| 4.                                                                 | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i>                                                                                                                                             | Horizontalna metoda za dokazivanje prisutnosti i određivanje broja stanica <i>Listeria monocytogenes</i> – Metoda brojenja<br><i>Horizontal method for the detection and enumeration of Listeria monocytogenes – Enumeration method</i> | HRN EN ISO 11290-2:2017<br>(ISO 11290-2:2017; EN ISO 11290-2:2017)                                                                                                                                         |

| Br. No. | Materijali/Proizvodi<br>Materials/Products                          | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                    | Metoda ispitivanja<br>Test method                                                                                                                                                                                                                                                                                                              |
|---------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.      | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Horizontalna metoda za brojenje mikroorganizama - tehnika brojenja kolonija na 30 °C<br><br><i>Horizontal method for the enumeration of microorganisms- Colony-count technique at 30 °C</i>                   | HRN EN ISO 4833-1:2013<br>(ISO 4833-1:2013;<br>EN ISO 4833-1:2013)<br>HRN EN ISO 4833-1:2013/A1:2022<br>(ISO 4833-1:2013/Amd 1:2022;<br>EN ISO 4833-1:2013/A1:2022)<br><br>HRN EN ISO 4833-2:2013<br>(ISO 4833-2:2013;<br>EN ISO 4833-2:2013)<br>HRN EN ISO 4833-2:2013/A1:2022<br>(ISO 4833-2:2013/Amd 1:2022;<br>EN ISO 4833-2:2013/A1:2022) |
| 6.      | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Metoda za brojenje <i>Enterobacteriaceae</i> bez ponovnog oživljavanja - postupak brojenja kolonija<br><br><i>Method for enumeration of Enterobacteriaceae without resuscitation - Colony count technique</i> | HRN EN ISO 21528-2:2017<br>(ISO 21528-2:2017)                                                                                                                                                                                                                                                                                                  |
| 7.      | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Metoda za dokazivanje <i>Enterobacteriaceae</i> postupkom predobogaćivanja<br><br><i>Method for the detection of Enterobacteriaceae with pre - enrichment</i>                                                 | HRN EN ISO 21528-1:2017<br>(ISO 21528-1:2017)                                                                                                                                                                                                                                                                                                  |
| 8.      | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Metoda za brojenje kvasaca i plijesni - postupak brojenja kolonija<br><br><i>Method for enumeration of yeasts and moulds - Colony count technique</i>                                                         | HRN ISO 21527-1:2012<br>(ISO 21527-1:2008)<br>HRN ISO 21527-2:2012<br>(ISO 21527-2:2008)                                                                                                                                                                                                                                                       |
| 9.      | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Metoda za brojenje <i>Escherichia coli</i> bez oživljavanja - postupkom brojenja kolonija<br><br><i>Method for enumeration of Escherichia coli without resuscitation - Colony count technique</i>             | HRN ISO 16649-2:2001<br>(ISO 16649-2:2001)                                                                                                                                                                                                                                                                                                     |

