

SGS Bulgaria Ltd. Laboratory

Product: Zeolite

Sample description: 2 kg Packaging: plastic

State of packaging: intact

Sample temperature: -

TEST REPORT

No. 2287 NA / 04.03.2015

SGS Bulgaria Ltd. Laboratory

ФК 08NA

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Order: VAL15-1001589

Test requested by: S&B INDUSTRIAL MINERALS Ltd.

Kurdjali, 97 Belomorski Blvd.

Date of reception of the sample: 23.02.2015 Customer's designation of the sample: -

Seal: -

Quantity of which the sample is representative" –

The sample is shaped by the customer.

The sample is destroyed during the analysis.

Indicator	Unit	Test results (Value, uncertainty)	Test method	Test conditions, test apparatus
1. Content of metals and non-metals				
Arsenic	mg/kg	<0.05*		
Mercury	mg/kg	<0.05*	ВЛМ 39:2009	Humidity 12%, ICP-OES
Cadmium	mg/kg	<0.05*		
Lead	mg/kg	27.1 ± 1.9		
2. Polychlorinated dibenzodioxins and di				
PCDDs, PCDFs	ng/kg	According to Annex Dioxins and dioxin-like compounds	EPA 1613:1994	

Comments on the result based on WHO 2005 TEFs:

ng WHO-PCDD/PCDF-TEQ/kg = 0.198

detection limit

NOTES:

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Testing conducted by:

Head of Laboratory:

(I. Gospodinova, P. Doicheva)

(V. Pashova)

Date of testing: 04.03.2015

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quantification limit of the method

DIOXINS AND DIOXIN-LIKE COMPOUNDS

To Test Report No. 2287NA

Date: 4/3/2015

Analysis conducted by:

Head of laboratory:

Results			Comments on the results based on 2005 WHO TEFs					
Compound	Concentration (ng/kg)	WHO-TEF	WHO-TEQ (ng/kg) Lower bound	WHO-TEQ (ng/kg) Middle bound	WHO-TEQ (ng/kg) Upper bound	WHO-TEQ (ng/kg) Reporting limit		
2378-TCDF	<0.0176*	0.1	0.0000	0.0009	0.0018	0.0018		
2378-TCDD	<0.0156*	1	0.0000	0.0078	0.0156	0.0156		
12378-PeCDF	<0.0514*	0.03	0.0000	0.0008	0.0015	0.0015		
23478-PeCDF	<0.0395*	0.3	0.0000	0.0059	0.0119	0.0119		
12378-PeCDD	<0.0372*	1	0.0000	0.0186	0.0372	0.0372		
123478-HxCDF	<0.3005*	0.1	0.0000	0.0150	0.0301	0.0301		
123678-HxCDF	<0.1985*	0.1	0.0000	0.0099	0.0198	0.0198		
234678-HxCDF	<0.0789*	0.1	0.0000	0.0039	0.0079	0.0079		
123789-HxCDF	<0.0854*	0.1	0.0000	0.0043	0.0085	0.0085		
123478-HxCDD	<0.1711*	0.1	0.0000	0.0086	0.0171	0.0171		
123678-HxCDD	<0.1091*	0.1	0.0000	0.0055	0.0109	0.0109		
123789-HxCDD	<0.0889*	0.1	0.0000	0.0044	0.0089	0.0089		
1234678-HpCDF	<0.482*	0.01	0.0000	0.0024	0.0048	0.0048		
1234789-HpCDF	<1.144*	0.01	0.0000	0.0057	0.0114	0.0114		
1234678-HpCDD	<0.97*	0.01	0.0000	0.0049	0.0097	0.0097		
OCDF	<1.881*	0.0003	0.0000	0.0003	0.0006	0.00056		
OCDD	<1.902*	0.0003	0.0000	0.0003	0.0006	0.00057		
ng WHO-PCDD/F – TEQ/kg (as a basis)		0.000	0.099	0.198	0.198			
ng WHO-PCDD/F – TEQ/kg (88% d.w.)		0.000	0.096	0.193				
Measurement uncertainty (88% d.w.)				0.048				

^{*} quantification limit