

Scope of accreditation

The name of the accredited laboratory: **EKOLAB s.r.o.**

Testing laboratory

Napájadlá 17/2763, 040 01 Košice

Flexible scope of accreditation

Flexible scope of accreditation is published at:

<http://www.ekolab.sk/-osvedcenia>

Item	Subject of the Test		Established methods		Other specifications (range, uncertainty, purpose, Modification/validation, opinions/interpretations, etc.)
	Object / Matrix / Environment	Characteristics / Parameter / Indicator / Analyte	Principle / Type	Title	
1.1	Foodstuff, feed	As, Cd, Cu, Pb,	AAS	IPP 263 (AOAC 986.15, AOAC 985,01, STN EN 14084)	
1.2		Zn, Cu, Pb, Cd	ICP AES	IPP 263 (AOAC 986.15, AOAC 985.01, STN EN 14084, STN EN 15510)	
1.3	Fuels Secondary fuels (solid, liquid, gaseuos) Waste fuels	As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Tl, V, Zn, Hg	ICP AES, AAS	IPP 253 (EPA 29, STN EN 14385, STN EN 13211)	Decree of the Ministry of the Environment SR No. 228/2014 Coll. as amended
2.1	Waters and water leachates	COD _{Cr}	Spectropho metry, volumetric method	IPP 4 (STN ISO 15705, DIN 38409-44)	
2.2	Feed, foodstuff	Peroxide number	Volumetric method	IPP53 (AOAC 965.33)	
2.3		Acidity number		IPP 79 (STN EN ISO 660)	
2.4	Waters and water leachates	Thiocyanate	Spectropho metry	IPP 40 (ASTM D4193-08)	
2.5	Fuels Secondary fuels (solid, liquid, gaseuos) Waste fuels	Hydrogen sulfide	Spectropho metry	IPP 104 (STN 834712-4)	Decree of the Ministry of the Environment SR No. 228/2014 Coll. as amended
3.1	Liquid samples - waters, - water leachates	Ions²⁾	IC	IPP 300 (STN ISO 10304)	
3.2	Solid samples - waste - feeds - foodstuff - fuels Secondary fuels (solid, liquid, gaseous) Waste fuels	Sum PAH³⁾	HPLC/FLD calculation GC/MSD calculation	IPP 303 (ČSN 757554, STN EN ISO 17993) IPP 302 (ČSN 75 7554 STN EN 15527, STNPCEN TS 16181 STN EN 16619)	Decree of the Ministry of the Environment SR No. 228/2014 Coll. as amended

Annex to Decision No. č. 423/7315/2018/1 and Annex to the accreditation certificate No. S-307 dated 31.01.2018

The annex is an integral part of the accreditation certificate

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3.3	Emissions and work environment	Inorganic chlorine compounds expressed as Cl ₂ and ClO ₂	IC	IPP 109 (OSHA ID – 202)	Range	Extended combined uncertainty (k = 2), [%]
					(0,001-0,05) mg*	20
	(0,05-0,5) mg*	15				
	(0,5-25,0) mg*	10				
3.4	Fuels Secondary fuels (solid, liwuid, gaseous) Waste fuels	Sum PCB⁴⁾	GC/MSD calculation	IPP 305 (EPA 8082A)	Decree of the Ministry of the Environment SR No. 228/2014 Coll. as amended	
4.1	Waters Foodstuff Feed	Pesticides Carbamates⁵⁾	HPLC/MSD	IPP 308 (STN EN ISO11369, EPA 8325, STN EN 15662, EURL-SRM 9.1)		
		Ureas⁶⁾				
		Neonicotinoides⁷⁾				
		Trizines⁸⁾				
		Acid herbicides⁹⁾				
		Sulfonylureas³³⁾				
		Other³⁴⁾				
4.2		Organochlorine¹⁰⁾	GC/MSD	IPP 306 (EPA 525.2, EPA 8270C, STN EN 15662)		
		Organophosphates¹¹⁾				
		Triazines¹²⁾				
		Other³⁵⁾				
5.1	Liquid samples - waters Solid samples - waste - feed - foodstuff	Polychlorinated dibenzo-p-dioxins and dibenzofurans	GC/MSD	IPP367 (EPA 8280 B, Nar. komisie ES č. 152/2009, príloha V, STN EN 16215, STNPCEN/TS 16190)		
5.2	Liquid samples - water Solid samples - waste	Volatile compounds¹⁴⁾	GC/FID/ MSD	IPP 301 (STN EN ISO 15680, STN 757550, EPA 5021)		
5.3	Industrial products - electrotech nical products - plastics	Sum PBB and PBDE¹⁵⁾	GC/MSD calculation	IPP 304 (IEC 62321)		
5.4.	Solid samples - feed - foodstuff	Mycotoxins¹⁶⁾	LC/MSD	IPP 357 (UKZUZ Uniform working practices - feed testing 575)		
5.5	Solid samoles - feed - foodstuff Plastics and plastic components of products	Plasticisers³⁶⁾	GC/MS	IPP 312 (STN P CEN/TS 16183)		

