

Attachment no. 2 to the Certificate of Analysis for work order ST2413125

Sample: 24SE2_0-0,2

ALS SAMPLE ID: ST2413125/ 002

Measurement results PCDD/Fs:

Sample:		24SE2_0-0,2			
		Final extract [μ l]:	75		
Sample weight [g]:	3.611	Injection volume [μ l]:	4		
Dry matter [%]:	71.8	Acquisition date [d.m.y]:	20.04.2024		
2,3,7,8-PCDD/Fs	Result [ng/kg dw]	Limit of Detection [ng/kg dw]	Limit of Quantification [ng/kg dw]	¹ WHO-TEFs	WHO-TEQ Upperbound [ng/kg dw]
2,3,7,8-TCDD	< 2.3	1.1	2.3	1	2.3
1,2,3,7,8-PeCDD	< 2.3	1.2	2.3	1	2.3
1,2,3,4,7,8-HxCDD	< 1.1	1.1	2.3	0.1	0.11
1,2,3,6,7,8-HxCDD	< 1.5	0.74	1.5	0.1	0.15
1,2,3,7,8,9-HxCDD	< 0.82	0.82	1.6	0.1	0.082
1,2,3,4,6,7,8-HpCDD	< 18	9.1	18	0.01	0.18
OCDD	< 76	38	76	0.0003	0.023
2,3,7,8-TCDF	19	0.3	0.6	0.1	1.9
1,2,3,7,8-PeCDF	6.3	0.61	1.2	0.03	0.19
2,3,4,7,8-PeCDF	9	0.67	1.3	0.3	2.7
1,2,3,4,7,8-HxCDF	3.2	0.92	1.8	0.1	0.32
1,2,3,6,7,8-HxCDF	3.4	1	2.1	0.1	0.34
1,2,3,7,8,9-HxCDF	< 1.2	1.2	2.4	0.1	0.12
2,3,4,6,7,8-HxCDF	2.7	1.1	2.2	0.1	0.27
1,2,3,4,6,7,8-HpCDF	30	1.6	3.1	0.01	0.3
1,2,3,4,7,8,9-HpCDF	< 2.8	2.8	5.6	0.01	0.028
OCDF	20	2.2	4.5	0.0003	0.006
WHO-TEQ from quantified 2,3,7,8-PCDD/Fs -"Lowerbound"					6.0
WHO-TEQ from 2,3,7,8-PCDD/Fs -,"Mediumbound"					8.7
Maximum possible WHO-TEQ -"Upperbound"					11
PCDDs	Result [ng/kg dw]	PCDFs	Result [ng/kg dw]		
Tetra-CDDs	< 25	Tetra-CDFs	280		
Penta-CDDs	18	Penta-CDFs	73		
Hexa-CDDs	11	Hexa-CDFs	29		
Hepta-CDDs	< 29	Hepta-CDFs	50		
OCDD	< 76	OCDF	20		
Total PCDDs	29	Total PCDFs	450		

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

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 WHO-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.