| Br. No. | Materijali/Proizvodi<br>Materials/Products                          | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                                                                                                                                                                                   | Metoda ispitivanja<br>Test method                                                                                                                                                                      |
|---------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Metoda za dokazivanje<br><i>Escherichia coli</i> postupkom<br>predobogaćivanja<br><br><i>Method for the detection of<br/>Escherichia coli with pre -<br/>enrichment</i>                                                                                                                                                                                                                               | Modificirana<br>HRN EN ISO 16649-3:2015<br>(ISO 16649-3:2015, EN ISO<br>16649-3:2015)<br>Vlastita metoda<br><i>In-house method</i><br>SOP-MO-1; 2; 3/04-KL<br>VI. izdanje/edition<br>(2016-03-15)      |
| 11.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Metoda za brojenje<br><i>Staphylococcus aureus</i> -<br>postupkom brojenja kolonija<br><br><i>Method for enumeration of<br/>Staphylococcus aureus -<br/>Colony count technique</i>                                                                                                                                                                                                                    | HRN EN ISO 6888-1:2021<br>(ISO 6888-1:2021; EN ISO<br>6888-1:2021)<br>HRN EN ISO 6888-<br>1:2021/A1:2023<br>(ISO 6888-1:2021/Amd<br>1:2023; EN ISO 6888-<br>1:2021/A1:2023)                            |
| 12.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Metoda za dokazivanje<br><i>Staphylococcus aureus</i><br><br><i>Method for the detection of<br/>Staphylococcus aureus</i>                                                                                                                                                                                                                                                                             | HRN EN ISO<br>6888-3:2004<br>(ISO 6888-3:2003;<br>EN ISO 6888-3:2003)<br><br>HRN EN ISO 6888-<br>3:2004/Ispr. 1:2008 (EN ISO<br>6888-3:2003/AC:2005)                                                   |
| 13.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Horizontalna metoda za<br>dokazivanje i određivanje<br>broja <i>Clostridium</i> spp. -- 1. dio:<br>Određivanje broja<br>sulfitreducirajućih <i>Clostridium</i><br>spp. tehnikom brojenja<br>kolonija<br><br><i>Horizontal method for the<br/>detection and enumeration of<br/>Clostridium spp. -- Part 1:<br/>Enumeration of sulfite-<br/>reducing Clostridium spp. by<br/>colony-count technique</i> | HRN EN ISO 15213-1:2023<br>(ISO 15213-1:2023; EN ISO<br>15213-1:2023)                                                                                                                                  |
| 14.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Metoda za dokazivanje<br>sulfitreducirajućih bakterija<br>( <i>Clostridium perfringens</i> i<br>druge vrste) u anaerobnim<br>uvjetima<br><br><i>Method for the detection of<br/>sulfite - reducing bacteria<br/>(Clostridium perfringens and<br/>other species) growing under<br/>anaerobic conditions</i>                                                                                            | Vlastita metoda<br><i>In-house method</i><br>SOP-MO-1;2;3/09/10-KL<br>VI. izdanje/ edition (2013-02-<br>28)<br>modificirana / modified<br>HRN EN 26461-1:2008<br>(ISO 6461-1:1986;<br>EN 26461-1:1993) |

| Br. No. | Materijali/Proizvodi<br>Materials/Products                                         | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br><i>Raspon/Range</i>                                                                                                                                                            | Metoda ispitivanja<br>Test method                                                                                                                                                                                                                  |
|---------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i>                | Horizontalna metoda za brojenje <i>Clostridium perfringens</i> - tehnika brojenja kolonija<br><br><i>Horizontal method for enumeration of Clostridium perfringens - Colony count technique</i>                                        | HRN EN ISO 15213-2:2023<br>(ISO 15213-2:2023;<br>EN ISO 15213-2:2023)                                                                                                                                                                              |
| 16.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i>                | Dokazivanje prisutnosti <i>Campylobacter spp.</i><br><br><i>Detection of Campylobacter spp.</i>                                                                                                                                       | HRN EN ISO 10272-1:2017<br>(ISO 10272-1:2017;<br>EN ISO 10272-1:2017)                                                                                                                                                                              |
| 17.     | Meso i mesni proizvodi<br><i>Meat and meat products</i>                            | Horizontalna metoda za dokazivanje prisutnosti patogene <i>Yersinia enterocolitica</i><br><br><i>Horizontal method for the detection of presumptive pathogenic Yersinia enterocolitica</i>                                            | HRN EN ISO 10273:2017<br>(ISO 10273:2017;<br>EN ISO 10273:2017)                                                                                                                                                                                    |
| 18.     | Meso, mesni proizvodi, obrisci trupova<br><i>Meat, meat products, carcass swab</i> | Horizontalna metoda za otkrivanje <i>Escherichia coli</i> O157<br><br><i>Horizontal method for the detection of Escherichia coli O157</i>                                                                                             | HRN EN ISO 16654:2003<br>(ISO 16654:2001;<br>EN ISO 16654:2001)<br>HRN EN ISO 16654:2003/A1:2017<br>(ISO 16654:2001/Amd 1:2017; EN ISO 16654:2001/A1:2017)<br>HRN EN ISO 16654:2003/A2:2023 (ISO 16654:2001/Amd 2:2023; EN ISO 16654:2001/A2:2023) |
| 19.     | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i>                | Horizontalni postupak brojenja mezofilnih bakterija mliječne kiseline - Postupak brojenja kolonija pri 30 °C<br><br><i>Horizontal method for the enumeration of mesophilic lactic acid bacteria - Colony-count technique at 30 °C</i> | HRN ISO 15214:1999<br>(ISO 15214:1998)                                                                                                                                                                                                             |