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	Object / Matrix / Environment	Characteristics / Parameter / Indicator / Analyte	Principle / Type	Title		
6.1	Liquid and solid samples	VOC Non-volatile (NV) Volatile organic compounds (VOC)	Gravimetry	IPP 195 (STN EN ISO 11890-1, STN EN ISO 3251)		
6.2	Fuels Gaseous fuels	Solid aerosol	Gravimetry	IPP 211 (MDHS 14/4)	Decree of the Ministry of the Environment SR No. 228/2014 Coll. as amended	
7.1 ¹⁾	Air: - Emissions, - Workplace atmosphere	Aldehydes ¹⁾	LC/DAD	IPP 406 (EPA 0011, NIOSH 2016, NIOSH 2018)	Range	Extended combined uncertainty (k = 2) [%]
					(0,001-0,05) mg*	20
					(0,05-0,25) mg*	18
		(0,25-1,0) mg*	15			
7.2 ¹⁾	Air: - Emissions - Workplace atmosphere	Volatile compounds Chlorinated hydrocarbons ¹⁾	GC/FID/ MSD Solvent desorption Thermal desorption	IPP 417 (STN P CEN/TS 13649, MDHS 96)	(0,001-0,05) mg*	25
					(0,05-0,2) mg*	20
					(0,2-1,0) mg*	18
7.3 ¹⁾	Air: - Emissions - Workplace atmosphere	Aromatic hydrocarbons ¹⁹⁾	GC/FID/ MSD	IPP 417 (STN P CEN/TS 13649, MDHS 96)	(0,001-0,05) mg*	25
		Aliphatic hydrocarbons ²⁰⁾				
		Acetates ²¹⁾				
		Alcohols ²²⁾				
		Ketones ²³⁾				
		Fenol and cresols ²⁴⁾				
		Ethers ²⁵⁾				
Acrylates ²⁶⁾						
7.4 ¹⁾	Air: - Emissions - Workplace atmosphere	Organic acids ²⁷⁾	HPLC/DAD	IPP 400 (VDI 2457 B1.4)	(0,01-0,05) mg*	15
					(0,05-0,2) mg*	12
7.5 ¹⁾	Air: - Emissions - Workplace atmosphere	Polychlorinated dibenzo-p-dioxins and benzofuranes ²⁸⁾	GC/MSD	IPP 464 (STN EN 1948-2,3)	(0,02-0,05) ng*	40
					(0,05-0,2) ng*	35
					(0,2-5,0) ng*	30
8.	Emissions and gases	Gases ²⁹⁾	GC/BID	IPP 418 (STN EN ISO 6974 ASTM D7652-11)		
9.1	Waters	Chlorinated alkanes ³⁰⁾	GC/MSD	IPP 466 (STN EN ISO 12010)		
9.2		Phthalates ³¹⁾		IPP 312 (STN EN ISO 18856)		
9.3		Fenols ³²⁾		IPP 319 (STN EN ISO 18857)		

POZNÁMKY:

1) The performance of subcontracting of authorized measurements under Act no. 137/2010 Coll. as amended

*- weight per sample

2) Ions: Chloridy, Nitrates, Nitrites, Phosphates, Sulphates, Fluorides, Chromate (Cr⁶⁺)

3) PAH: Acenaften, Acenaftylen Antracén, Benzo(a)antracén, Benzo(a)pyren, Benzo(b)fluoranten, Benzo(k)fluoranten, Benzo(g,h,i)perylen, Dibenzo(a,h)antracén, Fenantren, Fluoranten, Fluoren, Chryzen, Indeno(1,2,3-c,d)pyren, Naftalen, Pyren

