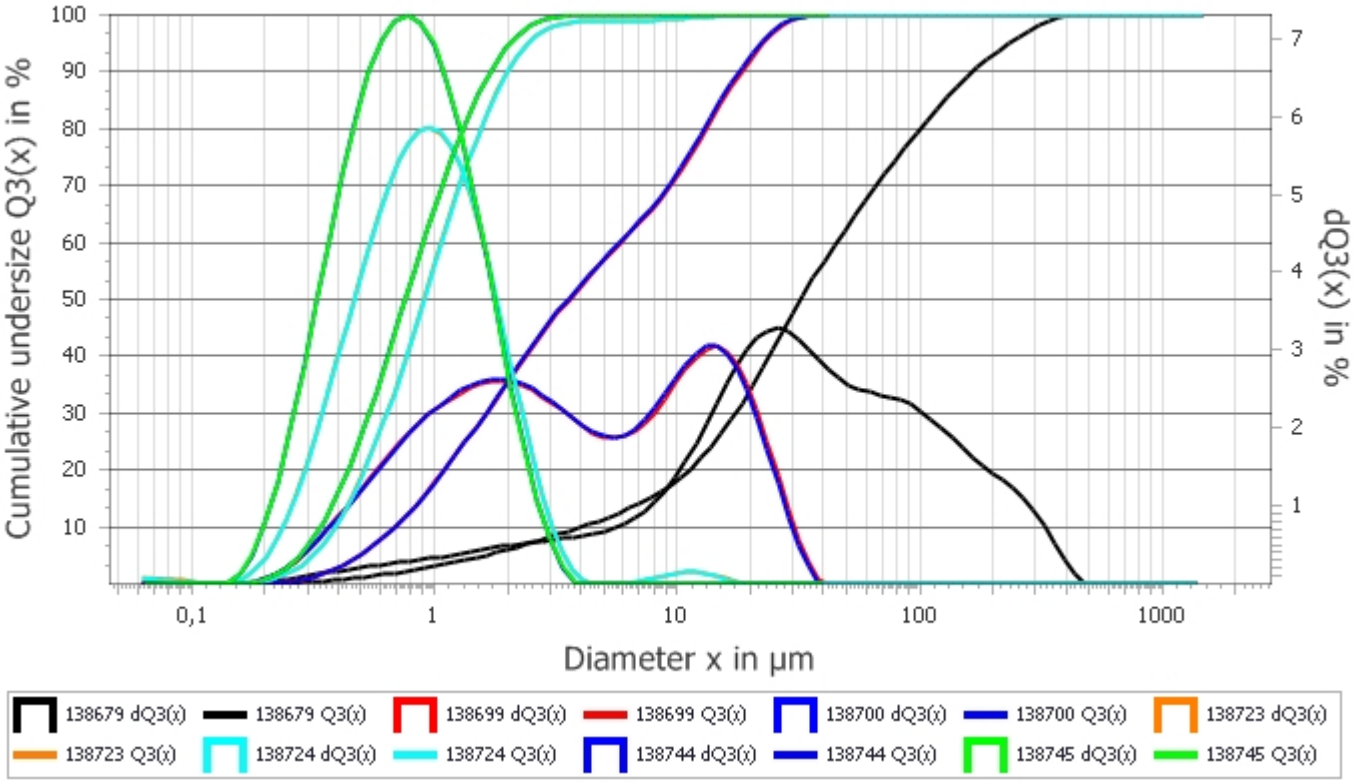
ANALYSETTE 22

Prot.-No. **M190301**

pre disp.in 1% Na4P2O7; 1min L-17; measured in 01% Na4P2O7

Material CaCO3



Q3(x) in %	x in µm	CV in %	M138679	M138699	M138700	M138723	M138724	M138744	M138745
10	0,98	127,6	4,01	0,69	0,69	0,39	0,39	0,34	0,34
50	6,11	176,1	32,3	3,59	3,54	0,9	0,91	0,76	0,76
90	29,91	186,8	165,65	18,37	17,98	1,99	1,99	1,7	1,7

x in µm	Q3(x) in %	CV in %	M138679	M138699	M138700	M138723	M138724	M138744	M138745
0,1	0,0	0,0	0	0	0	0,1	0,1	0	0
1,0	40,3	60,7	3,1	17,8	17,7	56,1	55,9	65,8	65,8
5,0	74,8	42,6	11,4	56,8	57,1	99	99	100	100
10,0	80,1	35,0	18,2	71,8	72,3	99,3	99,4	100	100
15,0	84,9	29,4	26	83,9	84,6	99,9	99,9	100	100
20,0	88,5	25,3	34,2	92,3	92,8	100	100	100	100
30,0	92,3	19,8	47,6	99,1	99,3	100	100	100	100
50,0	94,7	13,8	62,7	100	100	100	100	100	100
80,0	96,4	9,2	74,6	100	100	100	100	100	100
100,0	97,1	7,2	79,9	100	100	100	100	100	100
150,0	98,3	4,2	88,3	100	100	100	100	100	100
200,0	99,0	2,5	92,9	100	100	100	100	100	100
300,0	99,7	0,7	98	100	100	100	100	100	100
400,0	100,0	0,1	99,8	100	100	100	100	100	100
500,0	100,0	0,0	100	100	100	100	100	100	100

