



Attachment no. 1 to the Certificate of Analysis for work order PR2258582

Sample:

NE 3

ALS SAMPLE ID: PR2258582/ 001

Measurement results PCDD/Fs:

Sample:		NE 3			
Sample volume [ml]: 850		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	< 0.38	0.38	0.75	1	0.38
1,2,3,7,8-PeCDD	< 1.4	1.4	2.8	0.5	0.7
1,2,3,4,7,8-HxCDD	< 4.6	4.6	9.2	0.1	0.46
1,2,3,6,7,8-HxCDD	< 3	3	6	0.1	0.3
1,2,3,7,8,9-HxCDD	< 3	3	6.1	0.1	0.3
1,2,3,4,6,7,8-HpCDD	< 1.6	1.6	3.1	0.01	0.016
OCDD	< 1.4	1.4	2.9	0.001	0.0014
2,3,7,8-TCDF	< 0.92	0.92	1.8	0.1	0.092
1,2,3,7,8-PeCDF	< 1.5	1.5	3	0.05	0.075
2,3,4,7,8-PeCDF	< 2	2	4	0.5	0.99
1,2,3,4,7,8-HxCDF	< 1.8	1.8	3.5	0.1	0.18
1,2,3,6,7,8-HxCDF	< 2.4	2.4	4.9	0.1	0.24
1,2,3,7,8,9-HxCDF	< 2.9	2.9	5.7	0.1	0.29
2,3,4,6,7,8-HxCDF	< 2.9	2.9	5.7	0.1	0.29
1,2,3,4,6,7,8-HpCDF	< 19	9.5	19	0.01	0.19
1,2,3,4,7,8,9-HpCDF	< 22	22	44	0.01	0.22
OCDF	< 1.8	1.8	3.6	0.001	0.0018
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"					4.7
PCDDs	Result [pg/l]	PCDFs	Result [pg/l]		
Tetra-CDDs	< 8.3	Tetra-CDFs	< 35		
Penta-CDDs	< 20	Penta-CDFs	< 42		
Hexa-CDDs	< 46	Hexa-CDFs	< 28		
Hepta-CDDs	< 3.1	Hepta-CDFs	< 38		
OCDD	< 1.4	OCDF	< 1.8		
Total PCDDs	< 78	Total PCDFs	< 150		

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 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.