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DIN CERTCO  
Gesellschaft für Konformitätsbewertung  
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## Test report 3109088

Order no. 3894328  
Client no. 10028880



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Environmental Services

SGS Institut Fresenius GmbH  
Goerzallee 305A  
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Berlin, 10.10.2016

Your project: DINplus test POL-KRES EDWOOD  
Your order no.: 3190063  
Date of order: 22.09.2016

Testing period from 26.09.2016 until 10.10.2016  
First sample no. 160997910  
Sample entry 26.09.2016

SGS Institut Fresenius

i.V. Thomas Smyk  
Customer Service

i.V. Naser Riazati  
Customer Service

Maria Georgileas  
Customer Service

Sample matrix: Wood pellets  
Sample delivery: Sample sent on behalf of the client  
Sample entry: 26.09.2016  
Testing period: 26.09.2016 until 10.10.2016

Sample no.: 160997911  
Sample name: Sample 2

Parameter	Unit	LOQ	Method <sup>4</sup>	Result	Limit DIN plus <sup>1</sup>	Lab <sup>5</sup>
Fines	mass % ar	0,1	DIN EN 15149-2	0,2	≤ 0,5 (1,0) <sup>2</sup>	B1

Sample no.: 160997910  
Sample name: Sample 1

Parameter	Unit	LOQ	Method <sup>4</sup>	Result	Limit DIN plus <sup>1</sup>	Lab <sup>5</sup>
Average diameter	Millimeter		DIN EN 16127	6,1	6 or 8 ± 1	B1
Average length	Millimeter		DIN EN 16127	14,2	3,15 to 40	B1
Pellets < 10 mm	mass % ar		DIN EN 16127	6,4	informational	B1
Overlengths > 40 and ≤ 45 mm	mass % ar		DIN EN 16127	not found	≤ 1	B1
Overlengths > 45 mm	mass % ar		DIN EN 16127	not found	not allowed	B1
Moisture	mass % ar	0,1	DIN EN 14774-2	6,5	≤ 10	B1
Ash (550°C)	mass % d	0,1	DIN EN 14775	0,21	≤ 0,7	B1
Mechanical Durability	mass % ar	0,1	DIN EN 15210-1	98,4	≥ 97,5	B1
Net CV, const. p	MJ/kg ar	0,5	DIN EN 14918	17,11	≥ 16,5 to ≤ 19	B1
Bulk density	kg/m <sup>3</sup> ar	1	DIN EN 15103	655	≥ 600 to ≤ 750	B1
Nitrogen	mass % d	0,1	DIN EN 15104	0,18	≤ 0,3	B1
Sulphur total	mass % d	0,01	DIN EN 15289	< 0,01	≤ 0,04	B1
Chlorine total	mass % d	0,01	DIN EN 15289	< 0,01	≤ 0,02	B1
Arsenic	mg/kg d	1	DIN EN 15297	< 1	≤ 1	B1
Cadmium	mg/kg d	0,3	DIN EN 15297	< 0,3	≤ 0,5	B1
Chromium	mg/kg d	1	DIN EN 15297	< 1	≤ 10	B1
Copper	mg/kg d	2	DIN EN 15297	3	≤ 10	B1
Lead	mg/kg d	3	DIN EN 15297	< 3	≤ 10	B1
Mercury	mg/kg d	0,05	DIN EN 15297	0,06	≤ 0,1	B1
Nickel	mg/kg d	1	DIN EN 15297	< 1	≤ 10	B1
Zinc	mg/kg d	1	DIN EN 15297	4	≤ 100	B1
Shrinkage starting temperature SST	°C		DIN CEN/TS 15370-1 <sup>3</sup>	1190	-	B1
Deformation temperature DT	°C		DIN CEN/TS 15370-1 <sup>3</sup>	1380	≥ 1200	B1
Hemisphere temperature HT	°C		DIN CEN/TS 15370-1 <sup>3</sup>	1470	-	B1
Flow temperature FT	°C		DIN CEN/TS 15370-1 <sup>3</sup>	1500	-	B1

ar - result calc. to 'as received' state

LOQ - Limit of quantitation

d - result calc. to 'bone dry' state

1) Issue 06/2015

2) Value is valid for packing units up to 20kg; Value in parenthesis is valid for bigger packing units and bulk ware

3) Determination was performed under oxidizing conditions. Pre ashing temperature was 815°C.

4) Deviant to the requirements of DINplus, regarding applicable standards according to DIN EN ISO 17225-2 the respective ones according to DIN EN 14961-2 were applied instead, approved by DIN CERTCO.

5) The laboratory locations of the SGS Group Germany and Switzerland according to the above abbreviations are listed at <http://www.institut-fresenius.de/filestore/89/laborstandortkuerzelsgs2.pdf>