ANALYSETTE 22

FRITSCH

Meas-No. 138679 **Name** (3) **Date** 01-Okt-19 9:32:44

Material CaCO3 **Lot** original sample

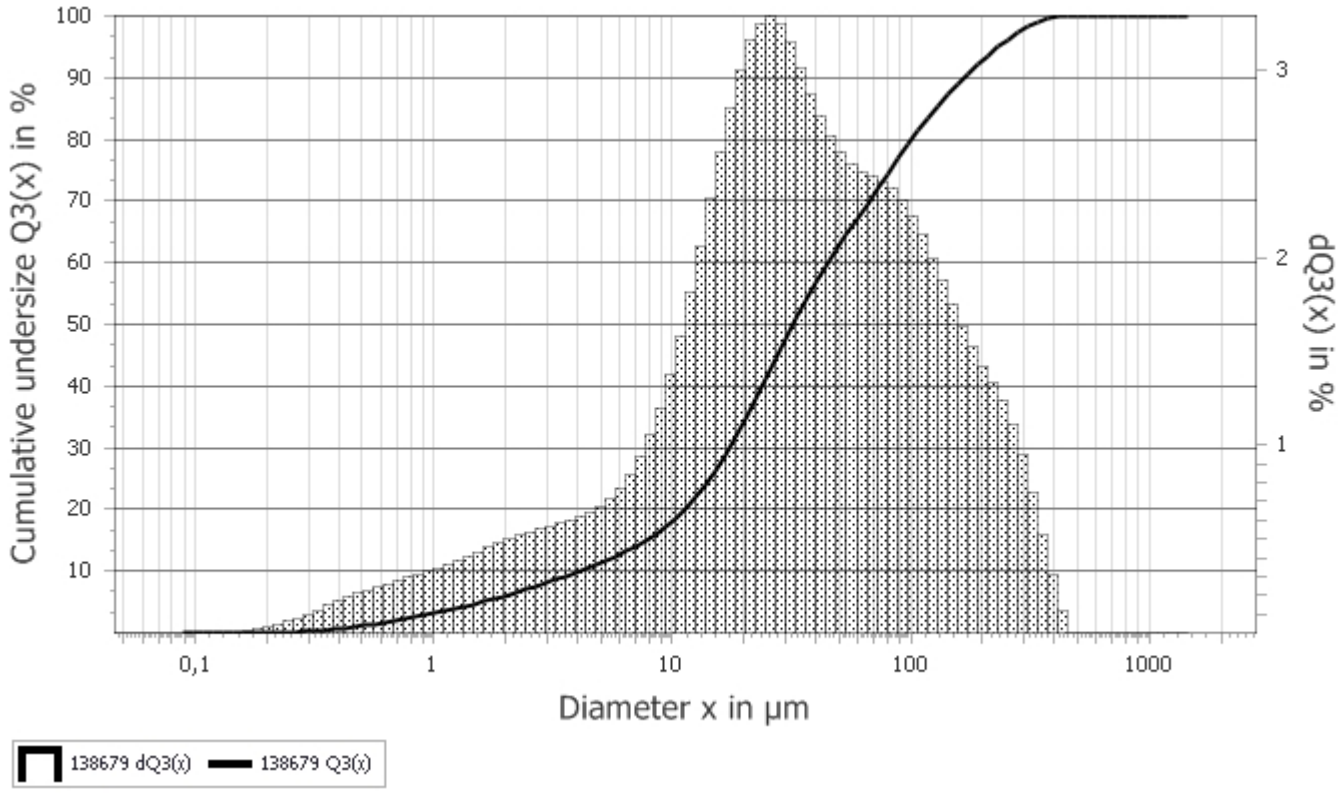
Information Malaysia **Comment** M190301

Calculation Fraunhofer **TradeOff** broad (1000,0)

Refractive index --- **Absorptions coefficient** ---

Scans Fine 100 **Scans Coarse** 100 **Channels** 102 **Beam Obscuration** 13,0 %

Meas. Range 0.08 - 2100 µm **Pump** 70 % **Ultrasonic** 100 %



x in µm	Q3(x) in %
0,50	1,1
1,00	3,1
2,00	6,0
5,00	11,4
10,00	18,2
20,00	34,2
30,00	47,6
40,00	56,6
50,00	62,7
60,00	67,4
70,00	71,3
80,00	74,6
90,00	77,5
100,00	79,9

