

Kincardine Offshore Windfarm Environmental Statement Appendix A: Particle Size Analysis Report

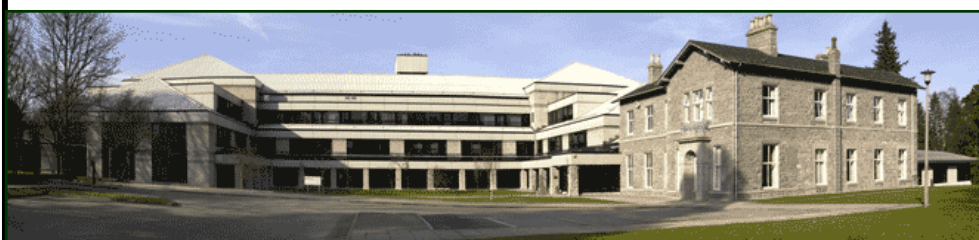
February 2016

Analytical Report

on the Particle Size Distribution of Samples

FOR:

Amy Parry
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REPORT AUTHOR:

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INVESTORS IN PEOPLE



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Job and Sample Information:	
Job No(s):	2014-20632
Client Order No/Reference:	
Date Sample(s) Received:	3/3/15
Lab Code	Client Code
See Table	See Table

Methods

Methods	Accreditation Reference
Particle Size Analysis using Laser Diffraction	DM011

Results

Customer Code	Laboratory Code	>32mm (%)	<32mm >2mm (%)	<2mm (%)
6/EAB/2013 Mar 2013 12143 TV6	1201092	0	0.19	99.81
8/KINCSS/2014 Mar 2014 18251 TV9	1201093	0	0.97	99.03
9/KINCSS/2014 Mar 2014 18252 TV10	1201094	0	0.44	99.56
10/EAB/2013 Mar 2013 12144 TV10	1201095	0	0.05	99.95
23/KINCSS/2014 Mar 2014 18266 TV27	1201096	0	0.37	99.63
28/KINCSS/2014 Mar 2014 18271 TV33	1201097	0	3.89	96.11
31/KINCSS/2014 Mar 2014 18274 TV38	1201098	0	7.92	92.08
34/KINCSS/2014 Mar 2014 18277 TV41	1201099	0	1.73	98.27
38/KINCSS/2014 Mar 2014 18281 TV45	1201100	0	4.59	95.41
7/KINCSS/2014 Mar 2014 18250 TV8	1201126	0	0.49	99.51

See Appendix
(Ten Pages)

Note:

Samples will be stored for a period of eight weeks following completion of analysis and acceptance of analytical report(s) at no extra cost after which samples will be disposed of unless a specific instruction is given (with the sample analysis request/order) to store the sample beyond this period. Extended storage charges will apply.

Result Analysis Report

Laboratory Code

1201092 6/EAB/2013 Mar 2013
12143 TV6

Measured:

12 March 2015 09:39:54

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 09:39:55

Sample bulk lot ref:

1201092 = Run 1

Result Source:

Measurement

Particle Name:

Default

Accessory Name:

Hydro 2000G (A)

Analysis model:

General purpose

Sensitivity:

Normal

Particle RI:

1.520

Absorption:

0.1

Size range:

0.020 to 2000.000 μm

Obscuration:

8.65 %

Dispersant Name:

Water

Dispersant RI:

1.330

Weighted Residual:

0.941 %

Result Emulation:

Off

Concentration:

0.1528 %Vol

Span :

1.081

Uniformity:

0.347

Result units:

Volume

Specific Surface Area:

0.0489 m^2/g

Surface Weighted Mean D[3,2]:

122.744 μm

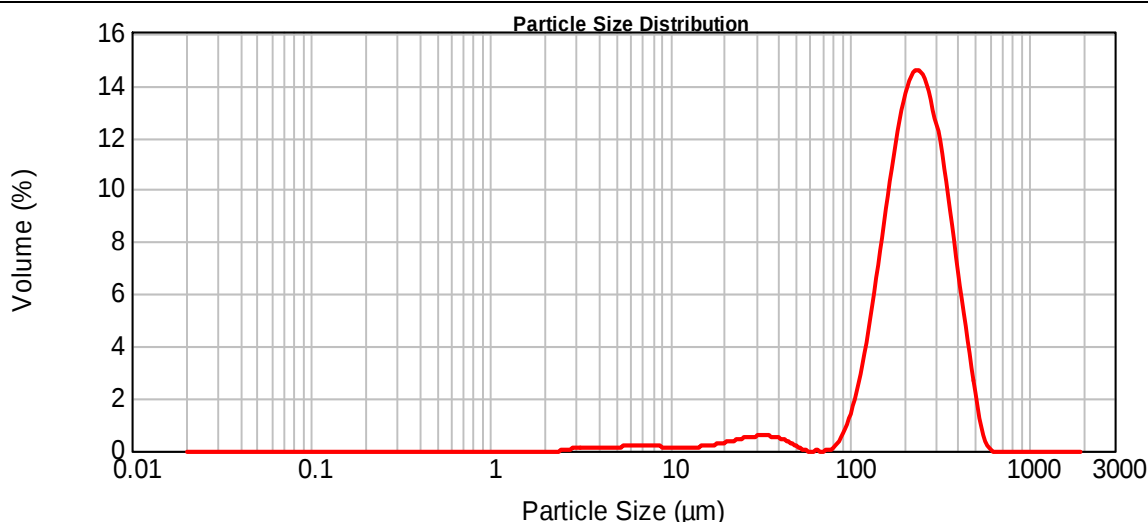
Vol. Weighted Mean D[4,3]:

240.711 μm

d(0.1): 128.122 μm

d(0.5): 231.390 μm

d(0.9): 378.321 μm



— 1201092 6/EAB/2013 Mar 2013 12143 TV6, 12 March 2015 09:39:54

Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.13	50.238	0.05	355.656	6.12
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.12	56.368	0.00	399.052	4.18
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.12	63.246	0.00	447.744	2.43
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.11	70.963	0.00	502.377	0.77
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.11	79.621	0.17	563.677	0.04
0.036	0.00	0.252	0.00	1.783	0.00	12.619	0.11	89.337	0.62	632.456	0.00
0.040	0.00	0.283	0.00	2.000	0.00	14.159	0.12	100.237	1.39	709.627	0.00
0.045	0.00	0.317	0.00	2.244	0.00	15.887	0.15	112.468	2.57	796.214	0.00
0.050	0.00	0.356	0.00	2.518	0.04	17.825	0.19	126.191	4.09	893.367	0.00
0.056	0.00	0.399	0.00	2.825	0.07	20.000	0.25	141.589	5.88	1002.374	0.00
0.063	0.00	0.448	0.00	3.170	0.07	22.440	0.32	158.866	7.70	1124.683	0.00
0.071	0.00	0.502	0.00	3.557	0.09	25.179	0.38	178.250	9.35	1261.915	0.00
0.080	0.00	0.564	0.00	3.991	0.10	28.251	0.42	200.000	10.51	1415.892	0.00
0.089	0.00	0.632	0.00	4.477	0.11	31.698	0.44	224.404	10.99	1588.656	0.00
0.100	0.00	0.710	0.00	5.024	0.12	35.566	0.41	251.785	10.69	1782.502	0.00
0.112	0.00	0.796	0.00	5.637	0.13	39.905	0.33	282.508	9.66	2000.000	0.00
0.126	0.00	0.893	0.00	6.325	0.13	44.774	0.21	316.979	8.03		
0.142	0.00	1.002	0.00	7.096	0.13	50.238		355.656			