| Br.<br>No.                                                 | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                     | Metoda ispitivanja<br>Test method                                                                                 |
|------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Molekularna ispitivanja</b><br><i>Molecular testing</i> |                                            |                                                                                                         |                                                                                                                   |
| 1.                                                         | Hrana<br><i>Food</i>                       | Određivanje količine glutena<br>ELISA metodom<br><br><i>Determination of gluten by<br/>ELISA method</i> | Vlastita metoda<br><i>In-house method</i><br><br>SOP-LKH-1-28/247<br>II. izdanje / <i>edition</i><br>(2024-11-22) |

| Br.<br>No.                            | Materijali/Proizvodi<br>Materials/Products                                                        | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                    | Metoda ispitivanja<br>Test method      |
|---------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>Uzorkovanje</b><br><i>Sampling</i> |                                                                                                   |                                                                                                                                        |                                        |
| 1.                                    | Okolišni uzorci u proizvodnji<br>hrane<br><br><i>Environmental samples in<br/>food production</i> | Uzorkovanje s površina<br>upotrebom briseva<br><br><i>Horizontal methods for<br/>sampling techniques from<br/>surfaces using swabs</i> | HRN ISO 18593:2019<br>(ISO 18593:2018) |

| Br.<br>No.                                                            | Materijali/Proizvodi<br>Materials/Products                                                                             | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                  | Metoda ispitivanja<br>Test method                                                               |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| ISPITIVANJE PREDMETA OPĆE UPORABE<br>TESTING OF OBJECTS OF COMMON USE |                                                                                                                        |                                                                                                                                                                                      |                                                                                                 |
| Fizikalno kemijska ispitivanja<br>Physical and chemical testing       |                                                                                                                        |                                                                                                                                                                                      |                                                                                                 |
| 1.                                                                    | Ambalaža (materijali koji dolaze u neposredan dodir s hranom)<br><br>Packaging (materials in direct contact with food) | Određivanje stiren monomera metodom Headspace plinske kromatografije s masenom spektrometrijom (GC-MS/MS)<br><br>Determination of styrene monomer using Headspace GC-MS/MS technique | Vlastita metoda<br>In-house method<br>SOP-LKH-30/142a<br>III. izdanje / edition<br>(2022-05-26) |

| Br.<br>No.                                      | Materijali/Proizvodi<br>Materials/Products | Vrsta ispitivanja/Svojstvo<br>Type of test/Property<br>Raspon/Range                             | Metoda ispitivanja<br>Test method                                                             |
|-------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| OKOLIŠNA MJERENJA<br>ENVIRONMENTAL MEASUREMENTS |                                            |                                                                                                 |                                                                                               |
| 1.                                              | Zrak<br><br>Air                            | Određivanje temperature<br><br>Determination of temperature<br><br>Od/ from -15°C do/ till 50°C | Vlastita metoda<br>In-house method<br>SOP-LEK-40/50a<br>IV. izdanje / edition<br>(2021-12-15) |