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- 4) **PCB congeners:** PCB 18, 20, 28, 31, 44, 52, 77, 81, 101, 105, 114, 118, 123, 126, 138, 149, 153, 156, 157, 167, 169, 170, 180, 189, 194
- 5) **Carbamates:** Carbaryl, Carbofuran, Metiocarb, Propoxur, Furathiocarb, Bendiocarb, Butocarboxim sul., Butocarboxim, Methomyl, Aminocarb, Dioxacarb, Ethiofencarb, Isoprocarb, Mexacarbamate, Fenoxycarb, Prosulfocarb, Propamocarb, Iprovalicarb, Methiocarb, Orbencarb
- 6) **Ureas:** Monolinuron, Chloroxuron, Difenoxuron, Monuron, Dimefuron, Cycluron, Neburon, Metoxuron, Fenuron, Diuron, Linuron, Isoproturon, Chlortoluron, Methabenziazuron, Buturon, Siduron, Fluometuron, Thiadiazuron, Ethidimuron, Chlorbormuron, Metobromuron, Metoxuron, Tebutiuron
- 7) **Neonicotinoides:** Imidacloprid, Thiametoxam, Clothianidin, Thiachloprid, Dinotefuran, Nitenpyran, Acetamiprid
- 8) **Triazines:** Atrazin, Simazin, Cyanazin, Propazin, Sebutylazin, Terbutylazin, Ametryn, Prometryn, Terbutryn, Aziprotryn, Desmetryn, Dimetametryn, Metoprotryn, Simetryn, Desethyl atrazin, Deisopropyl atrazin, Desethylterbutylazin, Aziprotryne, Desmetryn, Simetryn,
- 9) **Acid herbicides:** Dicamba, Clopyralid, Picloram, 2,4-D, Mecoprop, Dichlorprop, MCPA, MCPB, 2,4-DB, Bentazon, Triclopyr
- 10) **Organochlorine:** Alachlór, Dieldrin, Isodrin, α -HCH, beta-HCH, gamma-HCH (lindane), delta-HCH, o,p'-DDD, o,p'-DDE, o,p'-DDT, p,p-DDD, p,p- DDD, p,p-DDT, HCB, Endrin, Endosulfan, Metoxychlor, Heptachlor, Heptachlor-endo-epoxide, Heptachlor-exo-epoxide
- 11) **Organophosphates** Mevinphos, Dimefox, Omethoate, Dimethoate, Paraoxon-ethyl, Disulfoton, Parathion-ethyl, Fenitrothion, Parathion-methyl, Formothion, Phosalone, Iodofenphos, Pyrazophos, Malaoxon, Methamidophos, Azinphos-ethyl, Etrimfos, Azinphos-methyl, Fenchlorphos, Bromophos-ethyl, Fonofos, Bromophos-methyl, Malathion, Carbophenothion, Methacrifos, Methidathion, Chlorpyrifos, Pirimiphos-ethyl, Chlorpyrifos-methyl, Pirimiphos-ethyl, Diazinon, Propetamphos, Dichlofenthion, Sulfotep, Dichlorvos, Tetrachlorvinphos, Ethion, Acephate, Bromophos-methyl, Bromophos-ethyl, Dichlofenthion, Chlorfenvinphos, Monocrotophos, Profenofos
- 12) **Triazines:** Atrazin, Simazin, Cyanazin, Propazin, Sebutylazin, Terbutylazin, Ametryn, Prometryn, Terbutryn, Atraton
- 13) **Polychlorinated dibenzo-p-dioxines and furanes:** 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, OCDF, 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, OCDD
- 14) **Volatile compounds:** Vinylchlorid, 1,1-dichloroethylen, trans-1,2-DCE, 1,1-Dichloroethan, cis-1,2-DCE, Chloroform, 1,2-Dichloroethan, Benzen, TCE, 1,3-DCB, 1,4-DCB, 1,2-DCB, 1,3,5-TMB, 1,2,4-TMB, 1,2,4-TCB, 1,3,5-TCB, PCE, Chlórbenzén, Toluén, CCl₄, Etylbenzén, m,p-xylén, o-xylén, Styren, Bromoform, Dibromchlormethan, Bromdichlormethan
- 15) **PBB a PBDE:** PBB 3, PBB 10, PBB 30, PBB 49, PBB 103, PBB 153, PBB 169, PBB 209, PBDE 1, PBDE 7, PBDE 17, PBDE 28, PBDE 47, PBDE 66, PBDE 71, PBDE 85, PBDE 99, PBDE 100, PBDE 138, PBDE 153, PBDE 154, PBDE 183, PBDE 190, PBDE 203, PBDE 209
- 16) **Mycotoxins:** Aflatoxins G1,G2,B1,B2, Ochratoxin A, Zearalenon, Deoxynivalenol
- 17) **Aldehydes:** Formaldehyd, Aacetaldehyd, Furfural
- 18) **Chlorinated hydrocarbons:** 1,1-DCE, CH₂Cl₂, PCE, trans-1,2-DCE, CHCl₃, Chlorbenzen, 1,2- dichloretan, 1,1-dichloretan, TCE, 1,3-DCB, 1,2-DCB, cis-1,2-DCE, 2-chloretanol, Chloretan, Vinylchlorid
- 19) **Aromatic hydrocarbons:** Benzen, o- Xylen, 1,3,5- trimetylbenzen, Toluén, m,p- xylen, 1,2,4- trimetylbenzen, Etylbenzen, Styren, 1,2,3- trimetylbenzen
- 20) **Aliphatic hydrocarbons:** Pentane, Hexane, Nonane,
- 21) **Acetates:** Vinylacetate, Metylacetate, Butylacetate
- 22) **Alcohols:** 2- butanol, n-propanol, Cyklohexanol, i-butylalkohol, n-butanol, Metanol, Alylakohol, i-amylalkohol, Etanol, 1-Metoxy-2 propanol, t-butanol, 1-hexanol
- 23) **Ketones:** Acetone, Etylmetylketone, Metylizobutylketone
- 24) **Fenol and cresols:** Fenol, o-krezol, m-krezol, p-krezol
- 25) **Ethers:** dimetylether
- 26) **Acrylates:** Etylakrylate, Metylakrylate
- 27) **Organic acids:** Fomric acid, Acetic acid
- 28) **Polychlorinated dibenzo-p-dioxines and furanes:** 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, OCDF, 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD
- 29) **Gases:** Methane, Ethane, Propane, Butane, Ethylene, Propylene, Isopentane, Oxygen, Hydrogen, Carbon dioxide, Carbon monooxide, Nitrogen, Carbonyl sulfide
- 30) **Chlorinated alkanes:** (C10-C13) (SCCPs)
- 31) **Phthalates:** Dibutylphthalate, Bis(2-ethylhexyl)phthalate
- 32) **Fenols:** 4-tert-octylphenol
- 33) **Sulfonylurea:** Amidosulfuron, Bensulfuron-methyl, Cinosulfuron, Cyclosulfuron, Ethoxysulfuron, Flazasulfuron, Foramsulfuron, Halosulfuron-methyl, Chlorimuron-ethyl, Chlorsulfuron, Imazosulfuron, Iodosulfuron-methyl, Mesosulfuron-methyl, nicosulfuron, Oxasulfuron, Prosulfuron, Primisulfuron-methyl, Rimsulfuron, Sulfometuron-methyl, Sulfosulfuron, Thiazafurion, Thifensulfuron, Trifloxysulfuron
- 34) **Other:** Glyphosate, Anilazine, Desmedipham, Diquat, Fenoxaprop-ethyl, Fenoxaprop-P, Haloxyfop, Haloxyfop-R-methyl Oxidisulfoton, Phenmedipham, Pyridaphenthion, Quinalphos, Terbumeton, Thaiabendazole, Thiram, Triadimefon, Triadimenol, Triazophos, Trichlorfon, Vamidothion, Allethrin, AMPA, Azaconazol, Azimsulfuron, Azoxystrobine, Benzthiazuron, Boscalid, Bromoxynil, Bromuconazol, Carbendazime, Carboxim, Carfentrazone-ethyl, Clomazone, c-permethrin, Cyproconazol, Diclofop, Difenconazol, Dimethachlor, Dimethenamide, Diniconazol, Epoxiconazol, Fenbuconazol, Fenobucarb, Fenothiocarb, Fenpropidin, Fenpropimorph, Flamprop-isopropyl, Fluzafop, Fluzafop-P-butyl, Flupyrsulfuron-methyl-sodium, Fluquinconazole, Fluroxypyr, Glufosinate-ammonium, Hexaflumuron, Hydroxy-2-atrazine, Chloridazon, Chloridazon-desphenyl, Chloridazon-methyl-desphenyl, Chlormequat, Imazamox, Imibenconazol-desbenzyl, Ioxynil, Isoproturon-desmethyl, Lenacil, Lufenuron, Mefenpyr-diethyl, Mepiquat, Metamitron, Metconazol, Methoxyfenozid, Metolcarb, Napropamide, Novaluron, Penconazol, Pencycuron, Promecarb, Quinmerac, Simeconazol, Spiroxamine, Tebuconazol, Teflubenzuron, Terbutylazine-2-hydroxy, Terbutylazine-desethyl-2-hydroxy, Tetraconazol, Thiodicarb, t-permethrin, Triflurazuron, Trimesium, Triticonazol, Tritosulfuron, Uniconazol
- 35) **Other** Amitraz, Benfluralin, Bromacil, Carbofuran, Crimidine, Diazinon, Diflufenican, Dichlofluanid, Fenmidone, Fenarimol, Fenvalerate, Flamprop-isopropyl, Folpet, Fonofos, Hexaconazole, Hexazinone, Chinomethionat, Chlorfenapyr, Chlorfenson, Chlorothalonil, Chlorpropham, Chlorthal-dimethyl, Metribuzin, Naled, Omethoate, Phorate, Phosalone, Pronamide, Propanil, Propiconazole, Quintozene,

