



Marchwood Scientific Services

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CERTIFICATE OF ANALYSIS

MSSL reference: 21-20720

Report date: 03-03-2021

Customer: EnviroDat Ltd
Cutbush Commercial
Cutbush Lane East
Reading
RG2 9AF

Customer contact: labresults@envirodat.org.uk

Customer reference: R21146

Customer purchase order: -

Customer sampling date: 19-02-2021

Date received: 24-02-2021

Analysis started: 25-02-2021

Analysis complete: 02-03-2021

Conforming: Yes

This report shall not be reproduced except when in full without approval of the laboratory.

Results only relate to the items tested. Results apply to the samples as received.

Conformance is contingent upon accurate information being provided by the customer, and customer compliance with relevant sample handling and storage conditions prior to receipt at the laboratory.

All opinions and interpretations expressed within this report are outside MSSL's scope of accreditation.

Accreditation Key:

Y : ISO 17025 UKAS

N : Non Accredited

M: MCERTS

(S): Subcontracted

Notes:

Reported by: Saber Chaudhry
Position: Senior Scientist

Approved by: Peter Allen
Position: General Manager
For/on behalf of Marchwood Scientific Services Ltd



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Marchwood Scientific Services

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Analysis of gas sample(s) from tedlar gas bag(s) by GC/TCD/FID

MSSL sample ref:	21-20720-001
Customer sample ref:	5 ltr sample bag

Determinand	Units	LOD	UKAS	
Hydrogen sulphide	% _(v/v)	0.001	N	<0.001

Analysis of siloxanes from charcoal tube(s) (226-01) by GC/MS (solvent desorption)

MSSL sample ref:	21-20720-001
Customer sample ref:	5 ltr sample bag
Customer sampling volume (L):	1

Determinand	Units	LOD	UKAS	
Hexamethyldisiloxane	µg	0.5	Y	5.4
	mg/m ³	Calc.	N	5.4
Hexamethylcyclotrisiloxane	µg	0.5	Y	1.8
	mg/m ³	Calc.	N	1.8
Octamethyltrisiloxane	µg	0.5	Y	<0.5
	mg/m ³	Calc.	N	<0.5
Octamethylcyclotetrasiloxane	µg	0.5	Y	14
	mg/m ³	Calc.	N	14
Decamethyltetrasiloxane	µg	0.5	Y	<0.5
	mg/m ³	Calc.	N	<0.5
Decamethylcyclopentasiloxane	µg	0.5	Y	2.6
	mg/m ³	Calc.	N	2.6
Dodecamethylpentasiloxane	µg	0.5	Y	<0.5
	mg/m ³	Calc.	N	<0.5
Dodecamethylcyclohexasiloxane	µg	0.5	Y	<0.5
	mg/m ³	Calc.	N	<0.5

Analysis of trace gas suite from S/S dual bed (Tenax/Sulficarb) thermal desorption sampling tube(s) by TD-GC/MS

MSSL sample ref:	21-20720-001
Customer sample ref:	5 ltr sample bag
Volume sampled (L):	0.3

Determinand	Units	LOD	UKAS	
Vinyl Chloride	ng	10	N	130
	µg	0.010	N	0.130
	mg/m ³	Calc.	N	0.43
	µg/m ³	Calc.	N	433
1,3-Butadiene	ng	10	N	<10
	µg	0.010	N	<0.010
	mg/m ³	Calc.	N	<0.033
	µg/m ³	Calc.	N	<33
Methanethiol	ng	50	N	<50
	µg	0.050	N	<0.050
	mg/m ³	Calc.	N	<0.17
	µg/m ³	Calc.	N	<167
Chloroethane	ng	10	N	74
	µg	0.010	N	0.074
	mg/m ³	Calc.	N	0.25
	µg/m ³	Calc.	N	247
1-Pentene	ng	20	N	260
	µg	0.020	N	0.26
	mg/m ³	Calc.	N	0.87
	µg/m ³	Calc.	N	867
Furan ⁽¹⁾	ng	10	N	1100
	µg	0.010	N	1.1
	mg/m ³	Calc.	N	3.7
	µg/m ³	Calc.	N	3667
Ethanethiol	ng	50	N	93
	µg	0.050	N	0.093
	mg/m ³	Calc.	N	0.31
	µg/m ³	Calc.	N	310
1,1-Dichloroethene	ng	5	N	7
	µg	0.005	N	0.007
	mg/m ³	Calc.	N	0.023
	µg/m ³	Calc.	N	23
Dimethylsulphide ⁽¹⁾	ng	10	N	13000
	µg	0.010	N	13
	mg/m ³	Calc.	N	43
	µg/m ³	Calc.	N	43333
DCM	ng	10	N	65
	µg	0.010	N	0.065
	mg/m ³	Calc.	N	0.22
	µg/m ³	Calc.	N	217
CS2 ⁽¹⁾	ng	10	N	1200
	µg	0.010	N	1.2
	mg/m ³	Calc.	N	4.0
	µg/m ³	Calc.	N	4000
trans-1,2-Dichloroethene	ng	5	N	<5
	µg	0.005	N	<0.005
	mg/m ³	Calc.	N	<0.017
	µg/m ³	Calc.	N	<17
1,1-Dichloroethane	ng	5	N	<5
	µg	0.005	N	<0.005
	mg/m ³	Calc.	N	<0.017
	µg/m ³	Calc.	N	<17