## FLEKSIBILNO PODRUČJE AKREDITACIJE / FLEXIBLE SCOPE OF ACCREDITATION

| Oznaka/<br>Identification                       | Materijali/<br>Proizvodi<br>Materials/<br>Products | Vrsta ispitivanja/<br>Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                                                                    | Tehnika<br>ispitivanja<br>Test technique | Metoda ispitivanja<br>Test method                                                                                                                              |
|-------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A – Ispitivanja voda / Testing of waters</b> |                                                    |                                                                                                                                                                                                                                                                                            |                                          |                                                                                                                                                                |
| A1                                              | Voda<br>Water                                      | Određivanje odabranih elemenata<br><i>Determination of selected elements</i>                                                                                                                                                                                                               | ICP-OES                                  | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| A2                                              | Voda<br>Water                                      | Određivanje žive<br><i>Determination of mercury</i>                                                                                                                                                                                                                                        | AAS<br>(FIMS)                            | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| A3                                              | Voda<br>Water                                      | Određivanje odabranih elemenata metodom ICP-MS<br><i>Determination of selected elements by ICP-MS method</i>                                                                                                                                                                               | ICP-MS                                   | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| A4                                              | Voda<br>Water                                      | Određivanje hlapljivih organskih spojeva metodom analize para iznad otopine (headspace) plinskom kromatografijom s masenom spektrometrijom (GC-MS/MS)<br><i>Determination of volatile organic compounds in waters by headspace method gas chromatography/ mass spectrometry (GC-MS/MS)</i> | GC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| A5                                              | Voda<br>Water                                      | Određivanje prioriternih tvari u vodama metodom plinske kromatografije s masenom spektrometrijom<br><i>Determination of priority substances in water – gas chromatographic method with mass spectrometry</i>                                                                               | GC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |

| Oznaka/<br>Identification | Materijali/<br>Proizvodi<br>Materials/<br>Products | Vrsta ispitivanja/<br>Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Tehnika<br>ispitivanja<br>Test technique | Metoda ispitivanja<br>Test method                                                                                                                                  |
|---------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A6                        | Voda<br>Water                                      | <p>Određivanje određenih alkilfenola i njihovih etoksilata, bisfenola A i pentaklorfenola metodom plinske kromatografije s masenom spektrometrijom i <math>\mu</math>Drop pripremom</p> <p><i>Determination of selected alkylphenols, their ethoxylates, bisphenol A and pentachlorophenol using gas chromatographic method with mass spectrometry and <math>\mu</math>Drop sample preparation</i></p>                                                                                                                                                                                                                                                                                    | GC-MS/MS                                 | <p>Prema popisu na <a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a></p> |
| A7                        | Voda<br>Water                                      | <p>Određivanje organokositrenih spojeva (tributilkositreni, dibutilkositreni, monobutilkositreni, difenilkositreni, monofenilkositreni, monooktrilkositreni, tetrabutilkositreni, dioktilkositreni, tricikloheksilkositreni, trifenilkositreni spojevi) metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS) i <math>\mu</math>Drop pripremom</p> <p><i>Determination of organotin compounds (tributyltin, dibutyltin, monobutyltin, diphenyltin, monophenyltin, monooctyltin, tetrabutyltin, dioctyltin, tricyclohexyltin, triphenyltin compounds) using gas chromatographic method with mass spectrometry (GC-MS/MS) and <math>\mu</math>Drop sample preparation</i></p> | GC-MS/MS                                 | <p>Prema popisu na <a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a></p> |

| Oznaka/<br>Identification | Materijali/<br>Proizvodi<br>Materials/<br>Products | Vrsta ispitivanja/<br>Svojstvo<br>Type of test/Property<br>Raspon/Range                                                                                                                                                                                                                                                                                                         | Tehnika<br>ispitivanja<br>Test technique | Metoda ispitivanja<br>Test method                                                                                                                                  |
|---------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A8                        | Voda<br>Water                                      | <p>Određivanje poluhlapljivih organskih spojeva (SVOC) u vodama metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS) i <math>\mu</math>Drop pripremom</p> <p><i>Determination of semi-volatile organic compounds (SVOCs) in water samples using gas chromatographic method with mass spectrometry (GC-MS/MS) and <math>\mu</math>Drop sample preparation</i></p> | GC-MS/MS                                 | <p>Prema popisu na <a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a></p> |
| A9                        | Voda<br>Water                                      | <p>Određivanje odabranih sredstava za zaštitu bilja u vodi metodom tekućinske kromatografije s masenom spektrometrijom</p> <p><i>Determination of selected plant treatment agents in water – liquid chromatographic method with mass spectrometry</i></p>                                                                                                                       | LC-MS/MS                                 | <p>Prema popisu na <a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a></p> |
| A10                       | Voda<br>Water                                      | <p>Određivanje PFAS-a u vodi metodom tekućinske kromatografije s masenom spektrometrijom (LC-MS/MS)</p> <p><i>Determination of PFAS in water by liquid chromatography-mass spectrometry (LC-MS/MS)</i></p>                                                                                                                                                                      | LC-MS/MS                                 | <p>Prema popisu na <a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a></p> |