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Sulfotep, Tecnazene, Terbufos, Tetradifon, Thiomethon, Tricyclazole, Acrinathrin, Aldrin, Beta-Endosulfan, Bromopropylate, Butachlor, Butylate, Cycloate, Cyfluthrin, Cyhalothrin, Cypermethrin, Cyproconazol, Deltamethrin, Dicofol, Dicrotophos, Dichlobenil, Dimethachlor, Diphenamide, EPTC, Ethofumesate, Ethoprophos, Fenson, Flucythrinate, Fluridone, Fluvalinate, Hexachlorobutadiene, Imazalil, Kresoxim-methyl, Mecarbam, Metalaxyl, Metolachlor, MGK, Molinate, Norflurazon, Pebulate, Pendimethalin, Pentachloroaniline, Pethoxamid, Phenothrin, Phosphamidon, Piperonyl-butoxide, Pirimicarb, Procymidone, Prometon, Propachlor, Prothioconazole, Resmethrin, Terbacil Tetrachlorvinphos, Tetrasul, Tolyfluamid, Trifluralin, Vernolate, Vinclozolin

36)Plasticizers: Diethyladipate, Dimethylphthalate, Diisomethylphthalate, Diethylphthalate, Diisobutyladipate, Dibutyladipate, Diisobutylphthalate

Dibutylphthalate, Bis(methylglycol)phthalate, Dipentylphthalate, Tributylphosphate, Tributyl-O-acetylcitrate, Bis(4-methyl-2-pentyl)phthalate, Dihexylphthalate, Benzylbutylphthalate, Bis(2-ethylhexyl)adipate, Bis(2-ethylhexyl)phthalate, Dicyclohexylphthalate, Di-n-octylphthalate, Diisononylphthalate, Diisodecylphthalate

Persons capable of modifying and validating methods / developing new methods during accreditation

Firstname and Surname, Titles	Ability to modify and validate methods / develop new methods - - no. items
Ing. Eva Jusková	1.1-9.3
Ing. Katarína Jusková	3.1-9.3
Ing. Jana Tomleinová	1.1-2, 6
RNDr. Monika Gul'ková	1.1-1.2, 6

