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AB 994

Research laboratory
accredited by PCA, Nr AB
994

Scopes of accreditation:

- concentration and mass measurements of flow of fine particles
- measurements of concentration and mass flow of SO₂, NO_x, CO
- concentration measurements of CO₂, O₂
- concentration and mass flow measurements of OWO
- sampling for mass concentration determination of PCDD/PCDF and dioxin type PCB
- sampling for concentration determination of (As; Cd; Cr; Co; Cu; Mn; Ni; Pb; Sb; Tl; V)
- sampling for concentration determination of Hg
- sampling and determination of concentration and mass flow of HCl
- sampling and determination of concentration and mass flow of HF
- sampling for determining the concentration of individual gaseous organic compounds
- calibration of Automated Monitoring systems,
- QAL2 procedure
- annual performance test of Automated Monitoring Systems, AST procedure
- noise measurement from machinery, installations and industrial plants

Chorzów, June 26th 2025
Our ref. No.: PW/62/06/25

Report No PW/62/06/25

on concentration measurements of PCDDs/PCDFs and dioxins-like PCBs emitted into environment from flue gas channel located at UAB GREN KLAIPEDA, Kretainio g. 3 LT-94103, Klaipeda, Lithuania.

Client name and address:

UAB "GREN KLAIPEDA"

Kretainio g. 3,
LT-94103 Klaipeda

Developed by:

mgr Grzegorz Bortel

Calculation and data transfer checked by:

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1. PURPOSE AND SCOPE OF THE REPORT

Purpose of executed measurements was to determine the concentration and emission of *PCDDs/PCDFs and dioxins-like PCBs* emitted to environment from flue gas channel located at UAB GREN KLAIPEDA, Kretainio g. 3 LT-94103, Klaipeda, Lithuania

Measurements range:

- PCDD/DF emission and concentration,
- PCB emission and concentration.

The measurements were carried out in accordance with the sampling plan and the described sampling methods.

Operating parameters of the technological installation was obtained from the customer's representative.

2. BASIS OF MEASUREMENTS EXECUTION

The measurements were taken according to the Purchase Order dated May 13th 2025 – mail message.

3. MEASUREMENT TEAM

The measurements taken on May 27th 2025 were executed by the following team:

- Grzegorz Bortel specialist- measurement team leader,
- Karol Sodo specialist,
- Przemysław Zubel specialist.

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4. MEASUREMENT RESULTS SUMMARY

Below are presented measurement results summary, full measurement results are presented in chapter no 6, at page 9.

Concentration of the substance in the gas in the reference conditions O2 ref. 11%	PCDDF	ng/m3 ref.	0,0287
	PCB		0,0007
	PCDDF + PCB		0,0294
Emission limits	PCDDF	ng/m3 ref.	0,06
	PCB		0,02
	PCDDF + PCB		0,08

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5. DESCRIPTION OF THE MEASUREMENT METHOD**Measurement of the gas volumetric flow**

The flow rate was determined according to ISO Standard PN-EN ISO 16911-1:2013 „Stationary source emissions - Manual and automatic determination of velocity and volume flow rate in ducts - Part 1: Manual reference method". Gravimetric dust monitor type Megasystem APIS X-1 and type "S" Pitot tube were used for the measurements. Measurement is accredited.

Accreditation range: differential pressure: > 5 Pa

Measurement O₂ content

The concentration of O₂ was determined using gas analyzer HORIBA PG-350E-HR equipped with testing probe 1500 mm long. The measurements were taken according to the procedure described in measurement unit as well as to Polish Standard PN-EN 14789:2017 "Stationary source emissions - Determination of volume concentration of oxygen O₂ - Reference method - Paramagnetism". Measurement is accredited.

Accreditation range: O₂ content: 1,5-21%

Measurement CO₂ content

The concentration of CO₂ was determined using gas analyzer HORIBA PG-350E-HR equipped with testing probe 1500 mm long. The measurements were taken according to the procedure described in measurement unit as well as to Standard ISO 10396:2007 "Stationary Source Emissions - Sampling For The Automated Determination Of Gas Concentrations ". Measurement is accredited.