**Napomene / Notes:**

ICP-OES - optička emisijska spektrometrija induktivno vezane plazme / ICP OES - *inductively coupled plasma atomic emission spectroscopy*

AAS (FIMS) – “Flow Injecton Mercury System” atomska apsorpcijska spektrometrija / AAS (FIMS) – *flow injecton mercury system atomic absorption spectrometry*

GC-MS/MS – plinska kromatografija / tandemaska spektrometrija masa / GC-MS/MS - *Gas chromatography-tandem mass spectrometry*

LC-MS/MS – tekućinska kromatografija / tandemaska spektrometrija masa / LC-MS/MS – *Liquid chromatography-tandem mass spectrometry*

ICP-MS - masena spektrometrija induktivno vezane plazme / ICP - MS - *inductively coupled plasma / mass spectrometry*

| Oznaka/<br>Identification                        | Materijali/<br>Proizvodi<br>Materials/<br>Products | Vrsta ispitivanja/<br>Svojstvo<br>Type of test/ Property<br>Raspon/Range                                                                                                                                                                                                            | Tehnika<br>ispitivanja<br>Test technique | Metoda ispitivanja<br>Test method                                                                                                                              |
|--------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>B – Ispitivanja otpada / Testing of waste</b> |                                                    |                                                                                                                                                                                                                                                                                     |                                          |                                                                                                                                                                |
| B1                                               | Eluati otpada<br>Waste eluat                       | Određivanje odabranih elemenata<br>Determination of selected elements                                                                                                                                                                                                               | ICP-OES                                  | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| B2                                               | Otpad<br>Waste                                     | Određivanje odabranih elemenata<br>Determination of selected elements                                                                                                                                                                                                               | ICP-OES                                  | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| B3                                               | Otpad<br>waste                                     | Određivanje žive<br>Determination of mercury                                                                                                                                                                                                                                        | AAS<br>(FIMS)                            | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| B4                                               | Otpad<br>Waste                                     | Određivanje hlapljivih organskih spojeva metodom analize para iznad otopine (headspace) plinskom kromatografijom s masenom spektrometrijom (GC-MS/MS)<br>Determination of volatile organic compounds in waters by headspace method gas chromatography/ mass spectrometry (GC-MS/MS) | GC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| B5                                               | Otpad<br>Waste                                     | Određivanje pesticida metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS)<br>Determination of pesticides – gas chromatographic method with mass spectrometry (GC-MS/MS)                                                                                             | GC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |

**Priprema analitičkih uzorka / Preparation of analytical samples:**

- Otpad / Waste: modificirana / modified HRN EN 13657:2008 (EN 13657:2002); modificirana / modified HRN EN 12457-4:2005 (EN 12457-4:2002)
- Eluat: CEN/TR 16912:2020

**Napomene / Notes:**

ICP-OES - optička emisijska spektrometrija induktivno vezane plazme / ICP OES - inductively coupled plasma atomic emission spectroscopy

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GC-MS/MS – plinska kromatografija / tandemaska spektrometrija masa / GC-MS/MS - Gas chromatography-tandem mass spectrometry