Q3(x) in %	x in µm
5,0	1,61
10,0	**4,01**
15,0	7,70
20,0	11,23
30,0	17,41
40,0	23,92
50,0	**32,30**
60,0	45,23
70,0	66,41
80,0	100,29
90,0	**165,65**
95,0	231,19
97,0	272,46
99,0	338,81

ANALYSETTE 22

FRITSCH

Meas-No. 138699 **Name** (2) **Date** 02-Okt-19 10:50:07

Material CaCO3 **Lot** 10min P5pl 20mm ZrO2 in IPA

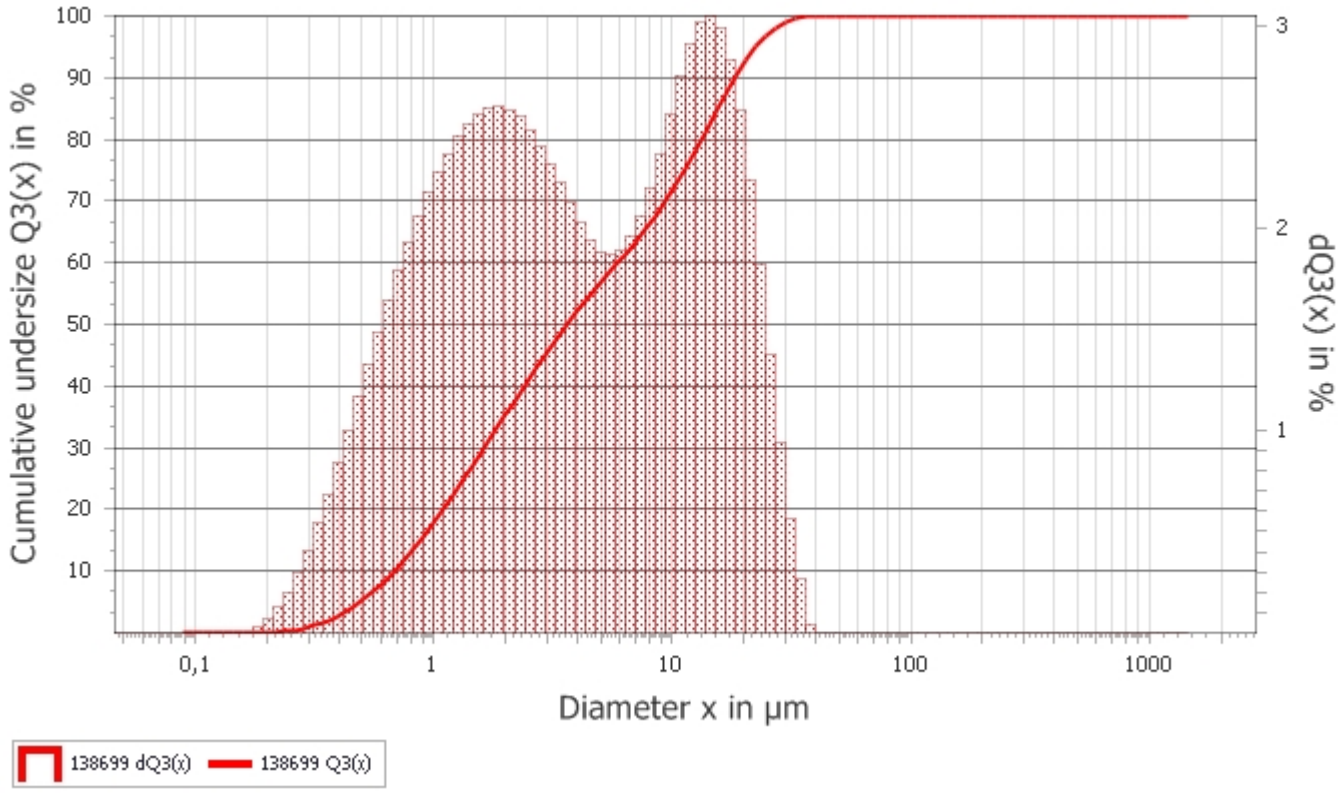
Information Malaysia **Comment** M190301

Calculation Fraunhofer **TradeOff** broad (1000,0)

Refractive index --- **Absorptions coefficient** ---

Scans Fine 100 **Scans Coarse** 100 **Channels** 102 **Beam Obscuration** 12,0 %

Meas. Range 0.08 - 2100 µm **Pump** 70 % **Ultrasonic** 100 %



x in µm	Q3(x) in %
0,10	0,0
0,50	5,2
1,00	17,8
2,00	35,5
3,00	45,8
4,00	52,4
6,00	60,4
8,00	66,3
10,00	71,8
12,00	77,0
15,00	83,9
20,00	92,3
30,00	99,1
40,00	100,0

