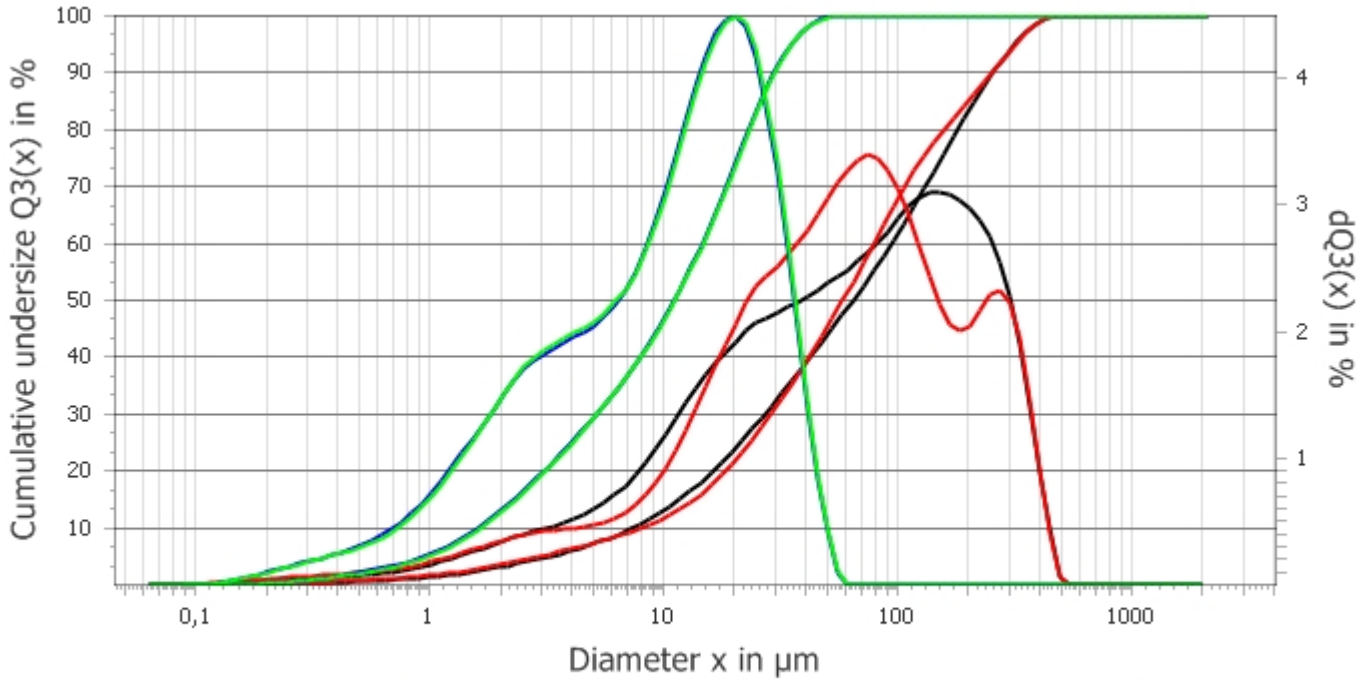


ANALYSETTE 22

Prot.-No. M190264

pre disp. 1min L-17 ultrasound; measured in 0,1 % Na4P2O7

Material Cement



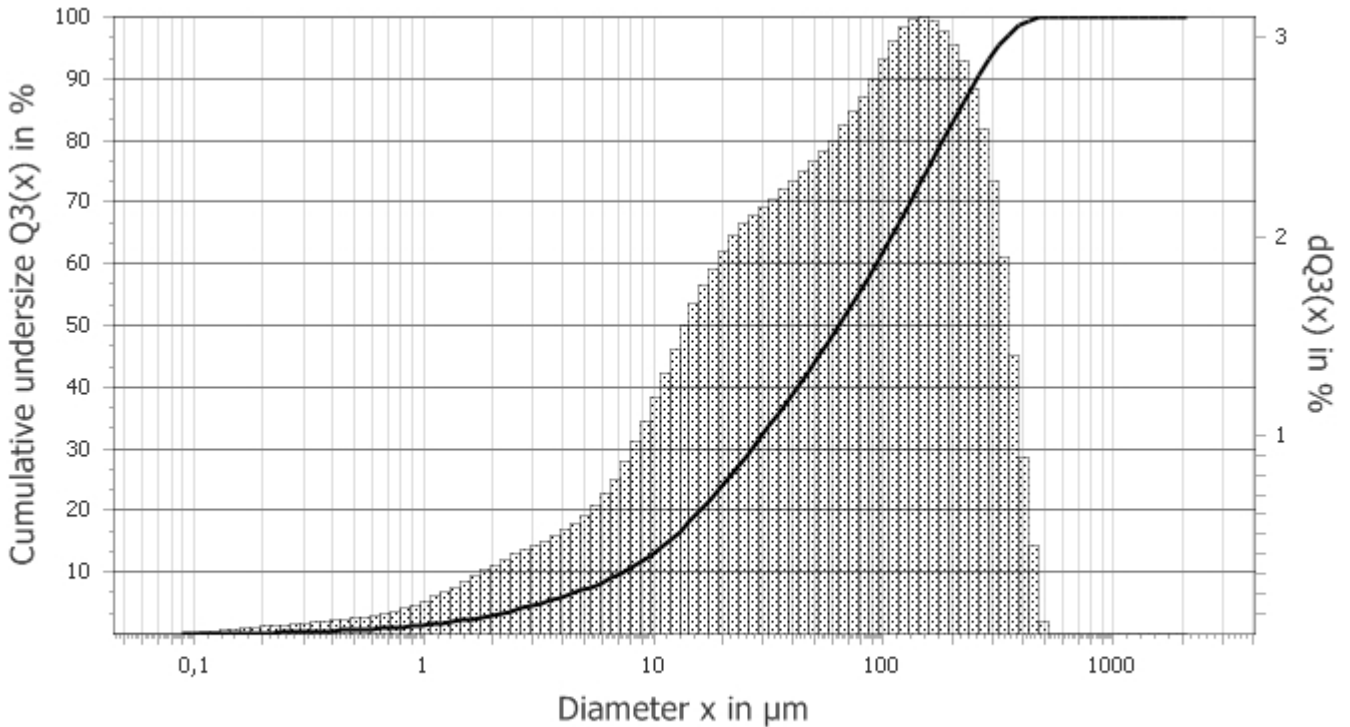
| Q3(x) in % | x in µm | CV in % | M138555 | M138564 | M138569 | M138570 |
|------------|---------|---------|---------|---------|---------|---------|
| 10 | 4,67 | 65,2 | 7,34 | 8,07 | 1,62 | 1,66 |
| 50 | 36,06 | 69,3 | 64,03 | 57,88 | 11,13 | 11,2 |
| 90 | 141,14 | 79,1 | 254,08 | 251,36 | 29,43 | 29,7 |

| x in µm | Q3(x) in % | CV in % | M138555 | M138564 | M138569 | M138570 |
|---------|------------|---------|---------|---------|---------|---------|
| 0,1 | 0,0 | 0,0 | 0 | 0 | 0 | 0 |