Specification of the activities in which the laboratory performs the sampling

Item	Objekt			Metóda		Other specifications
	Object	Property	Place of Sampling	Type / Principle	Title	
1	Gaseous secondary and waste fuels	Properties listed in items of fixed range: 7.1-7.6, 15.1 Flexible range: 1.3, 2.5, 3.2, 3.4, 6.2,	Manufacturers and holders of fuels	- Sampling to the bag - Sampling to the liquid sorbent - Sampling on the filter and PUF	IPP 206 (STN EN ISO 10715, STN EN ISO 13 686)	Decree of the Ministry of the Environment SR No. 228/2014 Coll. as amended
2	Liquid secondary and waste fuels	Properties listed in items of fixed range: 7.1-7.6, 15.1 Flexible range: 1.3, 2.5, 3.2, 3.4, 6.2, 7.5	Manufacturers and holders of fuels	Point sample	IPP 204 (STN EN ISO 3170)	Decree of the Ministry of the Environment SR No. 228/2014 Coll. as amended
3	Solid secondary and waste fuels	Properties listed in items of fixed range: 7.1-7.6, 15.1 Flexible range: 1.3, 2.5, 3.2, 3.4, 6.2, 8 POPs	Manufacturers and holders of fuels	Manual and mechanical sampling	IPP 205 (STN EN 15 442)	Decree of the Ministry of the Environment SR No. 228/2014 Coll. as amended

Persons capable of modifying and validating methods / developing new methods during accreditation

Meno a priezvisko, titul	Ability to modify and validate methods / develop new methods - - no. items
Ing. Lubomír Jusko	1-3

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Fixed range of accretitation

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1.1	Water and water leachate, waste, soils, sediments, solidi fuelas, products, raw material	Al, As, B, Ba, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Si, Sn, Ti, V, Zn Al ₂ O ₃ , CaO, MgO, Fe ₂ O ₃ , K ₂ O, MnO, Na ₂ O, SiO ₂ , TiO ₂ , V ₂ O ₅	ICP AES	IPP 250 (STN EN ISO 11885, JMAKO 180, EPA 200.7, STN EN 62321, STN EN 15411, STN EN 15410, STN EN 16170)	
1.2		Ag, As, Be, Cd, Co, Cr, Cu, Ni, Pb, Sb, Se	AAS	IPP 261 (STN EN ISO 15586, STN EN 16172)	
1.3		Hg	AAS	IPP 265 (STN EN 1483, STN PCEN/TS 16175)	
2.1	Foodstuff, feed	Hg	AAS	IPP 266 (STN EN 13806)	
3.1	Water and water leachate	pH	Potentiometry	IPP 1 (STN ISO 10523)	
3.2		Conductivity	Conductometry	IPP 2 (STN EN 27888)	
3.3		Total dissolved substances, suspended and dissolved substances	Gravimetry	IPP 7 (STN EN 872, STN 757373, STN EN 15216)	
3.4		BOD ₅	Electrochemical method	IPP 5 (STN EN 1899, EPA 5210D)	
3.5		Dissolved oxygen	Electrochemical method	IPP 17 (STN EN ISO 5814)	
3.6		COD _{Mn}	Volumetric analysis	IPP 3 (STN EN ISO 8467)	
3.7		TOC, DOC	NDIR	IPP 21 (STN EN 1484)	
3.8		Ammonium Ions	Spectrophotometry	IPP 12 (STN ISO 7150 – 1)	
			Volumetric analysis	IPP 18 (STN ISO 5664)	
3.9		Chlorides	Volumetric method	IPP 8 (STN ISO 9297)	
3.10		Phosphorous total, phosphate	Spectrophotometry	IPP 29 (STN EN ISO 6878)	
3.11		Sulfides, sulfane	Spectrophotometry	IPP 11 (STN 75 7483)	
3.12		Nitrite	Spectrophotometry	IPP 31 (STN EN 26777)	
			Volumetric analysis	IPP 19 (STN 75 7435)	
3.13		Nitrogen total	Chemiluminescence	IPP 19 (STN EN 12260)	
			Spectrophotometry	IPP 13 (STN ISO 6703 – 1,2)	
3.14	Cyanides total and easily released	Spectrophotometry	IPP 13 (STN ISO 6703 – 1,2)		
3.15	Phenolic index	Spectrophotometry	IPP 15 (STN ISO 6439)		
3.16	Anionic surfactants	Spectrophotometry	IPP 24 (STN EN 903)		

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	Object / Matrix / Environment	Characteristics / Parameter / Indicator / Analyte	Principle / Type	Title	
3.17	Water and water leachate	Non-polar extractable substances, Extractables substances	Spectrophotometry	IPP 22 (STN 83 0540 – 4)	
3.18		AOX	Coulometry	IPP 23 (STN EN ISO 9562)	
4.1	Solid materials, waste, raw materials	Dry mater, Loss of annealing	Gravimetry	IPP 110 (STN EN 12880, STN EN 15934, STN EN 15935, STN EN 15169, STN EN 14346)	
4.2		Non-polar extractable substances, Extractables substances	Spectrophotometry	IPP 111 (STN 75 7952, TN/ISO/TR 11046)	
4.3		TOC, IC, TC, CO ₂	NDIR	IPP 113 (STN EN 13137)	
4.4		Cyanides total and easily released	Spectrophotometry	IPP 116 (JMAKO MP 310, JMAKO MP 320)	
4.5		Phenolic index	Spectrophotometry	IPP 115 (JMAKO MP080, STN ISO6439)	
4.6		Nitrogen content	Elemental analysis	IPP 153 (STN EN 16168)	
5.1		Foodstuff, feed	Nitrogen content	Volumetric method	IPP56 (STN ISO 937, Commision Regulation (EC) No. 152/2009)
5.2	Elementárna analýza			IPP 153 (AOAC 990.03)	
5.3	Water		Gravimetry	IPP 57 (STN 57 0154)	
5.4	Sodium chloride		Volumetric analysis	IPP 58 (STN 57 0167, čl. 11)	
5.5	Free fat		Gravimetry	IPP 59 (STN ISO 1444)	
6	Workplace atmosphere	Equivalent level A acoustic pressure $L_{Aeq,T}$	Measurement of the sound pressure level and calculation of the determining quantities	ISO 9612:2010, Government Regulation SR No. 115/2006 Coll. as amended (IPP 203)	
		Top level C acoustic pressure $L_{CPk,T}$			
		Normalized level of exposure to noise $L_{AEX,sh}$			
7.1	Solid fuels	Ash	Gravimetry	IPP 150 (STN ISO 1171 STN EN 14775, STN EN 15403)	
7.2		Volatile compounds	Gravimetry	IPP151 (STN ISO 562 ČSN ISO 5071-1 STN EN 15148, STN EN 15402)	
7.3		Combustion heat ang calorific value	Calorimetry	IPP 154 (STN ISO 1928, STN EN 14918, STN EN 15400)	