| Oznaka/<br>Identification                                                                  | Materijali/<br>Proizvodi<br>Materials/<br>Products                             | Vrsta ispitivanja/<br>Svojstvo<br>Type of test/ Property<br>Raspon/Range                                                                                                                                                                                                                                                             | Tehnika<br>ispitivanja<br>Test technique | Metoda ispitivanja<br>Test method                                                                                                                              |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>C – Ispitivanje krutih sastavnica okoliša / Testing of solid environmental matrices</b> |                                                                                |                                                                                                                                                                                                                                                                                                                                      |                                          |                                                                                                                                                                |
| C1                                                                                         | Krute sastavnice<br>okoliša<br><br><i>Solid<br/>environmental<br/>matrices</i> | Određivanje odabranih<br>elemenata<br><br><i>Determination of selected<br/>elements</i>                                                                                                                                                                                                                                              | ICP-OES                                  | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| C2                                                                                         | Krute sastavnice<br>okoliša<br><br><i>Solid<br/>environmental<br/>matrices</i> | Određivanje odabranih<br>elemenata<br><br><i>Determination of selected<br/>elements</i>                                                                                                                                                                                                                                              | ICP-OES                                  | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| C3                                                                                         | Krute sastavnice<br>okoliša<br><br><i>Solid<br/>environmental<br/>matrices</i> | Određivanje žive<br><br><i>Determination of mercury</i>                                                                                                                                                                                                                                                                              | AAS<br>(FIMS)                            | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| C4                                                                                         | Krute sastavnice<br>okoliša<br><br><i>Solid<br/>environmental<br/>matrices</i> | Određivanje hlapljivih<br>organskih spojeva<br>metodom analize para<br>iznad otopine (headspace)<br>plinskom kromatografijom s<br>masenom spektrometrijom<br>(GC-MS/MS)<br><br><i>Determination of volatile<br/>organic compounds in<br/>waters by headspace<br/>method gas<br/>chromatography/ mass<br/>spectrometry (GC-MS/MS)</i> | GC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| C5                                                                                         | Krute sastavnice<br>okoliša<br><br><i>Solid<br/>environmental<br/>matrices</i> | Određivanje pesticida<br>metodom tekućinske<br>kromatografije s masenom<br>spektrometrijom (LC-<br>MS/MS)<br><br><i>Determination of pesticides<br/>– LC-MS/MS technique</i>                                                                                                                                                         | LC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |

| Oznaka/<br>Identification | Materijali/<br>Proizvodi<br>Materials/<br>Products                             | Vrsta ispitivanja/<br>Svojstvo<br>Type of test/ Property<br>Raspon/Range                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Tehnika<br>ispitivanja<br>Test technique | Metoda ispitivanja<br>Test method                                                                                                                                      |
|---------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| C6                        | Krute sastavnice<br>okoliša<br><br><i>Solid<br/>environmental<br/>matrices</i> | Određivanje pesticida<br>metodom plinske<br>kromatografije s masenom<br>spektrometrijom (GC-<br>MS/MS)<br><br><i>Determination of pesticides<br/>– gas chromatographic<br/>method with mass<br/>spectrometry (GC-MS/MS)</i>                                                                                                                                                                                                                                                                                                | GC-MS/MS                                 | <i>Prema popisu na<br/><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a></i> |
| C7                        | Krute sastavnice<br>okoliša<br><br><i>Solid<br/>environmental<br/>matrices</i> | Određivanje PFAS-a<br>metodom tekućinske<br>kromatografije s masenom<br>spektrometrijom (LC-<br>MS/MS)<br><br><i>Determination of PFAS by<br/>liquid chromatography-<br/>mass spectrometry (LC-<br/>MS/MS)</i>                                                                                                                                                                                                                                                                                                             | LC-MS/MS                                 | <i>Prema popisu na<br/><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a></i> |
| C8                        | Krute sastavnice<br>okoliša<br><br><i>Solid<br/>environmental<br/>matrices</i> | Određivanje polikloriranih<br>bifenila (PCB 28, PCB 52,<br>PCB 101, PCB 118, PCB<br>138, PCB 141, PCB 153,<br>PCB 180) metodom plinske<br>kromatografije s masenom<br>spektrometrijom (GC-MS)<br><br><i>Determination of<br/>polychlorinated biphenyls<br/>(PCB 28, PCB 52, PCB<br/>101, PCB 118, PCB 141,<br/>PCB 138, PCB 153, PCB<br/>180) by using capillary gas<br/>chromatography with mass<br/>spectrometric detection<br/>(GC-MS)</i><br><br>Granica kvantifikacije/<br><i>Quantification limit</i><br>0,010 mg/kg | GC-MS                                    | <i>Prema popisu na<br/><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a></i> |