Accreditation range: CO₂ content: 0,1-20%

Measurement moisture content

Moisture content was determined using condensation-absorption method. The measurements were taken according to Polish Standard PN-EN 14790:2017. Measurement is accredited.

Accreditation range: H₂O content: 29-250 g/m³

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PCDDs/PCDFs and dioxins-like PCBs sampling and determination

PCDD/DF samples were taken according to the requirements of Polish Standard PN-EN 1948-1:2006 „ Stationary source emissions - Determination of mass concentration of PCDDs/PCDFs and dioxin-type PCBs - Part 1: Sampling of PCDDs/PCDFs”.

PCB samples were taken according to the requirements of Polish Standard PN-EN 1948-4:2014-03 „ Stationary source emissions - Determination of mass concentration of PCDDs/PCDFs and dioxin-type PCBs - Part 4: Sampling and analysis dioxin-like PCBs”.

The three stages of PCDD/DF and PCBs concentration and emission determination:

Stage I - sampling

For the determination of mass concentration of PCDD/DF and PCBs proper sampling plays important role that affects following stages of the testing. The sampling were performed by means of the filtration and condensation method using PCDD/DF and PCBs sampling system conformed to European Standard PN-EN 1948-1:2006 and PN-EN 1948-4:2014-03.

The following page shows the schematic diagram of the sampling system.

Stage II - laboratory analysis

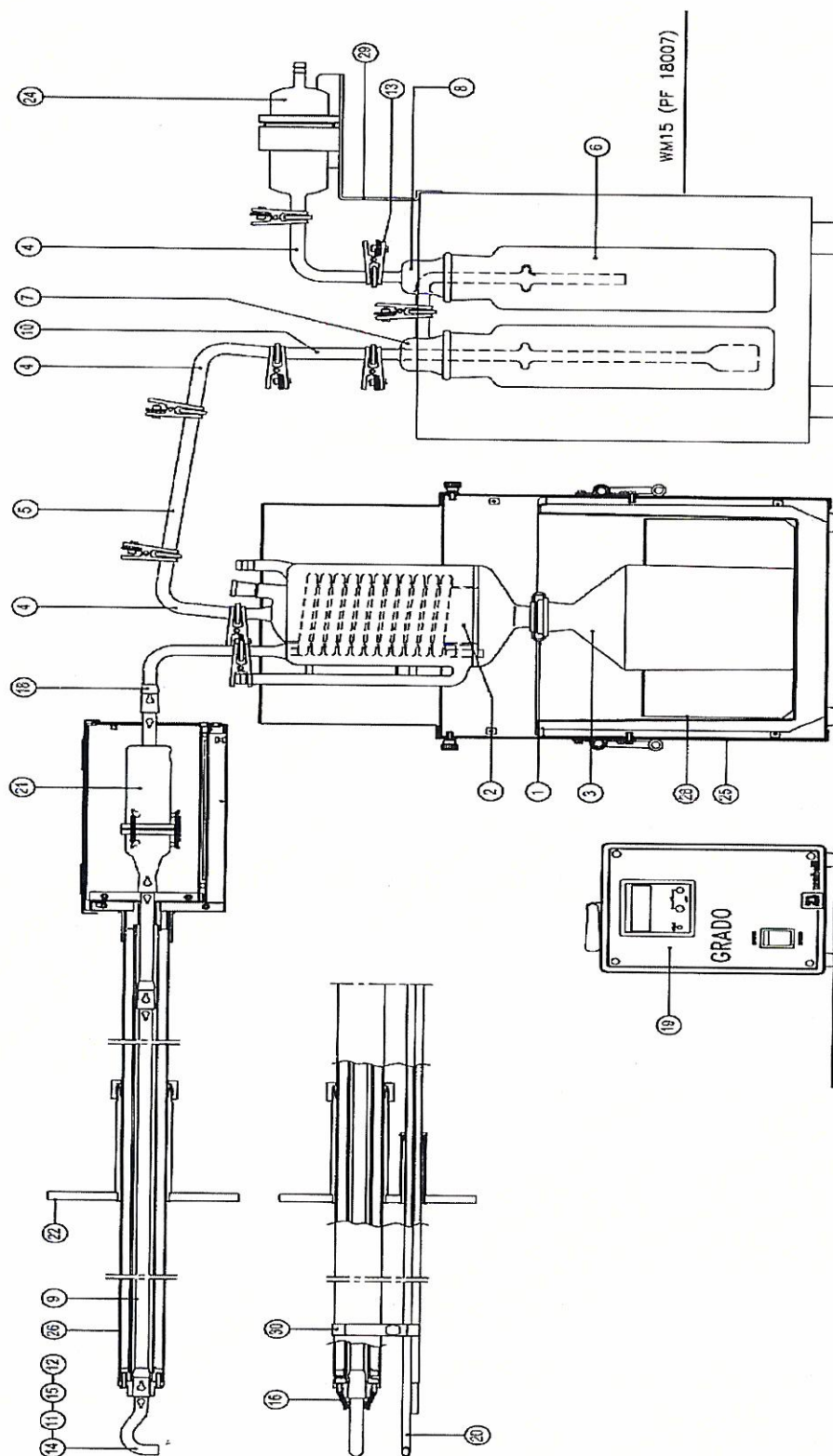
The samples were analysed at the ALS Czech Republic, s.r.o accredited laboratory following the CSN EN 1948-2,3,4 methodology: The determination of polychlorinated dibenzo-p-dioxine, dibenzofurans in emission samples with the method of isotop dillution using HRGC/HRMS.