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	Object / Matrix / Environment	Characteristics / Parameter / Indicator / Analyte	Principle / Type	Title	
7.4	Solid fuels	Water content	Gravimetry	IPP152 (STN 44 1377 STN EN 14774 STN ISO 579, STN P CEN/TS 15414)	
7.5		C, H, N, S	Elemental analysis	IPP 153 (ISO29541, STN EN 15407, STN EN 15104)	
7.6		Biomass content and carbon content in biomass	Gravimetry	IPP 158 (STN EN 15440)	
8.1	Petroleum products	Flash point	Physical measurement	IPP 182 (STN EN ISO 2719)	
8.2		Water content	Volumetric analysis	IPP 180 (STN EN ISO 12937)	
8.3		Limiting temperature of filterability	Physical measurement	IPP 183 (STN EN 116)	
8.4		Distillation characteristics	Physical measurement	IPP 181 (STN EN ISO 3405, ASTM D7345-7)	
8.5		Density	Physical measurement	IPP 184 (STN EN ISO 3675, STN ISO 91-1)	
8.6		Mechanical impurities	Gravimetry	IPP185 (STN EN 12662, STN 656080)	
8.7		Cetane index	Calculation	IPP 186 (STN EN ISO 4264)	
8.8		Kinematic viscosity and calculation of dynamic viscosity (20-100)°C	Physical measurement	IPP 187 (STN EN ISO 3104+ AC)	
8.9		Sulfur content	Ultraviolet fluorescence method	IPP188 (STN EN ISO 20846)	
8.10		Cloud point	Physical measurement	IPP189 (STN EN 23015)	
8.11		Pour point Point of flowability	Physical measurement	IPP191 (STN 656072, STN ISO 3016)	
8.12		Methyl esters of higher fatty acids (FAME)	Spectrophotometry	IPP 190 (STN EN 14078)	
9.1	Water and water leachate	Coliform bacteria <i>E. coli</i>	Cultivation method	IPP MBR 44 (STN EN ISO 9308-1)	
9.2		intestinal enterococci (faecal streptococci)		IPP MBR 45 (STN EN ISO 7899-2)	
9.3		Cultivable organisms pri 22°C, 36°C mesophilic, psychrophilic bacteria		IPP MBR 48 (STN EN ISO 6222)	
9.4		<i>Pseudomonas aeruginosa</i>		IPP MBR 47 (STN EN ISO 16266)	
9.5		<i>Staphylococcus aureus</i>		IPP MBR 5 (STN EN ISO 6888-1)	
9.6	Water and water leachate	<i>Salmonella</i> sp.	Cultivation method	IPP MBR 49 (STN EN ISO 19250)	
9.7		<i>Legionella</i> sp.		IPP MBR 50 (STN EN ISO 11731-2)	

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	Object / Matrix / Environment	Characteristics / Parameter / Indicator / Analyte	Principle / Type	Title	
10.1	Foodstuff	Total aerobic count	Cultivation method	IPP MBR 29 (STN EN ISO 4833)	
10.2		<i>Salmonella</i>		IPP MBR 36 (STN EN ISO 6579)	
10.3		Yeast and molds		IPP MBR 30 (STN ISO 21527)	
10.4		Coliform bacteria		IPP MBR 31 (STN ISO 4832)	
10.5		<i>Enterobacteriaceae</i>		IPP MBR 32 (STN ISO 21528-2)	
10.6		<i>Clostridium perfringens</i>		IPP MBR 38 (STN EN ISO 7937)	
10.7		<i>Pseudomonas aeruginosa</i>		IPP MBR 43 (STN 56 0100, čl. 83)	
10.8		<i>E. coli</i>		IPP MBR 34 (STN ISO 16649-2)	
10.9		<i>Listeria monocytogenes</i>		IPP MBR 39 (STN EN ISO 11290-1, 2)	
10.10			<i>Listeria monocytogenes a Salmonella</i> (kvalitative analysis)	PCR	IPP MBR 40 (STN EN ISO 20837 STN EN ISO 20838 STN EN ISO 22174)
10.11	Medical devices, pharmacies, human body care facilities	Effectiveness of disinfection	Cultivation method	IPP MBR 1 (STN ISO 4833 STN ISO 21527 STN ISO 4832 STN ISO 21528-2 STN ISO 7218/A1 STN EN ISO 6887-1)	
10.12		Number of particles and microorganisms in the environment		IPP MBR 12 (STN ISO 4833 STN ISO 21527)	
10.13		Effectiveness of the sterilization process		IPP MBR 4 (STN EN ISO 11138 1,3- 5) Decree of the Ministry of the Environment SR No. 553/2007 Coll.	
11.1	Water	Biological analysis Taxon list: number of producers, consumers, colorless flagellates, live dead organisms, fibrous bacteria, coverage of the field of view, field of Fe and Mn bacteria	Microscopy	IPP MBR 51 (STN 75 7711+Z1)	
11.2		Determination of abiosestone	Microscopy	IPP MBR 53 (STN 75 7712)	