Operator notes: 2014-20632

Result Analysis Report

Laboratory Code

1201093 8/KINCSS/2014 Mar 2014
18251 TV9

Measured:

12 March 2015 10:07:13

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 10:07:14

Sample bulk lot ref:

1201093 = Run 1

Result Source:

Measurement

Particle Name:

Default

Accessory Name:

Hydro 2000G (A)

Analysis model:

General purpose

Sensitivity:

Normal

Particle RI:

1.520

Absorption:

0.1

Size range:

0.020 to 2000.000 μm

Obscuration:

8.86 %

Dispersant Name:

Water

Dispersant RI:

1.330

Weighted Residual:

0.967 %

Result Emulation:

Off

Concentration:

0.1326 %Vol

Span :

1.301

Uniformity:

0.403

Result units:

Volume

Specific Surface Area:

0.0573 m^2/g

Surface Weighted Mean D[3,2]:

104.641 μm

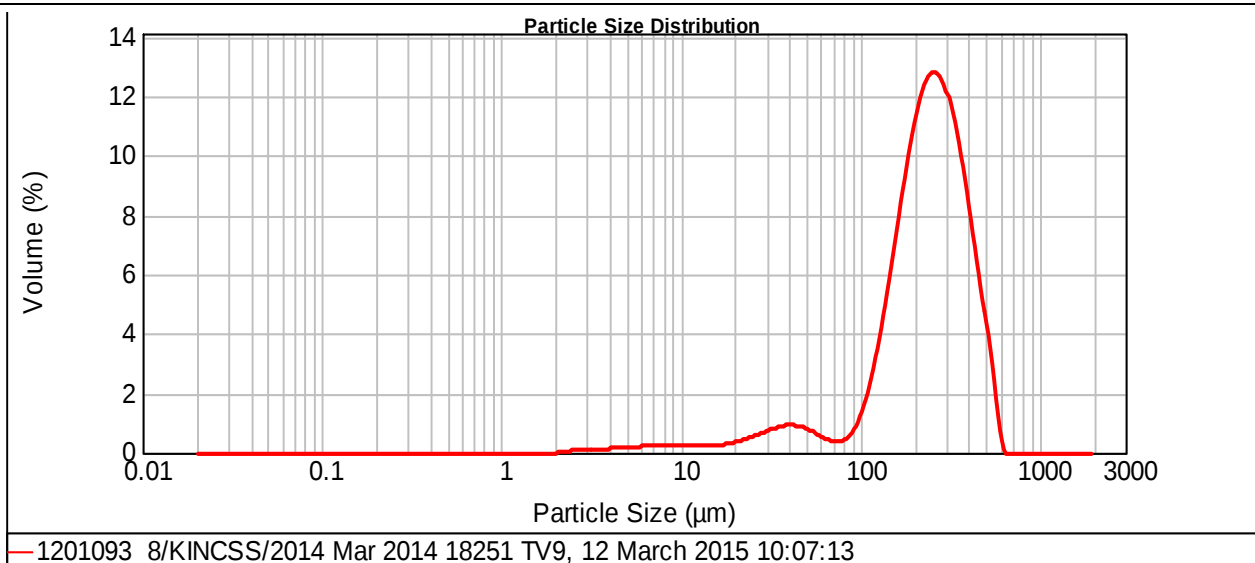
Vol. Weighted Mean D[4,3]:

250.247 μm

d(0.1): 103.235 μm

d(0.5): 240.944 μm

d(0.9): 416.604 μm



Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.18	50.238	0.55	355.656	6.97
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.18	56.368	0.43	399.052	5.41
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.18	63.246	0.31	447.744	3.87
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.18	70.963	0.27	502.377	2.50
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.18	79.621	0.37	563.677	0.43
0.036	0.00	0.252	0.00	1.783	0.00	12.619	0.17	89.337	0.69	632.456	0.00
0.040	0.00	0.283	0.00	2.000	0.01	14.159	0.18	100.237	1.28	709.627	0.00
0.045	0.00	0.317	0.00	2.244	0.05	15.887	0.20	112.468	2.20	796.214	0.00
0.050	0.00	0.356	0.00	2.518	0.06	17.825	0.24	126.191	3.38	893.367	0.00
0.056	0.00	0.399	0.00	2.825	0.07	20.000	0.29	141.589	4.80	1002.374	0.00
0.063	0.00	0.448	0.00	3.170	0.08	22.440	0.37	158.866	6.28	1124.683	0.00
0.071	0.00	0.502	0.00	3.557	0.10	25.179	0.46	178.250	7.69	1261.915	0.00
0.080	0.00	0.564	0.00	3.991	0.11	28.251	0.56	200.000	8.81	1415.892	0.00
0.089	0.00	0.632	0.00	4.477	0.13	31.698	0.64	224.404	9.50	1588.656	0.00
0.100	0.00	0.710	0.00	5.024	0.14	35.566	0.69	251.785	9.64	1782.502	0.00
0.112	0.00	0.796	0.00	5.637	0.16	39.905	0.70	282.508	9.22	2000.000	0.00
0.126	0.00	0.893	0.00	6.325	0.17	44.774	0.65	316.979	8.27		
0.142	0.00	1.002	0.00	7.096		50.238		355.656			

Operator notes: 2014-20632

Result Analysis Report

Laboratory Code

1201094 9/KINCSS/2014 Mar 2014
18252 TV10

Measured:

12 March 2015 10:50:45

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 10:50:46

Sample bulk lot ref:

1201094 = Run 1

Result Source:

Measurement

Particle Name:

Default

Accessory Name:

Hydro 2000G (A)

Analysis model:

General purpose

Sensitivity:

Normal

Particle RI:

1.520

Absorption:

0.1

Size range:

0.020 to 2000.000 μm

Obscuration:

9.09 %

Dispersant Name:

Water

Dispersant RI:

1.330

Weighted Residual:

0.911 %

Result Emulation:

Off

Concentration:

0.2745 %Vol

Span :