The dioxin and furans analyses were conducted at the ALS Czech Republic, s.r.o. Laboratory, specifically accredited for the test by the Český Institut Pro Akreditaci, o.p.s. , Nr L 1163.

Stage III - development and the results and discussion

The last stage includes results collection from the previous stages, emission calculation and PCDD/DF and PCBs concentration as well as comparison to the standards in force.

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Opis:

1. ferrule
2. cooler
- 5,10. aspiration path - tubes
13. clamp
20. Pitot tube „S” - type
25. cooler casing

3. condensation pot
6-8. scrubbers
16. holding springs
21. filter casing
26. heated probe

- 4,18. aspiration path - elbows
9. aspiration path - probe tube
17. aspiration controller
22. yoke
28. cooler coil

- 11,12,14,15. – aspiration endings
19. temperature controller
24. gas dryer
29.30. support

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6. MEASUREMENT RESULTS

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- 1) Plant or unit name: **Combined Heat and Power Plant¹⁾**
 2) Flue gases cleaning unit: **ALSTOM NID flue gas cleaning solution (bag filters, activate carbon, ammonia solution, hydrated lime)¹⁾**
 3) Emission source load during measurements: **96,6 MW**
 4) Fuel type or material mass flow in process: **municipal waste, industrial waste; 29 t/h**
 5) Location of sampling and measurements: **in duct, after flue gases cleaning unit**

