

Permit Number: BR8212IK

Operator: Knauf Insulation Ltd

Installation: Knauf Insulation Ltd, Cwmbran

Form Number: Air2

Reporting of emissions to air for the period from 01/07/2021 to 31/12/2021

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
A0	Particulate matter	35 mg/Nm ³	Extractive sample	14.85 (3 spot sample average) [7]	BS EN 13284-1	14:18 – 16:22 29/11/2021	0.99
A1	Particulate matter	20 mg/Nm ³	Daily average	10.45	MCerts Approved	Jul –Dec 2021 94% Operational	-
A1	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/Nm ³	Daily average	175.95	MCerts Approved	Jul –Dec 2021 94% Operational	-
A1	Carbon Monoxide	100 mg/Nm ³	Extractive sample	0.31 (3 spot sample average)	BS EN 15058	16:00 – 17:32 24/11/2021	0.95
A1	Oxides of Sulphur (as SO ₂)	150 mg/Nm ³	Extractive sample	28.5 (3 spot sample average)	BS EN14791	12:40 – 14:20 24/11/2021	2.0
A1	Gaseous Fluorides (as HF)	5 mg/Nm ³	Extractive sample	0.17 (3 spot sample average)	ISO 15713	14:25–15:30 / 09:28-09:58 24-25/11/2021	0.011
A1	Gaseous Chlorides (as HCl)	10 mg/Nm ³	Extractive sample	0.10 (3 spot sample average)	BS EN1911	10:35 – 12:41 24/11/2021	0.0074
A1	Group 1 Metals	1 mg/Nm ³	Extractive sample	0.013 (3 spot sample average)	BS EN14385	10:10 – 12:55 25/11/2021	0.0026
A1	Group 2 Metals	2 mg/Nm ³	Extractive sample	0.038 (3 spot sample average)	BS EN14385	10:35 – 12:41 24/11/2021	0.0074
A3	Particulate matter	47 mg/Nm ³	Extractive sample	24.8 (3 spot sample average)	BS EN 13284-1	10:10 – 12:55 25/11/2021	1.4
A3	Phenol	9 mg/Nm ³	Extractive sample	<0.64 (3 spot sample average)	BS EN 13649	12:23 – 15:32 22/11/2021	0.13

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
A3	Formaldehyde	5 mg/Nm ³	Extractive sample	0.23 (3 spot sample average)	USEPA M316	09:43 – 12:04 23/11/2021	0.04
A3	Ammonia	60 mg/Nm ³	Extractive sample	36.5 (3 spot sample average)	ISO 21877	12:23 – 15:55 22/11/2021	0.028
A3	Volatile organic compounds	27 mg/Nm ³	Extractive sample	10.5 (3 spot sample average)	BS EN 12619	16:30 – 18:02 22/11/2021	0.48
A3	Amines	3 mg/Nm ³	Extractive sample	0.15 (3 spot sample average) [6]	CE/TS 13649	09:35 – 12:49 23/11/2021	0.013
A4 ^[5]	Particulate matter	30 mg/Nm ³	Extractive sample	No longer emission point	BS EN 13284-1		

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the authority is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

[5] Particulate matter for emission point A4 has not been recorded since 2017 when a new filtration system was installed on each raw material silo removing the emission point A4.

[6] Average of results of five amine group measurements.

[7] Two fiberisers in operation due to process issues therefore result has been scaled up accordingly for three fiberisers.

Signed
(Authorised to sign as representative of Operator)

Darren Christy

Date...20/01/2022.....