



Attachment no. 5 to the Certificate of Analysis for work order PR2258582

Sample:

NE 11

ALS SAMPLE ID: PR2258582/ 005

Measurement results PCDD/Fs:

Sample:		NE 11			
Sample volume [ml]: 960		Final extract [μ l]:		60	
		Injection volume [μ l]:		4	
		Acquisition date [d.m.y]:		14.06.2022	
2,3,7,8-PCDD/Fs	Result [pg/l]	Limit of Detection [pg/l]	Limit of Quantification [pg/l]	¹ I-TEFs	I-TEQ Upperbound [pg/l]
2,3,7,8-TCDD	< 0.69	0.69	1.4	1	0.69
1,2,3,7,8-PeCDD	< 1	1	2.1	0.5	0.52
1,2,3,4,7,8-HxCDD	< 4.8	4.8	9.6	0.1	0.48
1,2,3,6,7,8-HxCDD	< 3.9	3.9	7.7	0.1	0.39
1,2,3,7,8,9-HxCDD	< 3.9	3.9	7.7	0.1	0.39
1,2,3,4,6,7,8-HpCDD	< 1.3	1.3	2.6	0.01	0.013
OCDD	< 1.7	1.7	3.4	0.001	0.0017
2,3,7,8-TCDF	< 0.6	0.6	1.2	0.1	0.06
1,2,3,7,8-PeCDF	< 2.3	2.3	4.7	0.05	0.12
2,3,4,7,8-PeCDF	< 2.3	2.3	4.5	0.5	1.1
1,2,3,4,7,8-HxCDF	< 1.6	1.6	3.2	0.1	0.16
1,2,3,6,7,8-HxCDF	< 2.2	2.2	4.3	0.1	0.22
1,2,3,7,8,9-HxCDF	< 4.2	4.2	8.3	0.1	0.42
2,3,4,6,7,8-HxCDF	< 2.2	2.2	4.4	0.1	0.22
1,2,3,4,6,7,8-HpCDF	< 1.7	1.7	3.5	0.01	0.017
1,2,3,4,7,8,9-HpCDF	< 1.5	1.5	3.1	0.01	0.015
OCDF	< 2.1	2.1	4.3	0.001	0.0021
I-TEQ from quantified 2,3,7,8-PCDD/Fs - "Lowerbound"					0
I-TEQ from 2,3,7,8-PCDD/Fs -, "Mediumbound"					2.4
Maximum possible I-TEQ - "Upperbound"					4.8
PCDDs	Result [pg/l]	PCDFs	Result [pg/l]		
Tetra-CDDs	< 15	Tetra-CDFs	< 23		
Penta-CDDs	< 14	Penta-CDFs	< 65		
Hexa-CDDs	< 48	Hexa-CDFs	< 26		
Hepta-CDDs	< 2.6	Hepta-CDFs	< 7		
OCDD	< 1.7	OCDF	< 2.1		
Total PCDDs	< 82	Total PCDFs	< 120		

¹I-TEF according to NATO.

The limit of quantification is defined as double of the detection limit.

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

The value of 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 TEQ is 20%.

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

Results marked "<" are bellow 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.