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	Object / Matrix / Environment	Characteristics / Parameter / Indicator / Analyte	Principle / Type	Title		
12.1	Water and water leachate	Inhibition of <i>Daphnia magna</i> Straus mobility	Determination of toxic effect	IPP MBR 27 (STN EN ISO 6341) IPP MBR 24 (STN 83 8303)		
12.2		Inhibition of the growth of freshwater algae		IPP MBR 57 (STN EN ISO 8692) IPP MBR 24 (STN 83 8303)		
12.3		Inhibition of root growth of a higher crop plant		IPP MBR 24 (STN 83 8303)		
12.4		Inhibition of light emission <i>Vibrio</i> <i>fischeri</i>		IPP MBR 52 (STN EN ISO 11348 -3)		
13.1	Water	pH	Potentiometry	IPP 213 (STN EN ISO 10523, STN EN 27888 STN EN ISO 7393-2 STN EN ISO 5814)	Field measurements	
13.2		Conductivity	Conductometry			
13.3		Chlorine free and bound	Spectrophotometry			
13.4		Dissolved oxygen	Electrochemical method			
14.1 ¹⁾	Air: - Emissions - Workplace atmosphere	Al, As, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, Mg, Mn, Ni, Pb, Sb, Se, Sn, Te, Tl, V, Zn	ICP AES AAS	IPP 253 (EPA 29 STN EN 14385, STN EN 13211, OSHA ID-206, OSHA 125G, NIOSH 6009)	Range	Extended combined uncertainty (k = 2) [%]
					(0,0001-0,001) mg*	20
					(0,001-0,002) mg*	18
					(0,002-0,5) mg*	15
					(0,5-1,0) mg*	10
14.2 ¹⁾		Ammonia	Volumetric analysis Spectrophotometry	IPP 106 (STN 83 4728 – 3,4)	(0,005-0,025) mg*	15
					(0,025-0,3) mg*	10
					(0,3-5,0) mg*	8
14.3 ¹⁾		HCl	Spectrophotometry HPLC/IC	IPP 109 (STN EN 1911)	Only emissions (0,005-0,05) mg*	15
					(0,05-0,5) mg*	10
				(0,5-5,0) mg*	8	
14.4 ¹⁾	Cl ₂	Volumetric analysis	IPP 100 (STN 83 4751 - 4)	Only emissions (0,005-0,05) mg*	20	
				(0,05-0,5) mg*	15	
				(0,5-5,0) mg*	12	
14.5 ¹⁾	SO ₂ , SO ₃ , H ₂ SO ₄ , SO _x	Volumetric analysis	IPP103 (STN 83 4711 – 4, 5, 6, STN EN 14791)	Only emissions (0,6-6,0) mg*	12	
				(6,0-30,0) mg*	8	
				(30,0-120,0) mg*	6	
14.6 ¹⁾	Fluorine	Spectrophotometry, Electrochemical method	IPP 101 (STN 83 4752 – 3,4, EPA 13A, EPA 13B, STN ISO 15713)	Only emissions (0,005-0,05) mg*	15	
				(0,05-0,5) mg*	10	
				(0,5-5,0) mg*	8	
14.7 ¹⁾	Hydrogen sulfide	Spectrophotometry	IPP 104 (STN 83 4712 – 4)	(0,005-0,1) mg*	30	
				(0,1-0,5) mg*	20	
				(0,5-5,0) mg*	15	
14.8 ¹⁾	CN ⁻ a HCN	Spectrophotometry	IPP 108 (CARB, method 426, NIOSH 6010)	(0,005-0,01) mg*	25	
				(0,01-0,1) mg*	15	
				(0,1-1,0) mg*	10	
14.9 ¹⁾	Reduced sulfur	Voleumetric analysis	IPP 105 (EPA 16A)	Only emissions (0,3-3,0) mg*	12	
				(3,0-60,0) mg*	10	
				(60,0-120,0) mg*	8	