| 0,5 | 1,4 | 49,1 | 0,6 | 0,8 | 2,1 | 2 |
| 1,0 | 3,4 | 55,1 | 1,4 | 1,7 | 5,4 | 5,2 |
| 2,0 | 8,0 | 58,9 | 3,1 | 3,5 | 12,9 | 12,5 |
| 5,0 | 18,4 | 60,2 | 7,3 | 7,4 | 29,5 | 29,4 |
| 10,0 | 29,4 | 57,9 | 13,1 | 11,7 | 46,5 | 46,4 |
| 20,0 | 48,3 | 52,6 | 24 | 21,8 | 74 | 73,5 |
| 30,0 | 61,1 | 48,0 | 32,3 | 31,2 | 90,6 | 90,3 |
| 40,0 | 68,2 | 43,1 | 38,7 | 38,8 | 97,6 | 97,6 |
| 50,0 | 72,2 | 38,2 | 43,9 | 45,4 | 99,7 | 99,7 |
| 60,0 | 74,9 | 33,6 | 48,4 | 51,1 | 100 | 100 |
| 70,0 | 77,1 | 29,7 | 52,3 | 56,3 | 100 | 100 |
| 80,0 | 79,2 | 26,4 | 55,8 | 60,8 | 100 | 100 |
| 90,0 | 80,9 | 23,7 | 59 | 64,7 | 100 | 100 |
| 100,0 | 82,5 | 21,3 | 62 | 68,1 | 100 | 100 |

