

Malvern 3000 Liquid Analysis (v.1)

Created by: jkassel
Last edited: 12/2/2013 9:24:45 AM



Information

Client Particle Technology Labs	Sample Name Average of 'QAS3001B'
Test Method Per Malvern Initiative Protocol	Sample ID Bottle 102588
Chemist JK	PTL ID SRM# 1781
SOP File Name QAS3001B (typical).msop	Measurement Date Time 1/27/2014 7:14:40 PM
Carrier DI H2O	Instrument Type Mastersizer3000
Notes Exp. 2019/01/09	

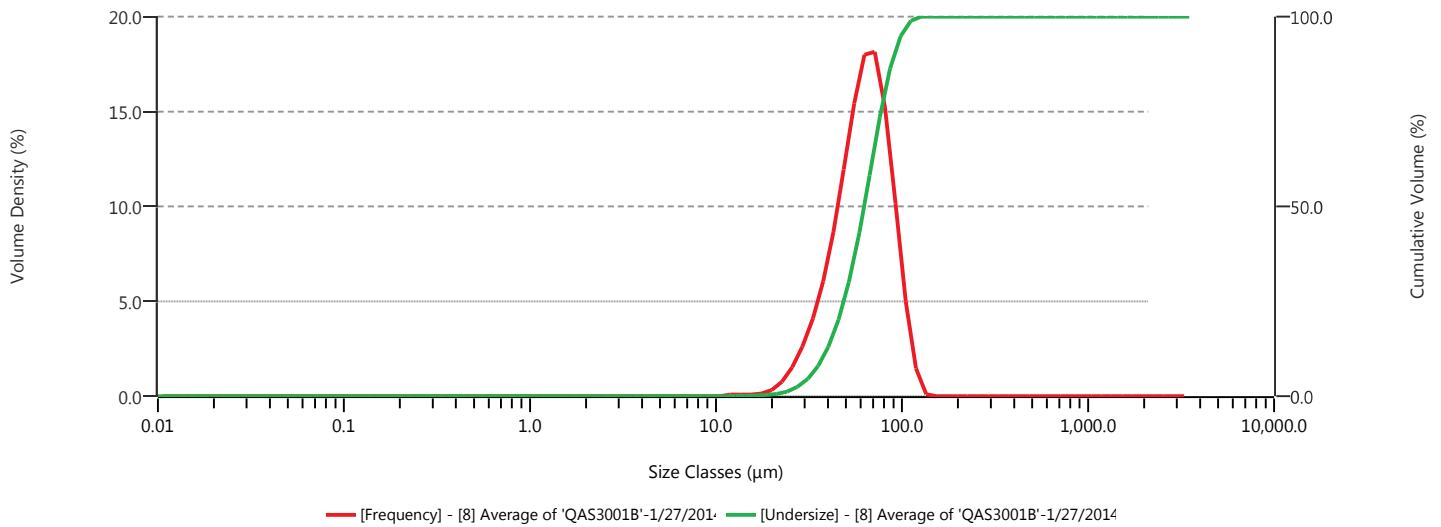
Measurement Details

Particle Name Glass Beads (typical)	Dispersant Name Water
Particle Refractive Index 1.520	Dispersant Refractive Index 1.330
Particle Absorption Index 0.000	Analysis Model Narrow Modes
Laser Power 79.90 %	Analysis Sensitivity Enhanced
Accessory Name Hydro MV	Accessory Serial No. MAL1090246
Laser Obscuration 14.16 %	Instrument Serial No. MAL1087829
Virtual Lens Range	Software Version 2.20.1308.151
Is Particle Fraunhofer? No	Are particles non-spherical? No

Analysis Results

Dv (10) 37.2 μ m	Span 0.864
Dv (50) 62.4 μ m	D [4,3] 63.4 μ m
Dv (90) 91.2 μ m	Weighted Residual 0.32 %

Frequency (compatible) and Undersize



Measurement Details

File Path R:\Malvern 3000\Measurement Data\M3000 Quarterly Annual PVs\PV2014-01-27.mmes	Average Result Records 5, 6, 7
Record Number 8	Original Record Number 8
Operator Name jkassel	

Measurement Details

Chemist Signature

Reviewer Signature



Measurement Details

Client Particle Technology Labs
Test Method Per Malvern Initiative Protocol
Chemist JK
SOP File Name QAS3001B (typical).msop
Carrier DI H2O
Notes Exp. 2019/01/09

Sample Name Average of 'QAS3001B'
Sample ID Bottle 102588
PTL ID SRM# 1781
Measurement Date Time 1/27/2014 7:14:40 PM

Measurement Details

Particle Name Glass Beads (typical)
Particle Refractive Index 1.520
Particle Absorption Index 0.000
Laser Power 79.90 %
Accessory Name Hydro MV
Instrument Type Mastersizer3000
Virtual Lens Range
Weighted Residual 0.32 %
Is Particle Fraunhofer? No

Dispersant Name Water
Dispersant Refractive Index 1.330
Analysis Model Narrow Modes
Analysis Sensitivity Enhanced
Accessory Serial No. MAL1090246
Instrument Serial No. MAL1087829
Software Version 2.20.1308.151
Are particles non-spherical? No
Original Record Number 8

Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0100	0.00	0.0876	0.00	0.767	0.00	6.72	0.00	58.9	43.01	516	100.00
0.0114	0.00	0.0995	0.00	0.872	0.00	7.64	0.00	66.9	58.19	586	100.00
0.0129	0.00	0.113	0.00	0.991	0.00	8.68	0.00	76.0	73.54	666	100.00
0.0147	0.00	0.128	0.00	1.13	0.00	9.86	0.00	86.4	86.40	756	100.00
0.0167	0.00	0.146	0.00	1.28	0.00	11.2	0.00	98.1	94.89	859	100.00
0.0189	0.00	0.166	0.00	1.45	0.00	12.7	0.07	111	98.93	976	100.00
0.0215	0.00	0.188	0.00	1.65	0.00	14.5	0.15	127	100.00	1110	100.00
0.0244	0.00	0.214	0.00	1.88	0.00	16.4	0.22	144	100.00	1260	100.00
0.0278	0.00	0.243	0.00	2.13	0.00	18.7	0.32	163	100.00	1430	100.00
0.0315	0.00	0.276	0.00	2.42	0.00	21.2	0.58	186	100.00	1630	100.00
0.0358	0.00	0.314	0.00	2.75	0.00	24.1	1.20	211	100.00	1850	100.00
0.0407	0.00	0.357	0.00	3.12	0.00	27.4	2.44	240	100.00	2100	100.00
0.0463	0.00	0.405	0.00	3.55	0.00	31.1	4.59	272	100.00	2390	100.00
0.0526	0.00	0.460	0.00	4.03	0.00	35.3	7.97	310	100.00	2710	100.00
0.0597	0.00	0.523	0.00	4.58	0.00	40.1	12.97	352	100.00	3080	100.00
0.0679	0.00	0.594	0.00	5.21	0.00	45.6	20.14	400	100.00	3500	100.00
0.0771	0.00	0.675	0.00	5.92	0.00	51.8	30.08	454	100.00		

Measurement Details

File Path R:\Malvern 3000\Measurement Data\M3000 Quarterly Annual PVs\PV2014-01-27.mmes
Record Number 8
Operator Name jkassel
Average Result Records 5, 6, 7

Measurement Details**Chemist Signature****Reviewer Signature****Annotation**

Particle Technology Labs 555 Rogers Street Downers Grove, IL 60515

Record Number	Sample Name	Signature State	Signatory	Signature Date
8	Average of 'QAS3001B'	Unsigned		