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	Object / Matrix / Environment	Characteristics / Parameter / Indicator / Analyte	Principle / Type	Title		
14.10	Workplace atmosphere	Solid aerosol and respirable fraction of solid aerosol	Gravimetry	IPP211 (MDHS 14/4, STN EN 689)	Decree of the Ministry of the Environment SR No. 355/2006 Coll. as amended	
15.1	Fuels Ware	chlorine fluorine sulfur	IC	IPP 160 (STN EN 15289, STN EN 15408, STN EN 14582, ASTM D7359-14a, UOP991-13)		
16.	Liquid samples - water Solid samples - waste - feed - foodstuff	PCB congeners ²⁾	GC/MSD	IPP 305 (EPA 3665A, EPA 8270C, EPA8082A,STN EN 1528, STN EN61619, STN EN 12766, STN 757921)		
17.	Liquid samples - water Solid samples - waste	Hydrocarbon index (C ₁₀ – C ₄₀)	GC/FID	IPP 309 (STN EN ISO 9377 – 2) IPP 460 (STN EN 14039, STN EN 16703)		
18.	Oils, oilseeds	Mastné kyseliny ³⁾	GC/FID	IPP 352 STN EN ISO 5508		
19.1	Solid and liquid waste	VOC Volatile content	GC/FID	IPP 465 (STN EN ISO 11890-2)		
19.2	Petroleum products Coatings		Gravimetry	IPP 194 (ASTM D2369)		
20.1 ¹⁾	Air: - Emissions - Workplace atmosphere	Amines dimethylamine	HPLC/FLD	IPP 401 (OSHA 34)	Range	Extended combined uncertainty (k = 2) [%]
					(0,001-0,05) mg*	20
						(0,05-0,2) mg*
20.2 ¹⁾		PAH ⁴⁾	GC/MSD HPLC/FLD	IPP 415 (NIOSH 5506, STN ISO 11338-2)	(0,00005- 0,0001) mg*	25
					(0,0001-0,001) mg*	20
21. ¹⁾		Chromate (Cr ⁶⁺)	IC	IPP 405 (EPA 0061, OSHA ID 215)	(0,005-0,02) mg*	20
					(0,02-0,3) mg*	15
22.	Air:	Inorganic acids ⁵⁾	IC	IPP402 (NIOSH 7903)		
23.	-Workplace atmosphere	Isocyanates ⁶⁾ I	HPLC/FLD	IPP 313 (ISO16702, OSHA 42, OSHA 47)		

NOTES:

1) Performance of subcontracting of authorized measurements according to Act no. 137/2010 Coll. as amended

2) PCB congeners: PCB 18, 20, 28, 31, 44, 52, 77, 81, 101, 105, 114, 118, 126, 138, 149, 156, 157, 167, 169, 170, 180, 189, 194

3) Fatty acids: caprylis, capric, lauric, tridecanoic, myristic, myristoleic, pentadecanoic, palmitic, palmitoleic, heptadecanoic, stearic, oleic, linoleic, linolenic, butyric, cis-eicosadecanoic, behenic, erucic, caproic, cis-eicosapentaenoic, cis-docosahexaenoic, undecanoic, pentadecanoic, cis-heptadecanoic, elaidic, linolelaidic, arachidic, gamma-linolenic, eicosanoic, heneicosanoic, cis-eicosatrienoic, methyl-cis-eicosatetraenoic, tricosanoic, cis-docosadienoic, lignoceric, nervonic

4) PAH: Acenaften, Acenaftylen, Antracen, Benzo(a)antracen, Benzo(a)pyren, Benzo(b)fluoranten, Benzo(k)fluoranten, Benzo(g,h,i)perylen, Dibenzo(a,h)antracen, Fenantren, Fluoranten, Fluoren, Chryzen, Indeno(1,2,3-c,d)pyren, Naftalen, Pyren

5) Inorganic acids: HCl, HF, HNO₃, H₂SO₄

6) Isocyanates: MDI,TDI,HDI

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Explanation of abbreviations:

OSHA - Occupational Safety and Health Administration

JMAKO – Uniform methods of analytical waste control

NIOSH - The National Institute for Occupational Safety and Health

MDHS – Methods for the Determination of Hazardous Substances

CARB – California Air Resources Board

SL ,PhEur – Slovak pharmacopoeia, European Pharmacopoeia

EPA – United States Environmental Protection Agency

*- weight per sample

Specification of the activities in which the laboratory performs the sampling

Item	Object			Method		Other specifications
	Object	Characteristic	Place of sampling	Type / Principle	Title	
1.	Water: Drinking, Surface, Wastewater, Underground	Properties listed in items of fixed scope of accreditation 1.1-1.3,3.1-3.18, 9.1-9.7, 12.1-13.4, 16 Properties listed in items of flexible scope of accreditation 2, 3.1, 3.2, 5.1, 5.2, 9.1-9.3	Sources and treatment of drinking water, rivers, lakes, water supply, sewerage Sewage treatment plants Groundwater - wells,	Point samples point and time-proportionally collected samples pumping test	IPP 200 (STN EN ISO 5667-1, 3, STN ISO 5667 - 5, 10, 11, 14, STN EN ISO 19458) IPP 200 (STN EN ISO 5667-1, 3, , STN ISO 5667- 10 STN EN ISO 19458) IPP 200 (STN EN ISO 5667-1, 3 STN ISO 11)	
2.	Bathing water	Properties listed in items of fixed scope of accreditation 3.1-3.18, 9.1-9.7	Swimming pools	Point samples	IPP 200 (Decree of the Ministry of the Environment SR No. 308/2012 a 309/2012 Coll.)	
3.	Workplace atmosphere	Properties listed in items of fixed scope of accreditation Fixed range 14, 20, 22, 23, Flexible range 7.1-7.5	Workplace atmosphere	Personal sampling	IPP 201 (STN EN 482, STN EN 689, STN EN ISO 10882-1,2)	
4.	Fuels	Properties listed in items of fixed scope of accreditation 8	Gas station	Point sample	IPP 204 (STN EN ISO 3170)	