0.967

Uniformity:

0.307

Result units:

Volume

Specific Surface Area:

0.0294 m^2/g

Surface Weighted Mean D[3,2]:

203.793 μm

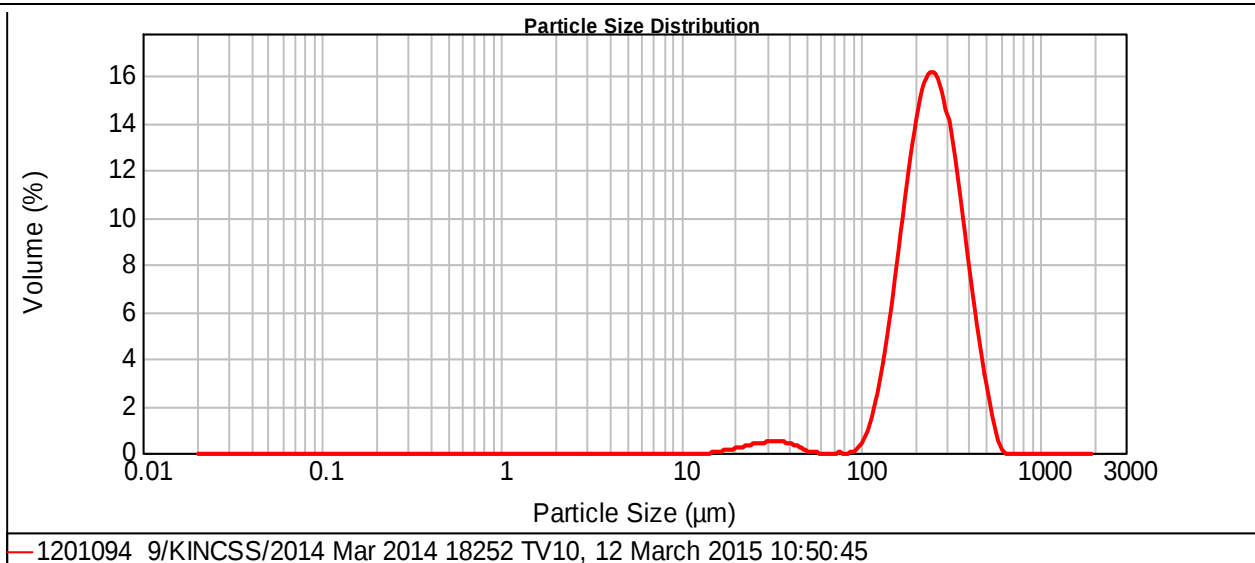
Vol. Weighted Mean D[4,3]:

260.912 μm

d(0.1): 152.859 μm

d(0.5): 248.903 μm

d(0.9): 393.428 μm



Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.00	50.238	0.02	355.656	7.08
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.00	56.368	0.00	399.052	4.84
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.00	63.246	0.00	447.744	2.91
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.00	70.963	0.00	502.377	1.32
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.00	79.621	0.00	563.677	0.17
0.036	0.00	0.252	0.00	1.783	0.00	12.619	0.00	89.337	0.07	632.456	0.00
0.040	0.00	0.283	0.00	2.000	0.00	14.159	0.00	100.237	0.51	709.627	0.00
0.045	0.00	0.317	0.00	2.244	0.00	15.887	0.07	112.468	1.40	796.214	0.00
0.050	0.00	0.356	0.00	2.518	0.00	17.825	0.10	126.191	2.81	893.367	0.00
0.056	0.00	0.399	0.00	2.825	0.00	20.000	0.16	141.589	4.76	1002.374	0.00
0.063	0.00	0.448	0.00	3.170	0.00	22.440	0.23	158.866	7.00	1124.683	0.00
0.071	0.00	0.502	0.00	3.557	0.00	25.179	0.30	178.250	9.25	1261.915	0.00
0.080	0.00	0.564	0.00	3.991	0.00	28.251	0.35	200.000	11.06	1415.892	0.00
0.089	0.00	0.632	0.00	4.477	0.00	31.698	0.36	224.404	12.07	1588.656	0.00
0.100	0.00	0.710	0.00	5.024	0.00	35.566	0.33	251.785	12.08	1782.502	0.00
0.112	0.00	0.796	0.00	5.637	0.00	39.905	0.25	282.508	11.09	2000.000	0.00
0.126	0.00	0.893	0.00	6.325	0.00	44.774	0.12	316.979	9.28		
0.142	0.00	1.002	0.00	7.096	0.00	50.238		355.656			

Operator notes: 2014-20632

Result Analysis Report

Laboratory Code

1201095 10/EAB/2013 Mar 2013
12144 TV10

Measured:

12 March 2015 10:57:21

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 10:57:22

Sample bulk lot ref:

1201095 = Run 1

Result Source:

Measurement

Particle Name:

Default

Accessory Name:

Hydro 2000G (A)

Analysis model:

General purpose

Sensitivity:

Normal

Particle RI:

1.520

Absorption:

0.1

Size range:

0.020 to 2000.000 μm

Obscuration:

9.99 %

Dispersant Name:

Water

Dispersant RI:

1.330

Weighted Residual:

0.662 %

Result Emulation:

Off

Concentration:

0.1245 %Vol

Span :

1.387

Uniformity:

0.434

Result units:

Volume

Specific Surface Area:

0.0688 m^2/g

Surface Weighted Mean D[3,2]:

87.261 μm

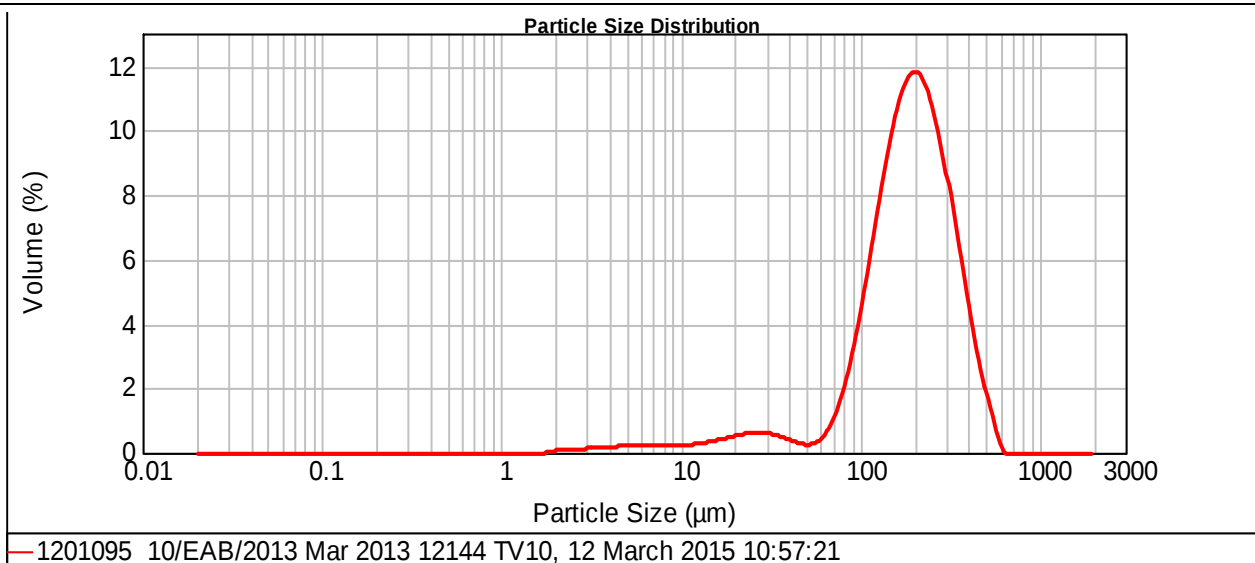
Vol. Weighted Mean D[4,3]:

206.476 μm

d(0.1): 87.341 μm

d(0.5): 191.769 μm

d(0.9): 353.332 μm



Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.16	50.238	0.20	355.656	4.04
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.16	56.368	0.31	399.052	2.79
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.17	63.246	0.59	447.744	1.74
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.18	70.963	1.08	502.377	1.00
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.20	79.621	1.80	563.677	0.16
0.036	0.00	0.252	0.00	1.783	0.02	12.619	0.22	89.337	2.76	632.456	0.00
0.040	0.00	0.283	0.00	2.000	0.06	14.159	0.26	100.237	3.89	709.627	0.00
0.045	0.00	0.317	0.00	2.244	0.07	15.887	0.31	112.468	5.14	796.214	0.00
0.050	0.00	0.356	0.00	2.518	0.09	17.825	0.37	126.191	6.38	893.367	0.00
0.056	0.00	0.399	0.00	2.825	0.10	20.000	0.42	141.589	7.50	1002.374	0.00
0.063	0.00	0.448	0.00	3.170	0.12	22.440	0.46	158.866	8.34	1124.683	0.00
0.071	0.00	0.502	0.00	3.557	0.13	25.179	0.47	178.250	8.83	1261.915	0.00
0.080	0.00	0.564	0.00	3.991	0.14	28.251	0.46	200.000	8.88	1415.892	0.00
0.089	0.00	0.632	0.00	4.477	0.15	31.698	0.41	224.404	8.49	1588.656	0.00
0.100	0.00	0.710	0.00	5.024	0.16	35.566	0.34	251.785	7.70	1782.502	0.00
0.112	0.00	0.796	0.00	5.637	0.16	39.905	0.26	282.508	6.62	2000.000	0.00
0.126	0.00	0.893	0.00	6.325	0.16	44.774	0.20	316.979	5.33		
0.142	0.00	1.002	0.00	7.096	0.16	50.238		355.656			

Operator notes: 2014-20632

Result Analysis Report

Laboratory Code

1201096 23/KINCSS/2014 Mar 2014
18266 TV27

Measured:

12 March 2015 11:17:10

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 11:17:11

Sample bulk lot ref:

1201096 = Run 1

Result Source:

Measurement

Particle Name:

Default

Accessory Name:

Hydro 2000G (A)

Analysis model:

General purpose

Sensitivity:

Normal

Particle RI:

1.520

Absorption:

0.1

Size range:

0.020 to 2000.000 μm

Obscuration:

8.20 %

Dispersant Name:

Water

Dispersant RI:

1.330

Weighted Residual:

1.164 %

Result Emulation:

Off

Concentration:

0.1859 %Vol

Span :

1.449

Uniformity:

0.481

Result units:

Volume

Specific Surface Area:

0.038 m^2/g

Surface Weighted Mean D[3,2]:

157.782 μm

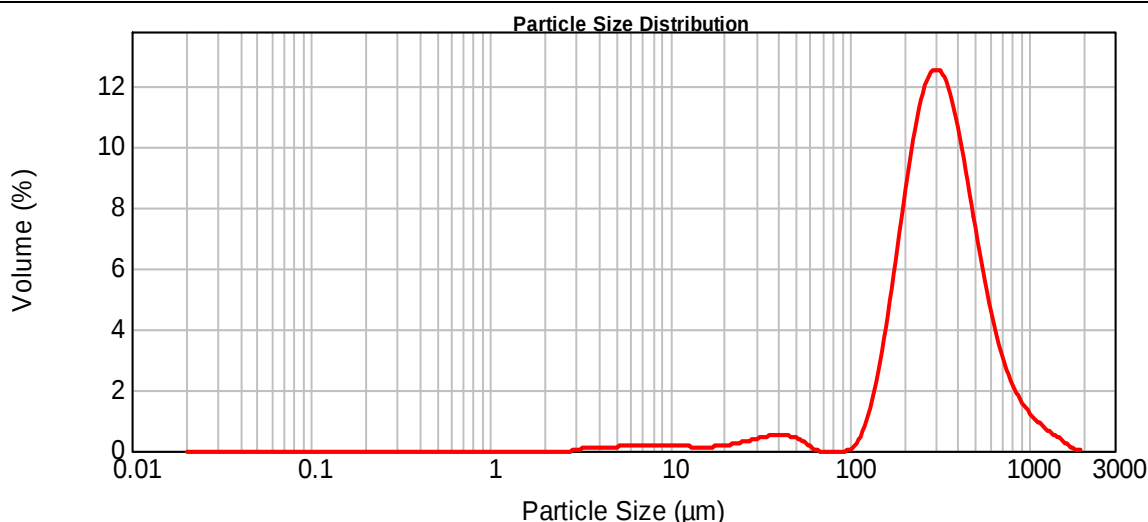
Vol. Weighted Mean D[4,3]:

364.264 μm

d(0.1): 167.625 μm

d(0.5): 314.040 μm

d(0.9): 622.594 μm



— 1201096 23/KINCSS/2014 Mar 2014 18266 TV27, 12 March 2015 11:17:10

Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.13	50.238	0.27	355.656	8.50
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.13	56.368	0.12	399.052	7.39
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.13	63.246	0.00	447.744	6.10
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.12	70.963	0.00	502.377	4.81
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.11	79.621	0.00	563.677	3.65
0.036	0.00	0.252	0.00	1.783	0.00	12.619	0.10	89.337	0.00	632.456	2.70
0.040	0.00	0.283	0.00	2.000	0.00	14.159	0.10	100.237	0.08	709.627	1.98
0.045	0.00	0.317	0.00	2.244	0.00	15.887	0.10	112.468	0.48	796.214	1.46
0.050	0.00	0.356	0.00	2.518	0.00	17.825	0.11	126.191	1.20	893.367	1.09
0.056	0.00	0.399	0.00	2.825	0.00	20.000	0.14	141.589	2.27	1002.374	0.83
0.063	0.00	0.448	0.00	3.170	0.03	22.440	0.18	158.866	3.64	1124.683	0.62
0.071	0.00	0.502	0.00	3.557	0.07	25.179	0.24	178.250	5.21	1261.915	0.44
0.080	0.00	0.564	0.00	3.991	0.09	28.251	0.30	200.000	6.78	1415.892	0.30
0.089	0.00	0.632	0.00	4.477	0.10	31.698	0.35	224.404	8.13	1588.656	0.12
0.100	0.00	0.710	0.00	5.024	0.11	35.566	0.39	251.785	9.07	1782.502	0.03
0.112	0.00	0.796	0.00	5.637	0.12	39.905	0.39	282.508	9.44	2000.000	
0.126	0.00	0.893	0.00	6.325	0.12	44.774	0.35	316.979	9.23		
0.142	0.00	1.002	0.00	7.096	0.12	50.238		355.656			

Operator notes: 2014-20632

Result Analysis Report

Laboratory Code

1201097 28/KINCSS/2014 Mar 2014
18271 TV33

Measured:

12 March 2015 11:23:47

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 11:23:48

Sample bulk lot ref:

1201097 = Run 1

Result Source:

Measurement

Particle Name:

Default

Accessory Name:

Hydro 2000G (A)

Analysis model:

General purpose

Sensitivity:

Normal

Particle RI:

1.520

Absorption:

0.1

Size range:

0.020 to 2000.000 μm

Obscuration:

8.74 %

Dispersant Name:

Water

Dispersant RI:

1.330

Weighted Residual:

0.829 %

Result Emulation:

Off

Concentration:

0.1107 %Vol

Span :

2.315

Uniformity:

0.735

Result units:

Volume

Specific Surface Area:

0.0671 m^2/g

Surface Weighted Mean D[3,2]:

89.410 μm

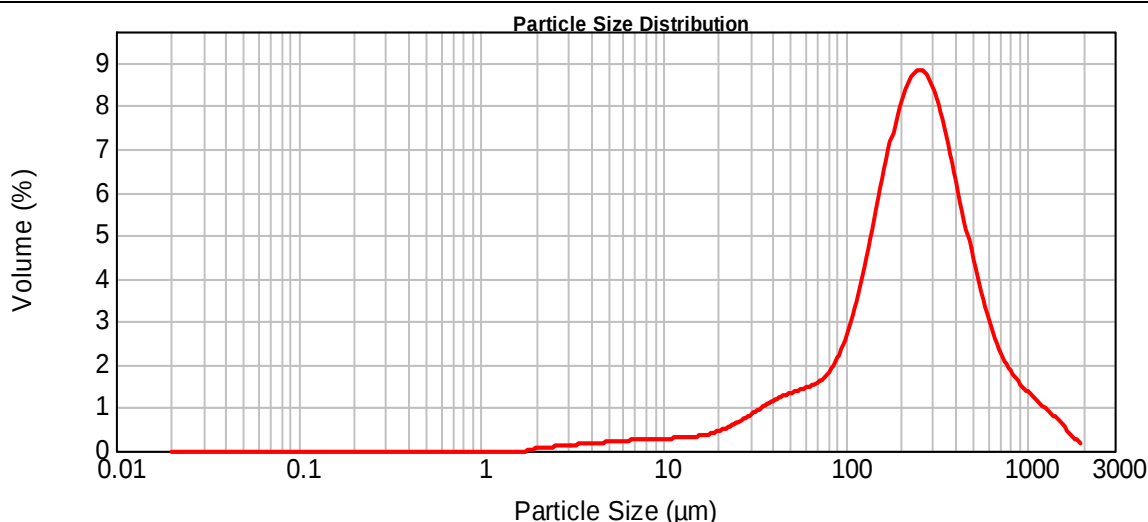
Vol. Weighted Mean D[4,3]:

306.436 μm

d(0.1): 57.044 μm

d(0.5): 238.496 μm

d(0.9): 609.244 μm



— 1201097 28/KINCSS/2014 Mar 2014 18271 TV33, 12 March 2015 11:23:47

Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.19	50.238	1.04	355.656	5.22
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.20	56.368	1.09	399.052	4.45
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.21	63.246	1.15	447.744	3.68
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.22	70.963	1.26	502.377	2.97
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.22	79.621	1.46	563.677	2.37
0.036	0.00	0.252	0.00	1.783	0.02	12.619	0.23	89.337	1.76	632.456	1.90
0.040	0.00	0.283	0.00	2.000	0.06	14.159	0.25	100.237	2.20	709.627	1.55
0.045	0.00	0.317	0.00	2.244	0.07	15.887	0.27	112.468	2.79	796.214	1.31
0.050	0.00	0.356	0.00	2.518	0.08	17.825	0.31	126.191	3.49	893.367	1.12
0.056	0.00	0.399	0.00	2.825	0.09	20.000	0.37	141.589	4.28	1002.374	0.96
0.063	0.00	0.448	0.00	3.170	0.11	22.440	0.44	158.866	5.06	1124.683	0.81
0.071	0.00	0.502	0.00	3.557	0.12	25.179	0.53	178.250	5.77	1261.915	0.65
0.080	0.00	0.564	0.00	3.991	0.13	28.251	0.63	200.000	6.31	1415.892	0.50
0.089	0.00	0.632	0.00	4.477	0.15	31.698	0.73	224.404	6.61	1588.656	0.32
0.100	0.00	0.710	0.00	5.024	0.16	35.566	0.83	251.785	6.63	1782.502	0.17
0.112	0.00	0.796	0.00	5.637	0.17	39.905	0.91	282.508	6.38	2000.000	
0.126	0.00	0.893	0.00	6.325	0.18	44.774	0.98	316.979	5.88		
0.142	0.00	1.002	0.00	7.096		50.238		355.656			

Operator notes: 2014-20632

Result Analysis Report

Laboratory Code

1201098 31/KINCSS/2014 Mar 2014
18274 TV38

Measured:

12 March 2015 11:30:42

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 11:30:44

Sample bulk lot ref:

1201098 = Run 1

Result Source:

Measurement

Particle Name:

Default

Accessory Name:

Hydro 2000G (A)

Analysis model:

General purpose

Sensitivity:

Normal

Particle RI:

1.520

Absorption:

0.1

Size range:

0.020 to 2000.000 μm

Obscuration:

9.34 %

Dispersant Name:

Water

Dispersant RI:

1.330

Weighted Residual:

0.671 %

Result Emulation:

Off

Concentration:

0.1275 %Vol

Span :

1.771

Uniformity:

0.546

Result units:

Volume

Specific Surface Area:

0.0625 m^2/g

Surface Weighted Mean D[3,2]:

96.056 μm

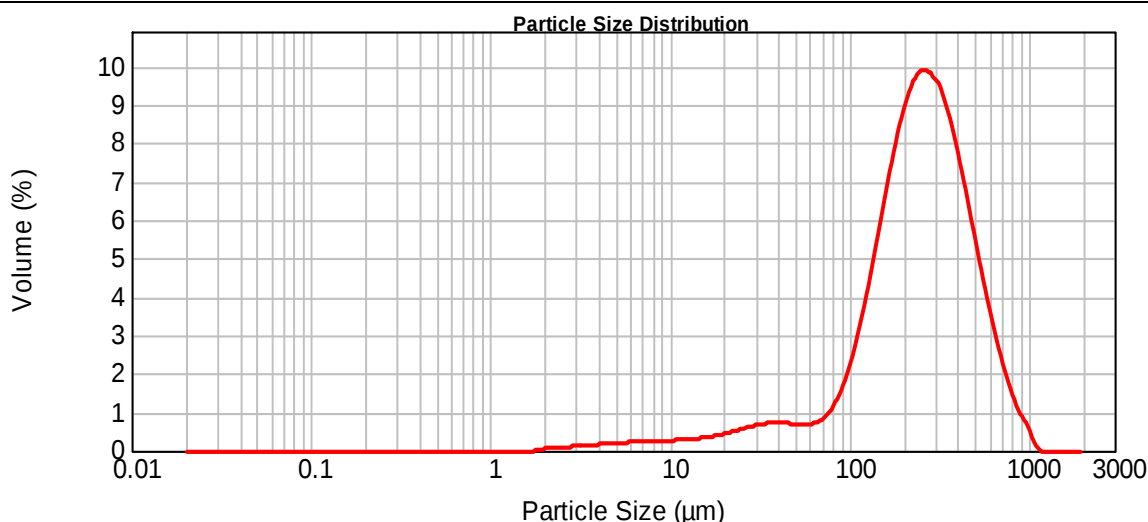
Vol. Weighted Mean D[4,3]:

283.314 μm

d(0.1): 84.691 μm

d(0.5): 249.132 μm

d(0.9): 525.830 μm



— 1201098 31/KINCSS/2014 Mar 2014 18274 TV38, 12 March 2015 11:30:42

Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.18	50.238	0.51	355.656	6.21
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.19	56.368	0.52	399.052	5.40
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.20	63.246	0.57	447.744	4.52
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.21	70.963	0.71	502.377	3.63
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.21	79.621	0.98	563.677	2.78
0.036	0.00	0.252	0.00	1.783	0.02	12.619	0.23	89.337	1.39	632.456	2.05
0.040	0.00	0.283	0.00	2.000	0.06	14.159	0.25	100.237	1.97	709.627	1.41
0.045	0.00	0.317	0.00	2.244	0.06	15.887	0.27	112.468	2.72	796.214	0.91
0.050	0.00	0.356	0.00	2.518	0.08	17.825	0.31	126.191	3.58	893.367	0.58
0.056	0.00	0.399	0.00	2.825	0.09	20.000	0.35	141.589	4.52	1002.374	0.19
0.063	0.00	0.448	0.00	3.170	0.10	22.440	0.40	158.866	5.45	1124.683	0.00
0.071	0.00	0.502	0.00	3.557	0.12	25.179	0.45	178.250	6.28	1261.915	0.00
0.080	0.00	0.564	0.00	3.991	0.13	28.251	0.50	200.000	6.94	1415.892	0.00
0.089	0.00	0.632	0.00	4.477	0.14	31.698	0.53	224.404	7.35	1588.656	0.00
0.100	0.00	0.710	0.00	5.024	0.15	35.566	0.55	251.785	7.47	1782.502	0.00
0.112	0.00	0.796	0.00	5.637	0.17	39.905	0.55	282.508	7.30	2000.000	0.00
0.126	0.00	0.893	0.00	6.325	0.18	44.774	0.53	316.979	6.86		
0.142	0.00	1.002	0.00	7.096		50.238		355.656			

Operator notes: 2014-20632

Result Analysis Report

Laboratory Code

1201099 34/KINCSS/2014 Mar 2014
18277 TV41

Measured:

12 March 2015 11:38:36

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 11:38:37

Sample bulk lot ref:

1201099 = Run 1

Result Source:

Measurement

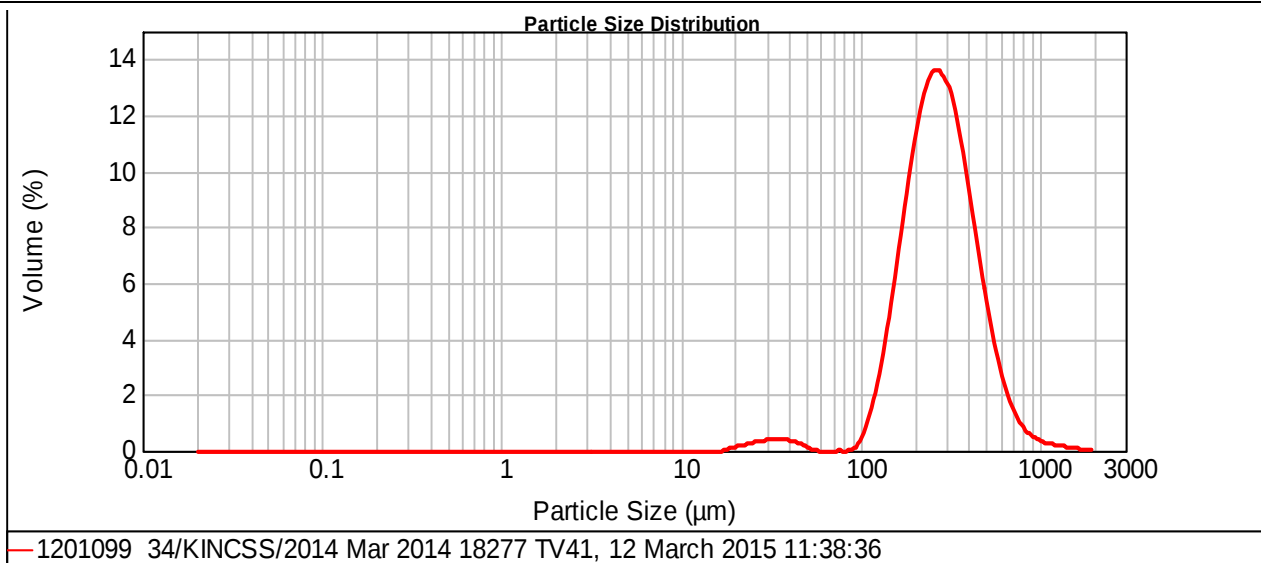
Particle Name: Default	Accessory Name: Hydro 2000G (A)	Analysis model: General purpose	Sensitivity: Normal
Particle RI: 1.520	Absorption: 0.1	Size range: 0.020 to 2000.000 um	Obscuration: 9.27 %
Dispersant Name: Water	Dispersant RI: 1.330	Weighted Residual: 1.023 %	Result Emulation: Off