MSSL sample ref:	21-20720-001
Customer sample ref:	5 ltr sample bag

Determinand	Units	LOD	UKAS	
cis-1,2-Dichloroethene	ng	5	N	49
	µg	0.005	N	0.049
	mg/m ³	Calc.	N	0.16
	µg/m ³	Calc.	N	163
Propanethiol	ng	40	N	160
	µg	0.040	N	0.16
	mg/m ³	Calc.	N	0.53
	µg/m ³	Calc.	N	533
1,2-Dichloroethane	ng	5	N	61
	µg	0.005	N	0.061
	mg/m ³	Calc.	N	0.20
	µg/m ³	Calc.	N	203
Carbon tetrachloride	ng	5	N	<5
	µg	0.005	N	<0.005
	mg/m ³	Calc.	N	<0.017
	µg/m ³	Calc.	N	<17
Benzene ⁽¹⁾	ng	1	N	1500
	µg	0.001	N	1.5
	mg/m ³	Calc.	N	5.0
	µg/m ³	Calc.	N	5000
Trichloroethylene	ng	5	N	63
	µg	0.005	N	0.063
	mg/m ³	Calc.	N	0.21
	µg/m ³	Calc.	N	210
Butanethiol	ng	40	N	<40
	µg	0.040	N	<0.040
	mg/m ³	Calc.	N	<0.13
	µg/m ³	Calc.	N	<133
Dimethyldisulphide ⁽¹⁾	ng	10	N	2600
	µg	0.010	N	2.6
	mg/m ³	Calc.	N	8.7
	µg/m ³	Calc.	N	8667
Toluene ⁽²⁾	ng	5	N	5400
	µg	0.005	N	5.4
	mg/m ³	Calc.	N	18
	µg/m ³	Calc.	N	18000
Butyric acid	ng	10	N	25
	µg	0.010	N	0.025
	mg/m ³	Calc.	N	0.083
	µg/m ³	Calc.	N	83
Ethylbutyrate	ng	10	N	<10
	µg	0.010	N	<0.010
	mg/m ³	Calc.	N	<0.033
	µg/m ³	Calc.	N	<33
2-Butoxyethanol	ng	10	N	<10
	µg	0.010	N	<0.010
	mg/m ³	Calc.	N	<0.033
	µg/m ³	Calc.	N	<33
Styrene ⁽¹⁾	ng	5	N	1400
	µg	0.005	N	1.4
	mg/m ³	Calc.	N	4.7
	µg/m ³	Calc.	N	4667

⁽¹⁾ Result is above the instrument calibration range.

⁽²⁾ Result should be considered as a minimum value due to detector saturation.

Analysis of aldehyde(s) from DNPH-treated high-purity silica gel tube(s) (226-119) by HPLC

MSSL sample ref:	21-20720-001
Customer sample ref:	5 ltr sample bag
Sampling volume (L):	1

Determinand	Units	LOD	UKAS	
Acetaldehyde	µg	0.1	Y	0.2
	mg/m ³	Calc.	N	0.20
Formaldehyde	µg	0.1	Y	<0.1
	mg/m ³	Calc.	N	<0.10

Analysis of arsenic from charcoal tube(s) (226-01) by ICP/OES

MSSL sample ref:	21-20720-001
Customer sample ref:	5 ltr sample bag
Customer sampling volume (L):	1

Determinand	Units	LOD	UKAS	
Arsenic	µg	0.5	N	<0.5
	mg/m ³	Calc.	N	<0.50