

Rīga Stradiņa University
HYGIENE AND OCCUPATIONAL DISEASE LABORATORY

Registered address: Dzirciema 16, Rīga LV-1007

Tel. 67409187, email: HASL@rsu.lv

TEST REPORT No. 2016 G/48

Customer:	SIA Baltic innovation holding, Atbrīvošanas Aleja 155c, Rēzekne, LV-4604
	/name, address/
Test subject/measurement name and identification:	Working environment (chemicals, dust)
Test subject/measurement location:	Kurzemes Prospekts 3c, Rīga
- site, address	
- date, time	07/03/2016, 15:20-16:40
- sampler type	filter: Millipore Mixed cellulose ester gridded 0.45 µm HAWG; Dräger tube;
- sample collection	using individual samplers Gilian 3500; Dräger Gas Detector Pump Accuro;
Sample testing location:	Rātsupītes 5, Rīga, LV-1067, tel. 67409187
Test subject/measurement: environment:	temperature: +16 °C; relative humidity: 38 %; atmospheric pressure: 785 mm Hg
- sampling site	
- testing site	temperature: +22 °C; relative humidity: 31 %; atmospheric pressure: 776 mm Hg
Method, technique:	Chemicals: Dust, NIOSH MAM Method 0500 Carbon oxide, ISO 8760:1990 Nitrogen dioxide, ISO 8761:1989
Measurement devices:	Chemical concentration measuring instrument: Analytical balances Kern 770-60 Dräger Gas Detector Pump;
Start of the test:	07/03/2016
End of the test:	22/03/2016
Sample No. in the lab:	340 - 350 G/48
Sampling/measurement sites/scheme:	Sampling sites were selected according to the customer's instructions.

Working process description at the sampling sites: the measurement was performed in the area where humans breathe, outdoors, in windless conditions. During operation of cutting device Breachpen.

TP 2016 G/48 1 (2)

Test results

Chemicals

Test procedure: Chemical samples were taken in accordance with the customer's instructions at the sites specified by the customer. Air samples were taken using individual samplers whose receiver filters were placed in the worker's breathing area or at a stationary workplace.

Workplace No.	Workplace description	Measured parameters, unit	Measurement result (average value $m \pm u^*$)	Required or recommended values (OEL ^{**})
1.	Simulation of the operation of cutting device Breachpen is performed. Air samples were taken in a prepared 1 m ³ room without air exchange. (Closed room.) The measurement was performed at a stationary workplace.	Dust (aluminosilicate), mg/m ³	1312.3 ± 196.8	2.0
		Nitrogen dioxide, mg/m ³	11.3 ± 2.2	2.0
		Carbon monoxide, mg/m ³	4.0 ± 0.6	20
2.	Simulation of the cutting action of cutting device Breachpen is performed holding the device in hand. The measurement was performed in the area where humans breath, outdoors, in windless conditions. Release of the smoke continued after the end of the Breachpen cutting device operation.	Dust (aluminosilicate), mg/m ³	11.1 ± 2.0	2.0

Notes:

* for the average values, expanded uncertainty is shown, which is determined as standard deviation multiplied by overlapping factor of 2 ensuring 95 % confidence level;

** OEL – occupational exposure limit values according to regulations of the Cabinet of Ministers No. 325 of 15 May 2007 “Health and safety requirements in contact with chemicals at workplace”.

The measurements and testing were performed by the RSU hygiene and occupational disease laboratory specialists: Arvis Kokins, Vitalijs Rodins.

Head of Laboratory: 31 March 2016

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TP 2016 G/48 2 (2)