Measurement reference number			27-05-02			
Date of measurement			27.05.2025			
Measurement time range			16:16-22:17			
Scope of test			Unit	Results	Uncertainty +/-	Method
Meteorological conditions	Atmospheric pressure		hPa	1013,1		PN-Z-04030-7:1994
	Air temperature		oC	15		
Measurement plane	Diameter		m	2,20		
	Area		m2	3,7994		
Stack gas parameters	Temperature		oC	53		
	Static pressure		Pa	8		
	Differential pressure		Pa	207		
	Gas moistness grade X		kg/kg	0,108		
	Average velocity		m/s	16,0		
	Chemical composition	O2	%	7,5	0,2	PN-EN 14789:2017
		CO2	%	11,5	0,6	ISO 10396:2007
	Wet gas density during testing		kg/m3	1,058		PN-EN 14790:2017
	Gas density in normal conditions		kg/m3 N	1,263		PN-EN 14790:2017
	Gas density in conventional conditions		kg/m3 U	1,346		PN-EN 14790:2017
Concentration in the gas at measurement conditions		ng/m3	0,0305	0,0094		PN-EN 1948:2006
PCB*			0,0007	0,0002	PN-EN 1948—4:2014-03	
PCDDF*+PCB*			0,0312	0,0096		
Concentration in the gas at normal conditions	PCDDF*		ng/m3 N	0,0328	0,0102	PN-EN 1948:2006
	PCB*			0,0008	0,0002	PN-EN 1948—4:2014-03
	PCDDF*+PCB*			0,0336	0,0104	
Concentration of the substance in the gas in the standard conditions	PCDDF*		ng/m3 U	0,0388	0,0120	PN-EN 1948:2006
	PCB*			0,0009	0,0003	PN-EN 1948—4:2014-03
	PCDDF*+PCB*			0,0397	0,0123	
Concentration of the substance in the gas in the reference conditions O2 ref. 11%	PCDDF*		ng/m3 ref.	0,0287	0,0089	PN-EN 1948:2006
	PCB*			0,0007	0,0002	PN-EN 1948—4:2014-03
	PCDDF*+PCB*			0,0294	0,0091	
Gas volume flow	measurement conditions		m3/h	219119	27554	PN-EN ISO 16911-1:2013
	normal conditions		m3N/h	183530	23079	
	conventional conditions		m3U/h	155455	19549	
	conventional conditions O2 ref. 11%		m3ref./h	210108	27032	
The emission obtained by measuring	PCDDF*		ng/h	6031,67	2015,80	PN-EN 1948:2006
	PCB*			139,91	46,76	PN-EN 1948—4:2014-03
	PCDDF*+PCB*			6171,58	2062,55	

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Emission limits	PCDDF*	ng/m3 ref.	0,06	
	PCB*		0,02	
	PCDDF*+PCB*		0,08	
Transgerssion	PCDDF*	ng/m3 ref.	-	
	PCB*		-	
	PCDDF*+PCB*		-	

* - the results obtained from the subcontractor (accredited)

¹)-information obtained from the client

Notes:

Normal conditions designate the temperature of 273 K and pressure of 101,3kPa, defining normal cubic meter m³N. The conventional conditions designate the temperature of 273K, pressure of 101,3 kPa and dry gases (steam contents less than 5 g/kg of flue gas), defining conventional cubic meter, m3U

The specified expanded uncertainty comes from standard uncertainty multiplied by expansion coefficient k = 2, which provides 95% level of confidence for normal distribution. Uncertainty takes into account the sampling and analysis.

Registry of samples delivered to the laboratory: P/133/05/25, P/134/05/25

Date of delivery to the laboratory: 29.05.2025

Date of analysis: 29.05 - 12.06.2025

Field blanks:

ID/ number of sample	Type of substance	The criterion of the blank [ng/m³] 11%O₂	The value of the blank [ng/m³] 11% O₂	Result [+/-]
P/134/05/25	PCDD/DF	0,006	< 0,0013	+
	PCB	0,002	< 0,0009	+

Work parameters of measurement system:**PCDD/DF (PN-EN 1948:2006) and PCB (PN-EN 1948-4+A1:2013)::**

sampling method:	condensation - adsorption method		
filter paramethers:	19 x 90 mm, filter efficiency: 99,998 %		
sampling train:	2 measurement axis		
oxygen reference :	11 %		
time of dioxins and furans measerument:	16:16 – 22:17 (360,1 min)		
nozzle diameter:	6	mm	
probe temperature:	117	°C	
scrubbers temperature	5	°C	
aspired gas volume	7,897	m³	
average sampling flow	21,9	l/min	
izokinetic ratio:	103,6	%	
leak test:	+ / +		
gas meter temperature	24,0	°C	
gas meter pressure	0	bar	
spiking pattern:	filter surface		
absorption solution:	100 ml H₂O dest. + 50 ml 2-etoksyetanol		
recovery:	82 %	¹³ C ₁₂ -1,2,3,7,8-PECDF,	/>50%/
	84 %	¹³ C ₁₂ -1,2,3,7,8,9-HxCDF,	/>50%/
	79 %	¹³ C ₁₂ -1,2,3,7,8,9 HpCDF.	/>50%/