Concentration: 0.3101 %Vol	Span : 1.227	Uniformity: 0.407	Result units: Volume
Specific Surface Area: 0.0266 m ² /g	Surface Weighted Mean D[3,2]: 225.241 um	Vol. Weighted Mean D[4,3]: 306.872 um	

d(0.1): 156.381 um

d(0.5): 273.174 um

d(0.9): 491.478 um



Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %	Size (µm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.00	50.238	0.03	355.656	7.78
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.00	56.368	0.00	399.052	6.23
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.00	63.246	0.00	447.744	4.68
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.00	70.963	0.00	502.377	3.30
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.00	79.621	0.00	563.677	2.19
0.036	0.00	0.252	0.00	1.783	0.00	12.619	0.00	89.337	0.10	632.456	1.38
0.040	0.00	0.283	0.00	2.000	0.00	14.159	0.00	100.237	0.58	709.627	0.83
0.045	0.00	0.317	0.00	2.244	0.00	15.887	0.00	112.468	1.39	796.214	0.51
0.050	0.00	0.356	0.00	2.518	0.00	17.825	0.07	126.191	2.56	893.367	0.33
0.056	0.00	0.399	0.00	2.825	0.00	20.000	0.12	141.589	4.08	1002.374	0.23
0.063	0.00	0.448	0.00	3.170	0.00	22.440	0.19	158.866	5.76	1124.683	0.17
0.071	0.00	0.502	0.00	3.557	0.00	25.179	0.24	178.250	7.47	1261.915	0.13
0.080	0.00	0.564	0.00	3.991	0.00	28.251	0.29	200.000	8.92	1415.892	0.08
0.089	0.00	0.632	0.00	4.477	0.00	31.698	0.31	224.404	9.91	1588.656	0.06
0.100	0.00	0.710	0.00	5.024	0.00	35.566	0.30	251.785	10.28	1782.502	0.03
0.112	0.00	0.796	0.00	5.637	0.00	39.905	0.25	282.508	10.00	2000.000	
0.126	0.00	0.893	0.00	6.325	0.00	44.774	0.16	316.979	9.09		
0.142	0.00	1.002	0.00	7.096	0.00	50.238		355.656			

Operator notes: 2014-20632

Result Analysis Report

Laboratory Code

1201100 38/KINCSS/2014 Mar 2014
18281 TV45

Measured:

12 March 2015 11:44:38

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 11:44:39

Sample bulk lot ref:

1201100 = Run 1

Result Source:

Measurement

Particle Name:

Default

Accessory Name:

Hydro 2000G (A)

Analysis model:

General purpose

Sensitivity:

Normal

Particle RI:

1.520

Absorption:

0.1

Size range:

0.020 to 2000.000 μm

Obscuration:

9.45 %

Dispersant Name:

Water

Dispersant RI:

1.330

Weighted Residual:

1.013 %

Result Emulation:

Off

Concentration:

0.1767 %Vol

Span :

1.184

Uniformity:

0.427

Result units:

Volume

Specific Surface Area:

0.0462 m^2/g

Surface Weighted Mean D[3,2]:

129.733 μm

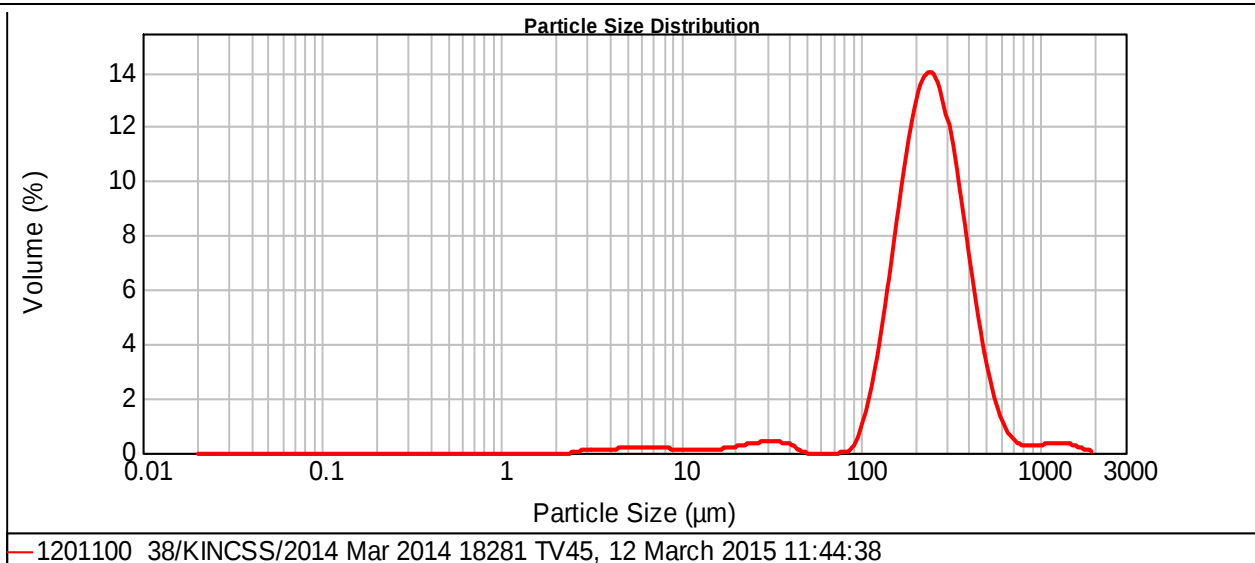
Vol. Weighted Mean D[4,3]:

275.257 μm

d(0.1): 138.222 μm

d(0.5): 244.082 μm

d(0.9): 427.253 μm



Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.13	50.238	0.00	355.656	6.35
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.12	56.368	0.00	399.052	4.60
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.11	63.246	0.00	447.744	3.06
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.09	70.963	0.00	502.377	1.85
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.08	79.621	0.02	563.677	1.01
0.036	0.00	0.252	0.00	1.783	0.00	12.619	0.08	89.337	0.33	632.456	0.51
0.040	0.00	0.283	0.00	2.000	0.00	14.159	0.09	100.237	1.05	709.627	0.27
0.045	0.00	0.317	0.00	2.244	0.00	15.887	0.11	112.468	2.16	796.214	0.19
0.050	0.00	0.356	0.00	2.518	0.05	17.825	0.14	126.191	3.63	893.367	0.20
0.056	0.00	0.399	0.00	2.825	0.07	20.000	0.19	141.589	5.39	1002.374	0.24
0.063	0.00	0.448	0.00	3.170	0.08	22.440	0.24	158.866	7.19	1124.683	0.26
0.071	0.00	0.502	0.00	3.557	0.10	25.179	0.29	178.250	8.83	1261.915	0.26
0.080	0.00	0.564	0.00	3.991	0.11	28.251	0.32	200.000	10.01	1415.892	0.23
0.089	0.00	0.632	0.00	4.477	0.12	31.698	0.31	224.404	10.55	1588.656	0.15
0.100	0.00	0.710	0.00	5.024	0.13	35.566	0.27	251.785	10.35	1782.502	0.09
0.112	0.00	0.796	0.00	5.637	0.13	39.905	0.19	282.508	9.47	2000.000	
0.126	0.00	0.893	0.00	6.325	0.13	44.774	0.01	316.979	8.04		
0.142	0.00	1.002	0.00	7.096	0.13	50.238		355.656			

Operator notes: 2014-20632

Result Analysis Report

Laboratory Code

1201126 7/KINCSS/2014 Mar 2014
18250 TV8

Measured:

12 March 2015 11:51:06

Sample Source & type:

Supplier = Atkins Limited

Measured by:

analy

Analysed:

12 March 2015 11:51:07

Sample bulk lot ref:

1201126 = Run 1

Result Source:

Measurement

Particle Name:

Default

Accessory Name:

Hydro 2000G (A)

Analysis model:

General purpose

Sensitivity:

Normal

Particle RI:

1.520

Absorption:

0.1

Size range:

0.020 to 2000.000 μm

Obscuration:

8.53 %

Dispersant Name:

Water

Dispersant RI:

1.330

Weighted Residual:

1.126 %

Result Emulation:

Off

Concentration:

0.3146 %Vol

Span :

1.265

Uniformity:

0.427

Result units:

Volume

Specific Surface Area:

0.0241 m^2/g

Surface Weighted Mean D[3,2]:

249.132 μm

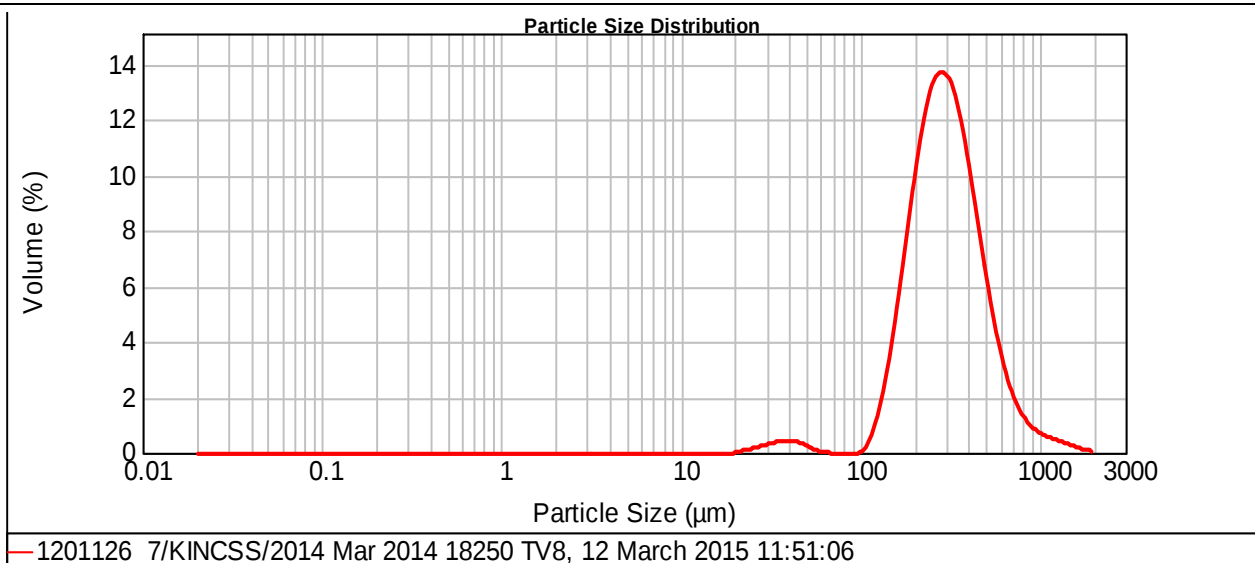
Vol. Weighted Mean D[4,3]:

338.978 μm

d(0.1): 171.233 μm

d(0.5): 294.615 μm

d(0.9): 544.010 μm



Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %	Size (μm)	Volume In %
0.020	0.00	0.142	0.00	1.002	0.00	7.096	0.00	50.238	0.13	355.656	8.50
0.022	0.00	0.159	0.00	1.125	0.00	7.962	0.00	56.368	0.03	399.052	7.00
0.025	0.00	0.178	0.00	1.262	0.00	8.934	0.00	63.246	0.00	447.744	5.43
0.028	0.00	0.200	0.00	1.416	0.00	10.024	0.00	70.963	0.00	502.377	3.98
0.032	0.00	0.224	0.00	1.589	0.00	11.247	0.00	79.621	0.00	563.677	2.77
0.036	0.00	0.252	0.00	1.783	0.00	12.619	0.00	89.337	0.00	632.456	1.87
0.040	0.00	0.283	0.00	2.000	0.00	14.159	0.00	100.237	0.11	709.627	1.24
0.045	0.00	0.317	0.00	2.244	0.00	15.887	0.00	112.468	0.67	796.214	0.86
0.050	0.00	0.356	0.00	2.518	0.00	17.825	0.00	126.191	1.61	893.367	0.62
0.056	0.00	0.399	0.00	2.825	0.00	20.000	0.00	141.589	2.98	1002.374	0.48
0.063	0.00	0.448	0.00	3.170	0.00	22.440	0.02	158.866	4.65	1124.683	0.38
0.071	0.00	0.502	0.00	3.557	0.00	25.179	0.16	178.250	6.47	1261.915	0.29
0.080	0.00	0.564	0.00	3.991	0.00	28.251	0.23	200.000	8.17	1415.892	0.22
0.089	0.00	0.632	0.00	4.477	0.00	31.698	0.29	224.404	9.50	1588.656	0.12
0.100	0.00	0.710	0.00	5.024	0.00	35.566	0.32	251.785	10.25	1782.502	0.07
0.112	0.00	0.796	0.00	5.637	0.00	39.905	0.31	282.508	10.30	2000.000	
0.126	0.00	0.893	0.00	6.325	0.00	44.774	0.25	316.979	9.66		
0.142	0.00	1.002	0.00	7.096	0.00	50.238		355.656			

Operator notes: 2014-20632