**Priprema analitičkih uzorka / Preparation of analytical samples:**

- Tlo / Soil: modificirana / modified HRN EN ISO 54321:2021 (ISO 54321:2020; EN ISO 54321:2021); HRN ISO 14869-2:2004 (ISO 14869-2:2002)
- Muljevi, sedimenti, biota / Sludges, sediments, biota: modificirana / modified HRN EN ISO 54321:2021 (ISO 54321:2020; EN ISO 54321:2021)
- Mineralne sirovine / Mineral raw materials: HRN ISO 14869-2:2004 (ISO 14869-2:2002)

**Napomene / Notes:**

ICP-OES - optička emisijska spektrometrija induktivno vezane plazme / ICP OES - inductively coupled plasma atomic emission spectroscopy

AAS (FIMS) – “Flow Injecton Mercury System” atomska apsorpcijska spektrometrija / AAS (FIMS) – flow injecton mercury system atomic absorption spectroscopy

GC-MS/MS – plinska kromatografija / tandem ska spektrometrija masa / GC-MS/MS - Gas chromatography-tandem mass spectrometry

LC-MS/MS – tekućinska kromatografija / tandem ska spektrometrija masa / LC-MS/MS – Liquid chromatography-tandem mass spectrometry

| Oznaka/<br>Identification                                                                                                                                                   | Materijali/<br>Proizvodi<br>Materials/<br>Products       | Vrsta ispitivanja/<br>Svojstvo<br>Type of test/Property<br>Raspon/Range      | Tehnika<br>ispitivanja<br>Test technique | Metoda ispitivanja<br>Test method                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>D – Ispitivanje ulja i goriva (uključujući kruta oporabljiva goriva, čvrsta biogoriva) / Testing of oils and fuels (including solid recovered fuels, solid biofuels)</b> |                                                          |                                                                              |                                          |                                                                                                                                                                |
| D1                                                                                                                                                                          | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Određivanje odabranih elemenata<br><i>Determination of selected elements</i> | ICP-OES                                  | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| D2                                                                                                                                                                          | Kruta oporabljena goriva<br><i>Solid recovered fuels</i> | Određivanje žive<br><i>Determination of mercury</i>                          | AAS<br>(FIMS)                            | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |

**Pripreme analitičkih uzorka / Preparation of analytical samples:**

- Kruta oporabljena goriva / *Solid recovered fuels*: HRN EN ISO 21646:2022 (EN 21646:2022; EN ISO 21646:2022); HRN EN 15411:2011 (EN 15411:2011)

**Napomene / Notes:**

ICP-OES - optička emisijska spektrometrija induktivno vezane plazme / ICP OES - *inductively coupled plasma atomic emission spectroscopy*

AAS (FIMS) – “Flow Injecton Mercury System” atomska apsorpcijska spektrometrija / AAS (FIMS) – *flow injecton mercury system atomic absorption spectrometry*

| Oznaka/<br>Identification                                                                     | Materijali/<br>Proizvodi<br>Materials/<br>Products                  | Vrsta ispitivanja/<br>Svojstvo<br>Type of test/ Property<br>Raspon/Range                                                                                                                                                                                                                         | Tehnika<br>ispitivanja<br>Test technique | Metoda ispitivanja<br>Test method                                                                                                                              |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>E – Ispitivanja hrane i hrane za životinje / Testing of food and animal feeding stuffs</b> |                                                                     |                                                                                                                                                                                                                                                                                                  |                                          |                                                                                                                                                                |
| E1                                                                                            | Hrana i hrana za životinje<br><i>Food and animal feeding stuffs</i> | Određivanje odabranih elemenata u hrani i stočnoj hrani optičkom emisijskom spektrometrijom induktivno vezane plazme (ICP-OES) i spektrofotometrijom<br><br><i>Determination of selected elements in food and animal feeding stuffs by inductively coupled plasma optical emission (ICP-OES)</i> | ICP-OES<br>Spectrophotometry             | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| E2                                                                                            | Hrana<br><i>Food</i>                                                | Određivanje žive<br><br><i>Determination of mercury</i>                                                                                                                                                                                                                                          | AAS<br>(FIMS)                            | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| E3                                                                                            | Hrana<br><i>Food</i>                                                | Određivanje odabranih elemenata metodom ICP-MS nakon digestije nitratnom kiselinom<br><br><i>Determination of selected elements by ICP-MS method after nitric acid digestion</i>                                                                                                                 | ICP-MS                                   | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| E4                                                                                            | Hrana<br><i>Food</i>                                                | Metoda za određivanje ostataka pesticida u hrani metodom tekućinske kromatografije s masenom spektrometrijom (LC-MS/MS)<br><br><i>Method for the determination of pesticide residues in foods— liquid chromatographic method with mass spectrometry (LC-MS/MS)</i>                               | LC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| E5                                                                                            | Hrana<br><i>Food</i>                                                | Metoda za određivanje ostataka pesticida u hrani metodom plinske kromatografije s masenom spektrometrijom (GC-MS/MS)<br><br><i>Method for the determination of pesticide residues in foods – gas chromatographic method with mass spectrometry (GC-MS/MS)</i>                                    | GC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |

| Oznaka/<br>Identification | Materijali/<br>Proizvodi<br>Materials/<br>Products         | Vrsta ispitivanja/<br>Svojstvo<br>Type of test/ Property<br>Raspon/Range                                                                                                                                                                                       | Tehnika<br>ispitivanja<br>Test technique | Metoda ispitivanja<br>Test method                                                                                                                              |
|---------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| E6                        | Hrana biljnog<br>podrijetla<br><br>Food of plant<br>origin | Određivanje pesticida<br>pojedinačnim metodama<br>tehnikom tekućinske<br>kromatografije s masenom<br>spektrometrijom (LC-<br>MS/MS)<br><br>Determination of pesticides<br>by single methods with<br>liquid chromatography-<br>mass spectrometry (LC-<br>MS/MS) | LC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| E7                        | Hrana biljnog<br>podrijetla<br><br>Food of plant<br>origin | Određivanje pesticida<br>pojedinačnim metodama<br>tehnikom plinske<br>kromatografije s masenom<br>spektrometrijom (GC-<br>MS/MS)<br><br>Determination of pesticides<br>by single methods with gas<br>chromatography-mass<br>spectrometry (GC-MS/MS)            | GC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| E8                        | Hrana<br><br>Food                                          | Određivanje toksina<br>metodom tekućinske<br>kromatografije s masenom<br>spektrometrijom (LC-<br>MS/MS)<br><br>Determination of toxins –<br>LC-MS/MS technique                                                                                                 | LC-MS/MS                                 | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |
| E9                        | Hrana<br><br>Food                                          | Određivanje odabranih<br>elemenata metodom AAS<br><br>Determination of Selected<br>Elements by the AAS<br>Method.                                                                                                                                              | AAS                                      | Prema popisu na<br><a href="https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/">https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/</a> |

**Priprema analitičkih uzorka / Preparation of analytical samples:**

- Hrana / Food: HRN EN 13805:2014 (EN 13805:2014)
- Hrana biljnog podrijetla / Food of plant origin: HRN EN 15662:2018 (EN 15662:2018)
- Hrana biljnog podrijetla / Food of plant origin: HRN EN 15662:2018 modificirana sa alkalnom hidrolizom / modified (EN 15662:2018) with alkaline hydrolysis
- Hrana biljnog podrijetla / Food of plant origin: QuPPE-PO-Method

**Napomene / Notes:**

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ICP-MS - masena spektrometrija induktivno vezane plazme / ICP - MS - inductively coupled plasma / mass spectrometry

GC-MS/MS – plinska kromatografija / tandemaska spektrometrija masa / GC-MS/MS - Gas chromatography-tandem mass spectrometry

LC-MS/MS – tekućinska kromatografija / tandemna spektrometrija masa / LC-MS/MS – 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.

Važeći popis akreditiranih metoda iz fleksibilnog područja akreditacije dostupan je na <https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/>. / The valid list of accredited methods in the flexible scope is available on <https://www.bioinstitut.hr/djelatnosti/laboratorij/ovlastenja/>.