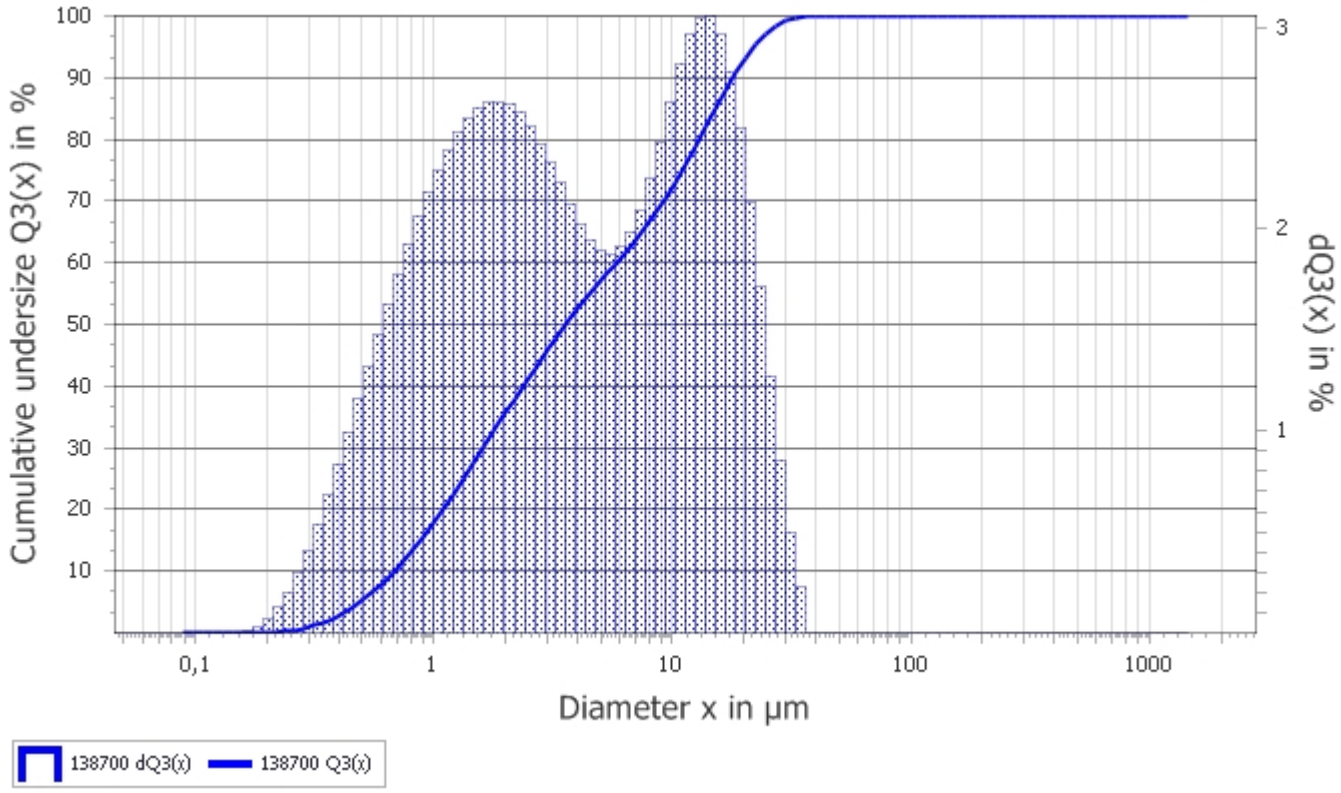
Q3(x) in %	x in µm
5,0	0,49
10,0	**0,69**
15,0	0,88
20,0	1,10
30,0	1,63
40,0	2,38
50,0	**3,59**
60,0	5,89
70,0	9,34
80,0	13,25
90,0	**18,37**
95,0	22,45
97,0	25,07
99,0	29,65

ANALYSETTE 22

FRITSCH

Meas-No.	138700	**Name**	(3)	**Date**	02-Okt-19 10:50:40
Material	CaCO3			**Lot**	10min P5pl 20mm ZrO2 in IPA
Information	Malaysia			**Comment**	M190301

Calculation	Fraunhofer			**TradeOff**	broad (1000,0)
Refractive index	---			**Absorptions coefficient**	---
Scans Fine	100	**Scans Coarse**	100	**Channels**	102
Meas. Range	0.08	**-**	2100 µm	**Pump**	70 %
Beam Obscuration	12,0 %				
Ultrasonic	100 %				



x in µm	Q3(x) in %
0,10	0,0
0,50	5,2
1,00	17,7
2,00	35,6
3,00	46,1
4,00	52,6
6,00	60,7
8,00	66,7
10,00	72,3
12,00	77,6
15,00	84,6
20,00	92,8
30,00	99,3
40,00	100,0