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	99 %	¹³ C ₁₂ -2,3,4,4'-tetraCB (60),	/>50%/
	69 %	¹³ C ₁₂ -2,3,3',4,5,5'-hexaCB (159).	/>50%/
PCDD/DF TEQ sample mass:	0,28	ng	
PCB TEQ sample mass:	0,0066	ng	

H₂O (PN-EN 14790:2017)

sampling train:	2 measurement axis
sampling equipment:	titanium sampling train
	heated probe 2,0 m long
	sampling pump: SKC
cartridge:	H ₂ O content set No 1
number of samplings:	1
sampling time:	60,1 min
sampling volume:	2,0 l/min
H ₂ O maas:	14,5 g
absorption efficiency:	99,2 %

O₂ paramagnetic (PN-EN 14789:2017):

Range :	0 – 5 % []	
	0 – 10 % [X]	
	0 – 25 % []	
Calibration gas:	O ₂ – 8,001% [X]	R/07/W
	O ₂ – 18,85% []	R/12/W
	N ₂ – 99,99% [X]	R/17/
Sampling train:	2 measurement axis	
Sampling time/ average time:	360 min / 1 min	

O ₂ concentration measurement (paramagnetic):		HORIBA PG-350E-HR			
check operation		unit	result	criterion	result +/-
„0” after adjustment, without sampling train		%	0,03	± 0,1 [%]*	+
„0” after adjustment, with sampling train	before measurement	%	0,09	± 0,5 [%]**	+
	after measurement	%	0,10	± 0,5 [%]**	+
„Span” after adjustment with sampling train /standard 8,001 % R/07/W analyzer range 10%/	before measurement	%	8,05	± 0,5 [%]**	+
	after measurement	%	7,95	± 0,5 [%]**	+
	before measurement time T90	% sec.	7,2 23	> 7,2 [%] < 200 sec.	----- +

Test Report No PW/62/06/25**7. MEASUREMENT DEVICES**

Name of measuring device	POBORNIK IZOKINETYCZNY
Type of measuring device	X1-APIS PLUS nr 0192
Calibration Certificate No, Date of issue	2054/696/LA/T/2024 09.10.2024 r. G-401/24-254/24 07.10.2024 r. 1074/409/LA/P/2024 08.10.2024 r.
Issued by	PLUM Sp. z o.o. KLEOSIN ZAP BESTWINKA

Name of measuring device	HORIBA
Type of measuring device	PG-350E-HR
Calibration Certificate No, Date of issue	79/1/AW/25 13.03.2025 r.
Issued by	LABOSERWIS SP. Z O.O. KATOWICE

Name of measuring device	aspiratory SKC
Type of measuring device	224-PCMTX4, 224-44MTX
Calibration Certificate No, Date of issue	n.d.
Issued by	n.d.

Name of measuring device	TEMPERATURA I CIŚNIENIE GAZOMIERZA
Type of measuring device	---
Calibration Certificate No, Date of issue	T220/PMT/2024 02.10.2024 r. 245/1/C/24 23.09.2024 r.
Issued by	CZACH-POMIAR Sp. z o.o. KATOWICE LABOSERWIS Sp. z o.o. KATOWICE

Test Report No PW/62/06/25**8. ANALYSIS RESULTS****Attachment no. 3 to the Certificate of Analysis for work order PR2568767**

Sample:

P/133/05/25

ALS SAMPLE ID: PR2568767/ 001

Measurement results PCBs:

Sample: P/133/05/25					
				Final extract [µl]:	250
				Injection volume [µl]:	4
				Acquisition date [d.m.y h:m]:	7.6.25 10:47
PCBs	Result [ng/sample]	Limit of Detection [ng/sample]	Limit of Quantification [ng/sample]	¹ WHO-TEFs	WHO-TEQ Upperbound [ng/sample]
PCB #77	< 0.093	0.041	0.093	0.0001	0.0000093
PCB #81	< 0.042	0.042	0.14	0.0003	0.000013
PCB #126	< 0.046	0.046	0.15	0.1	0.0046
PCB #169	< 0.066	0.066	0.22	0.03	0.002
PCB #105	< 0.13	0.047	0.13	0.00003	0.0000038
PCB #114	< 0.044	0.044	0.15	0.00003	0.0000013
PCB #118	< 0.27	0.041	0.27	0.00003	0.000008
PCB #123	< 0.041	0.041	0.14	0.00003	0.0000012
PCB #156	< 0.063	0.063	0.21	0.00003	0.0000019
PCB #157	< 0.065	0.065	0.22	0.00003	0.000002
PCB #167	< 0.092	0.092	0.31	0.00003	0.0000028
PCB #170	< 0.1	0.1	0.34	-	0
PCB #180	< 0.1	0.1	0.34	-	0
PCB #189	< 0.1	0.1	0.34	0.00003	0.0000031
WHO-TEQ from quantified PCBs - "Lowerbound"					0
WHO-TEQ from PCBs - "Mediumbound"					0.0033
Maximum possible WHO-TEQ - "Upperbound"					0.0066
PCBs	Result [ng/sample]	Limit of Detection [ng/sample]	Limit of Quantification [ng/sample]	Indicator PCB Lowerbound [ng/sample]	Indicator PCB Upperbound [ng/sample]
PCB #28	< 1.4	0.062	1.4	0	1.4
PCB #52	< 0.89	0.069	0.89	0	0.89
PCB #101	< 0.48	0.055	0.48	0	0.48
PCB #118	< 0.27	0.041	0.27	0	0.27
PCB #138	< 0.28	0.082	0.28	0	0.28
PCB #153	< 0.38	0.07	0.38	0	0.38
PCB #180	< 0.1	0.1	0.34	0	0.1
Indicator PCB6 - "Lowerbound"				0	
Maximal possible Indicator PCB6 - "Upperbound"					3.6
Indicator PCB7 - "Lowerbound"				0	
Maximal possible Indicator PCB7 - "Upperbound"					3.8

¹WHO 2005 TEF according to Van den Berg et al: Toxicological Sciences Advance Acces, 7 July 2006

Limits of quantification are defined on the base of blank level.

The limit of detection is defined as the amount of analyte producing a signal with S/N≥3.

The value of the detection limit is mentioned as the actual value at the acquisition date.

Measurement uncertainty is expressed as a double (k=2) relative standard deviation (RSD%), and corresponds to 95% confidence interval.

Estimation of uncertainty of each PCB congener is 30% , total WHO-TEQ and PCB6/PCB7 is 20%. These values were ensured by analyses of certified reference material under conditions of internal reproducibility.

Results marked "<" are lower than the limit of detection or quantification.

"Lowerbound" and "Upperbound" are levels defined in Regulation 2017/644 and EN 1948-4.

"Mediumbound" is level defined in Regulation 2017/644.

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Attachment no. 3 to the Certificate of Analysis for work order PR2568767

Sample: P/133/05/25		Final extract [µl]:	250
		Injection volume [µl]:	4
		Acquisition date (d.m.y h:m):	7.6.25 10:47
Sampling standard	Recovery [%]	Acceptable range [%]	Rec. in range?
13C12-2,3,4,4'-tetraCB (60)	99	> 50	YES
13C12-2,3,3',4,5,5'-hexaCB (159)	69	> 50	YES

Test Report No PW/62/06/25**Attachment no. 1 to the Certificate of Analysis for work order PR2568767**

Sample:

P/133/05/25

ALS SAMPLE ID: PR2568767/ 001

Measurement results PCDD/Fs:

Sample: P/133/05/25			Final extract [µl]: 60		
			Injection volume [µl]: 4		
			Acquisition date [d.m.y h:m]: 7.6.25 9:31		
2,3,7,8-PCDD/Fs	Result [ng/sample]	Limit of Detection [ng/sample]	Limit of Quantification [ng/sample]	I-TEFs	I-TEQ Upperbound [ng/sample]
2,3,7,8-TCDD	< 0.00074	0.00074	0.0015	1	0.00074
1,2,3,7,8-PeCDD	0.021	0.0015	0.003	0.5	0.01
1,2,3,4,7,8-HxCDD	0.033	0.0028	0.0056	0.1	0.0033
1,2,3,6,7,8-HxCDD	0.085	0.0028	0.0056	0.1	0.0085
1,2,3,7,8,9-HxCDD	0.039	0.0028	0.0056	0.1	0.0039
1,2,3,4,6,7,8-HpCDD	0.53	0.0018	0.0036	0.01	0.0053
OCDD	0.21	0.002	0.004	0.001	0.00021
2,3,7,8-TCDF	0.026	0.00085	0.0017	0.1	0.0026
1,2,3,7,8-PeCDF	0.091	0.0015	0.0031	0.05	0.0046
2,3,4,7,8-PeCDF	0.2	0.0015	0.0031	0.5	0.098
1,2,3,4,7,8-HxCDF	0.29	0.0083	0.017	0.1	0.029
1,2,3,6,7,8-HxCDF	0.39	0.0083	0.017	0.1	0.039
1,2,3,7,8,9-HxCDF	< 0.017	0.0083	0.017	0.1	0.0017
2,3,4,6,7,8-HxCDF	0.57	0.0083	0.017	0.1	0.057
1,2,3,4,6,7,8-HpCDF	1.8	0.0014	0.0027	0.01	0.018
1,2,3,4,7,8,9-HpCDF	0.069	0.0014	0.0027	0.01	0.00069
OCDF	0.097	0.0023	0.0046	0.001	0.000097
I-TEQ from quantified 2,3,7,8-PCDD/Fs - "Lowerbound"					0.28
I-TEQ from 2,3,7,8-PCDD/Fs - "Mediumbound"					0.28
Maximum possible I-TEQ - "Upperbound"					0.28
PCDDs	Result [ng/sample]	PCDFs		Result [ng/sample]	
Tetra-CDDs	0.097	Tetra-CDFs		0.86	
Penta-CDDs	0.47	Penta-CDFs		2.5	
Hexa-CDDs	1	Hexa-CDFs		3.9	
Hepta-CDDs	1.1	Hepta-CDFs		2.3	
OCDD	0.21	OCDF		0.097	

¹I-TEF according to NATO.

Limits of quantification are defined as double of the detection limits.

The limit of detection is defined as the amount of analyte producing a signal with $S/N \geq 3$.

The value of the detection limit is mentioned as the actual value at the acquisition date.

Measurement uncertainty is expressed as a double ($k=2$) relative standard deviation (RSD%), and corresponds to 95% confidence interval.

Estimation of uncertainty of each 2,3,7,8-PCDD/F congener is 30% and total I-TEQ is 20%.

These values were ensured by analyses of certified reference material under conditions of internal reproducibility.

Results marked with "<" are below limit of detection or quantification.

"Lowerbound" and "Upperbound" are levels defined in Regulation 2017/644 and EN 1948-4.

"Mediumbound" is levels defined in Regulation 2017/644.

Test Report No PW/62/06/25**Attachment no. 1 to the Certificate of Analysis for work order PR2568767**

Sample:

P/133/05/25

Standards recovery:

Sample: P/133/05/25					
				Final extract [µl]:	60
				Injection volume [µl]:	4
				Acquisition date [d.m.y h:m]:	7.6.25 9:31
Extraction standard	Recovery	Acceptable range [%]		Accept. rec. with respect to	
PCDDs	[%]	Basic	Extended	basic range	extended range
13C12 - 2,3,7,8-TCDD	74	50 - 130	30 - 150	YES	-
13C12 - 1,2,3,7,8-PeCDD	75	50 - 130	30 - 150	YES	-
13C12 - 1,2,3,4,7,8-HxCDD	85	50 - 130	30 - 150	YES	-
13C12 - 1,2,3,6,7,8-HxCDD	79	50 - 130	30 - 150	YES	-
13C12 - 1,2,3,4,6,7,8-HpCDD	90	40 - 130	20 - 150	YES	-
13C12 - OCDD	78	40 - 130	20 - 150	YES	-
PCDFs					
13C12 - 2,3,7,8-TCDF	78	50 - 130	30 - 150	YES	-
13C12 - 2,3,4,7,8-PeCDF	74	50 - 130	30 - 150	YES	-
13C12 - 1,2,3,4,7,8-HxCDF	89	50 - 130	30 - 150	YES	-
13C12 - 1,2,3,6,7,8-HxCDF	67	50 - 130	30 - 150	YES	-
13C12 - 2,3,4,6,7,8-HxCDF	81	50 - 130	30 - 150	YES	-
13C12 - 1,2,3,4,6,7,8-HpCDF	88	40 - 130	20 - 150	YES	-
13C12 - OCDF	78	40 - 130	20 - 150	YES	-
Sampling standard	Recovery	Acceptable range		Rec. in range?	
	[%]	[%]			
13C12-1,2,3,7,8-PeCDF	82	> 50		YES	
13C12-1,2,3,7,8,9-HxCDF	84	> 50		YES	
13C12-1,2,3,4,7,8,9-HpCDF	79	> 50		YES	

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9. CERTIFICATE OF ACCREDITATION

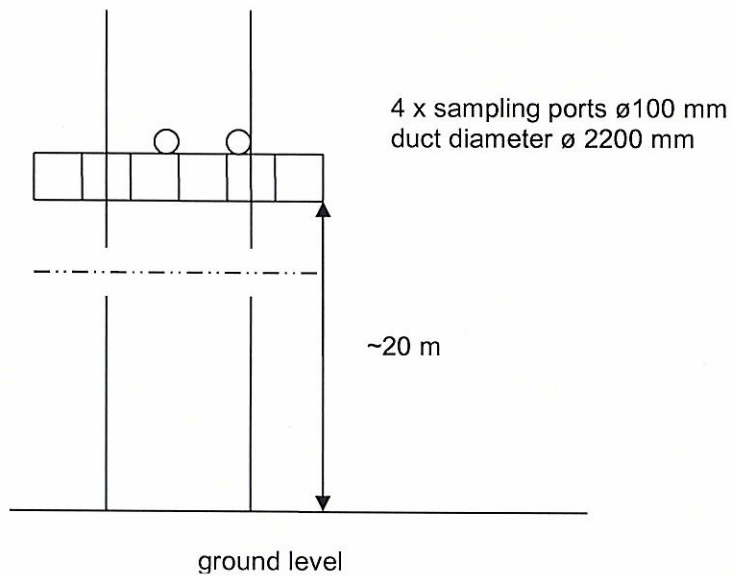
POLSKIE CENTRUM AKREDYTACJI
POLISH CENTRE FOR ACCREDITATIONSygnatariusz EA MLA
EA MLA SignatoryCERTYFIKAT AKREDYTACJI
LABORATORIUM BADAWCZEGO
ACCREDITATION CERTIFICATE OF TESTING LABORATORY
Nr AB 994

Potwierdza się, że: / This is to confirm that:

„PROFTECH” Sp. z o.o.
ul. Kurta Aldera 44, 41-506 Chorzówspełnia wymagania normy PN-EN ISO/IEC 17025:2018-02
meets requirements of the PN-EN ISO/IEC 17025:2018-02 standardAkredytowana działalność jest określona w Zakresie Akredytacji Nr AB 994
Accredited activity is defined in the Scope of Accreditation No AB 994Akredytacja pozostaje w mocy pod warunkiem przestrzegania
wymagań jednostki akredytującej określonych w kontrakcie Nr AB 994
This accreditation remains in force provided the Laboratory observes
the requirements of Accreditation Body defined in the Contract No AB 994Akredytacji udzielono dnia 30.01.2009 r.
Accreditation was granted on 30.01.2009DYREKTOR
POLSKIEGO CENTRUM AKREDYTACJI
LUCYNA GŁBORSKA

Warszawa, dnia 9 grudnia 2019 roku

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10. MEASUREMENT PLANE SCHEME

Approved by


DYREKTOR.....
Name and Signature
inż. Dariusz Guja

END OF REPORT