Q3(x) in %	x in µm
5,0	0,49
10,0	**0,69**
15,0	0,89
20,0	1,10
30,0	1,62
40,0	2,36
50,0	**3,54**
60,0	5,80
70,0	9,17
80,0	12,97
90,0	**17,98**
95,0	22,01
97,0	24,53
99,0	29,14

ANALYSETTE 22

FRITSCH

Meas-No. 138723 **Name** (3) **Date** 07-Okt-19 11:13:03

Material CaCO3 **Lot** 30min P5pl 0,5mm ZrO2 in IPA

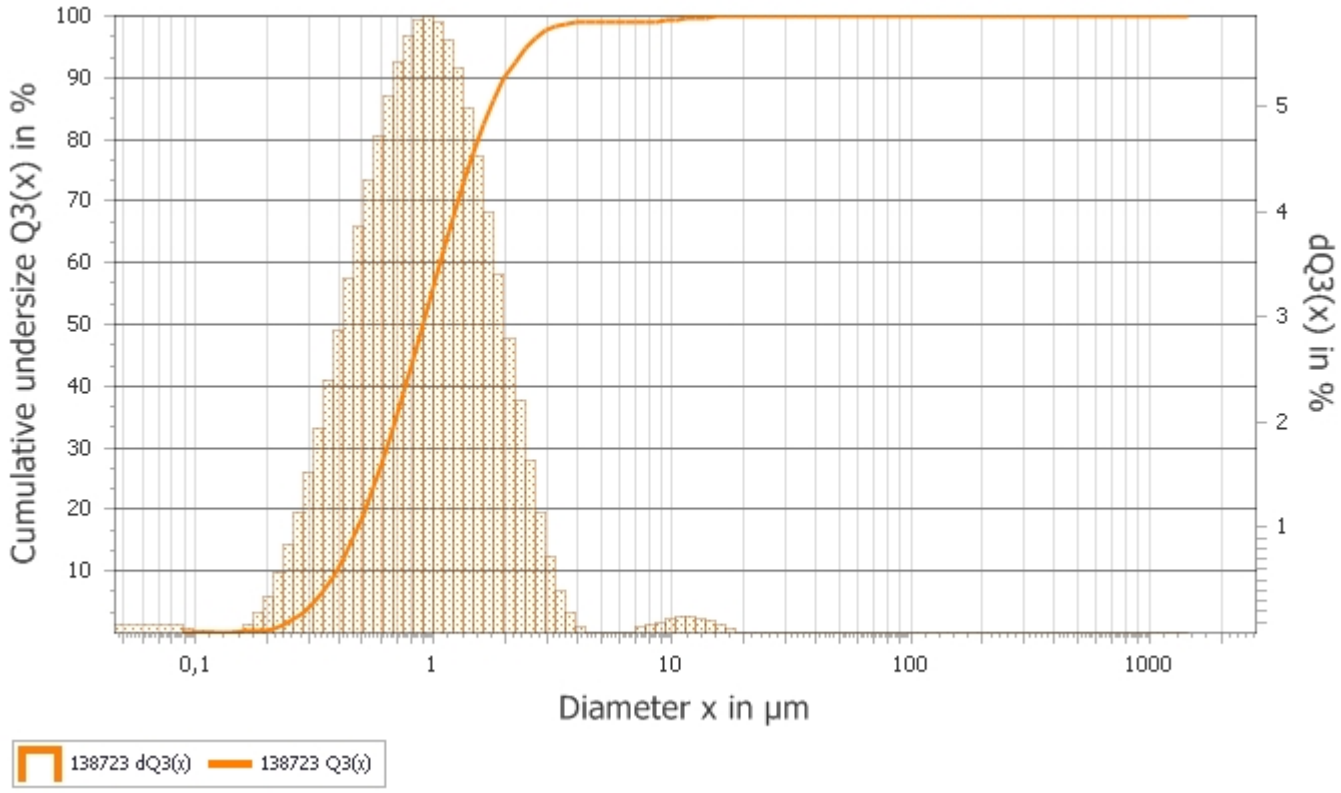
Information Malaysia **Comment** M190301

Calculation Fraunhofer **TradeOff** broad (1000,0)

Refractive index --- **Absorptions coefficient** ---

Scans Fine 100 **Scans Coarse** 100 **Channels** 102 **Beam Obscuration** 17,0 %

Meas. Range 0.08 - 2100 µm **Pump** 70 % **Ultrasonic** 100 %



x in µm	Q3(x) in %
0,10	0,1
0,30	4,2
0,50	18,7
1,00	56,1
1,50	78,6
2,00	90,2
3,00	97,8
5,00	99,0
8,00	99,1
10,00	99,3
15,00	99,9
20,00	100,0
25,00	100,0
30,00	100,0

Q3(x) in %	x in µm
5,0	0,31
10,0	**0,39**
15,0	0,45
20,0	0,52
30,0	0,64
40,0	0,76
50,0	**0,90**
60,0	1,07
70,0	1,27
80,0	1,55
90,0	**1,99**
95,0	2,42
97,0	2,77
99,0	4,26

ANALYSETTE 22

FRITSCH

Meas-No. 138724 **Name** (4) **Date** 07-Okt-19 11:13:36

Material CaCO3 **Lot** 30min P5pl 0,5mm ZrO2 in IPA

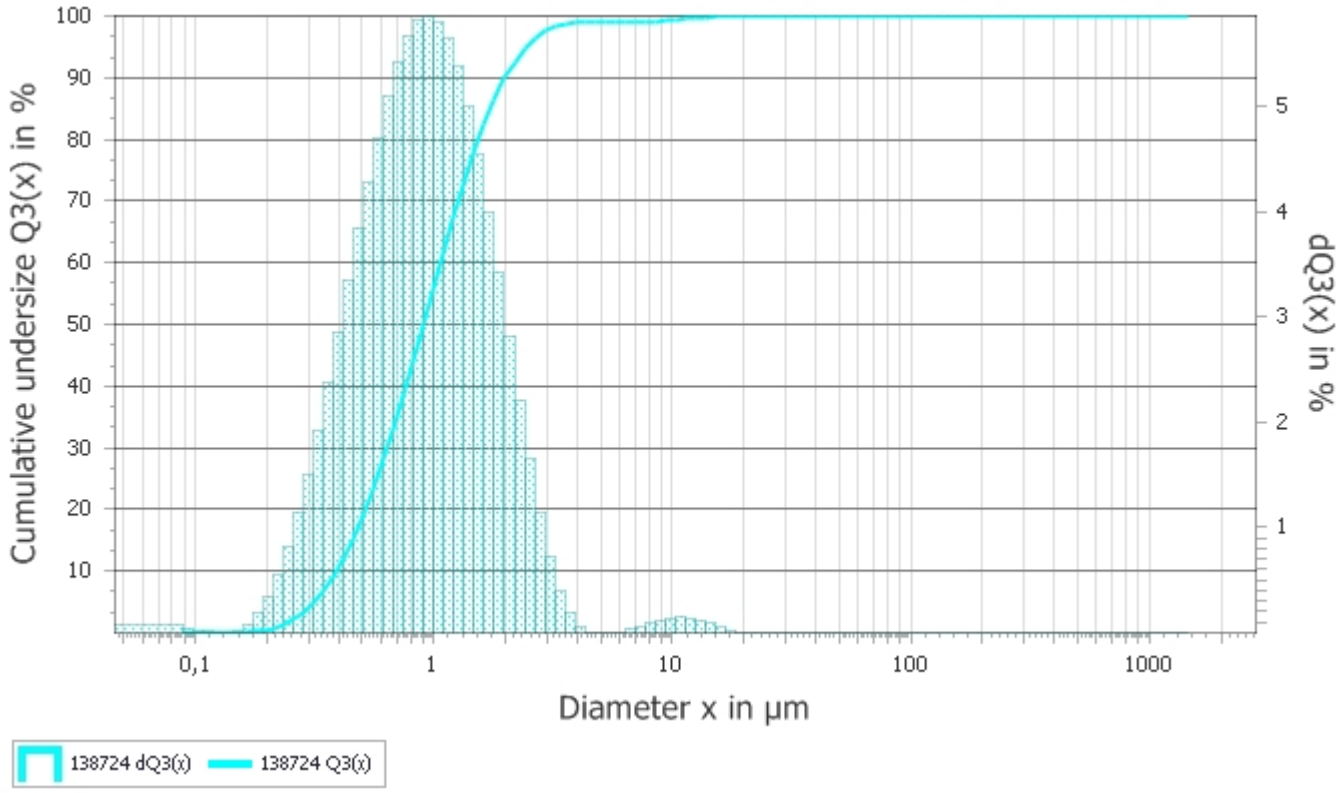
Information Malaysia **Comment** M190301

Calculation Fraunhofer **TradeOff** broad (1000,0)

Refractive index --- **Absorptions coefficient** ---

Scans Fine 100 **Scans Coarse** 100 **Channels** 102 **Beam Obscuration** 16,0 %

Meas. Range 0.08 - 2100 µm **Pump** 70 % **Ultrasonic** 100 %



x in µm	Q3(x) in %
0,10	0,1
0,30	4,1
0,50	18,6
1,00	55,9
1,50	78,5
2,00	90,1
3,00	97,8
5,00	99,0
8,00	99,1
10,00	99,4
15,00	99,9
20,00	100,0
25,00	100,0
30,00	100,0

Q3(x) in %	x in µm
5,0	0,32
10,0	**0,39**
15,0	0,46
20,0	0,52
30,0	0,64
40,0	0,77
50,0	**0,91**
60,0	1,07
70,0	1,28
80,0	1,55
90,0	**1,99**
95,0	2,43
97,0	2,77
99,0	6,00

ANALYSETTE 22

FRITSCH

Meas-No. 138744 **Name** (1) **Date** 08-Okt-19 13:31:48

Material CaCO3 **Lot** 45min 800rpm P5pl 1mm ZrO2 in IPA

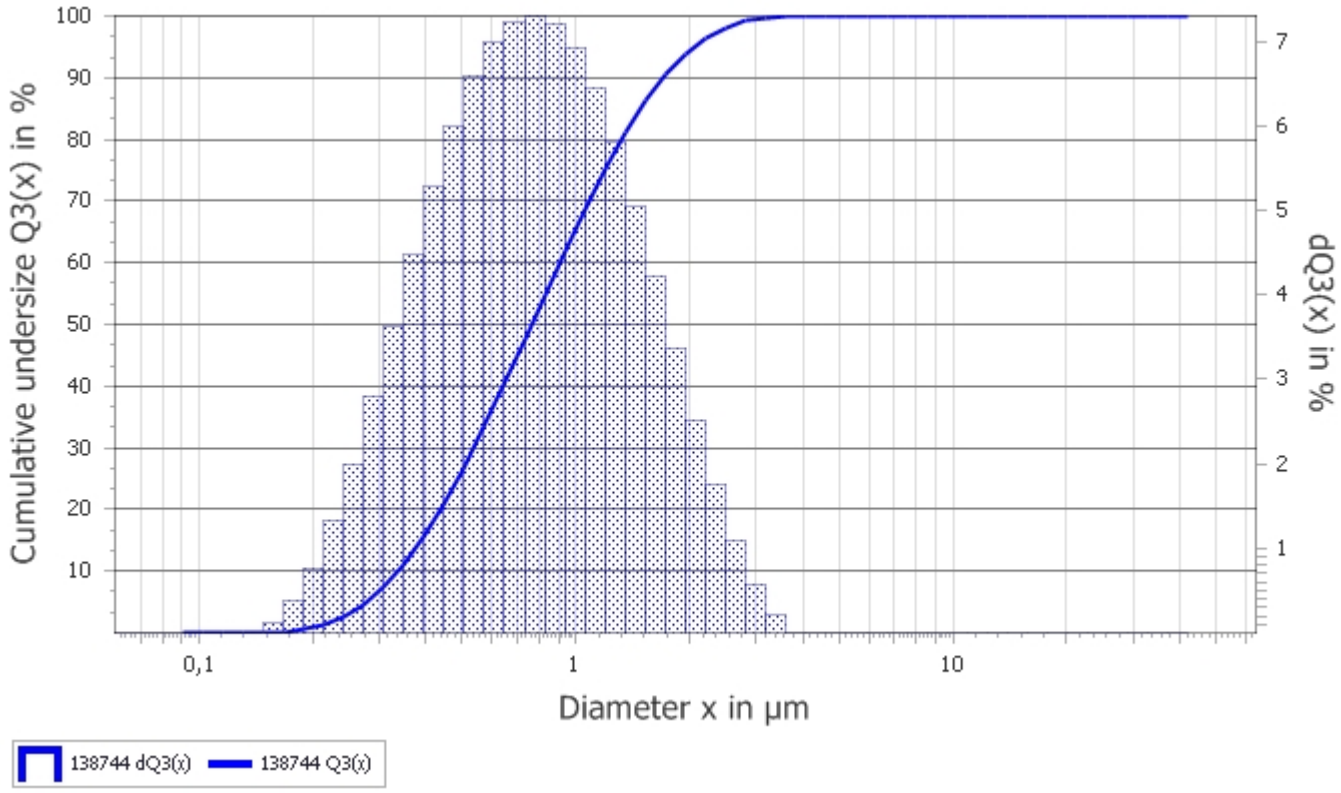
Information Malaysia **Comment** M190301

Calculation Fraunhofer **TradeOff** broad (100,0)

Refractive index --- **Absorptions coefficient** ---

Scans Fine 100 **Scans Coarse** 0 **Channels** 51 **Beam Obscuration** 13,0 %

Meas. Range 0.08 - 42 µm **Pump** 40 % **Ultrasonic** 100 %



x in µm	Q3(x) in %
0,10	0,0
0,20	0,8
0,30	6,7
0,40	16,0
0,50	26,2
0,60	36,0
0,80	52,9
1,00	65,8
1,20	75,6
1,50	85,5
1,80	91,6
2,00	94,3
3,00	99,5
4,00	100,0
5,00	100,0

Q3(x) in %	x in µm
5,0	0,28
10,0	**0,34**
15,0	0,39
20,0	0,44
30,0	0,54
40,0	0,64
50,0	**0,76**
60,0	0,90
70,0	1,08
80,0	1,32
90,0	**1,70**
95,0	2,07
97,0	2,31
99,0	2,76

ANALYSETTE 22

FRITSCH

Meas-No. 138745 **Name** (2) **Date** 08-Okt-19 13:32:03

Material CaCO3 **Lot** 45min 800rpm P5pl 1mm ZrO2 in IPA

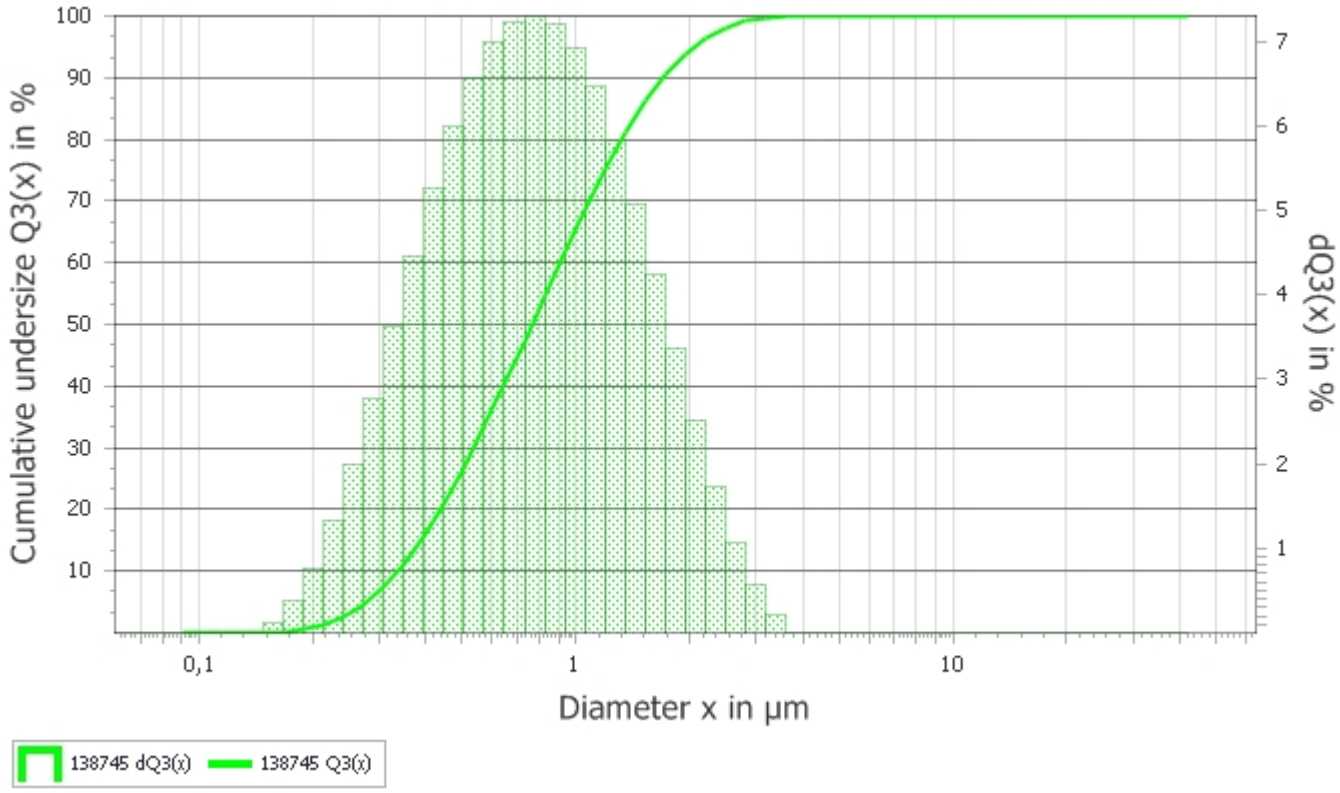
Information Malaysia **Comment** M190301

Calculation Fraunhofer **TradeOff** broad (100,0)

Refractive index --- **Absorptions coefficient** ---

Scans Fine 100 **Scans Coarse** 0 **Channels** 51 **Beam Obscuration** 13,0 %

Meas. Range 0.08 - 42 µm **Pump** 40 % **Ultrasonic** 100 %



x in µm	Q3(x) in %
0,20	0,8
0,30	6,7
0,40	16,0
0,50	26,2
0,60	36,0
0,80	52,8
1,00	65,8
1,20	75,6
1,50	85,5
1,80	91,6
2,00	94,4
3,00	99,5
4,00	100,0
5,00	100,0

Q3(x) in %	x in µm
5,0	0,28
10,0	**0,34**
15,0	0,39
20,0	0,44
30,0	0,54
40,0	0,64
50,0	**0,76**
60,0	0,90
70,0	1,08
80,0	1,32
90,0	**1,70**
95,0	2,06
97,0	2,31
99,0	2,76