ANALYSETTE 22

Meas-No. 138555 **Name**
Material Cement **Lot** dry ground 1 min WC
Information B **Comment** M190264

Calculation Fraunhofer **TradeOff** broad (1000,0)
Refractive index --- **Absorptions coefficient** ---
Scans Fine 100 **Scans Coarse** 100 **Channels** 102 **Beam Obscuration** 10,0 %
Meas. Range 0.08 - 2100 µm **Pump** 80 % **Ultrasonic** 100 %



138555 dQ3(x)

 138555 Q3(x)

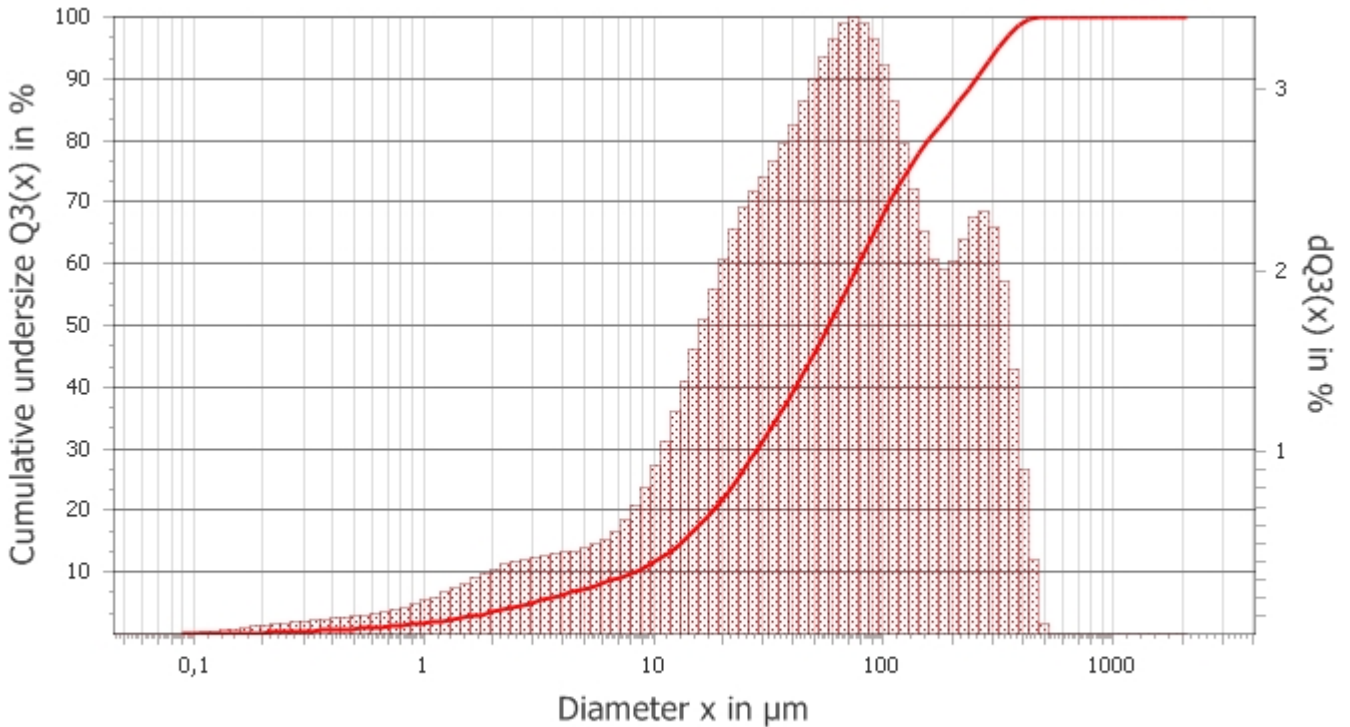
| x in µm | Q3(x) in % |
|---------|------------|
| 0,10 | 0,0 |
| 1,00 | 1,4 |
| 5,00 | 7,3 |
| 20,00 | 24,0 |
| 50,00 | 43,9 |
| 100,00 | 62,0 |
| 150,00 | 74,3 |
| 200,00 | 83,1 |
| 250,00 | 89,5 |
| 300,00 | 94,1 |
| 350,00 | 97,3 |
| 400,00 | 98,9 |
| 450,00 | 99,7 |
| 500,00 | 100,0 |
| 600,00 | 100,0 |

| Q3(x) in % | x in µm |
|-------------|---------------|
| 5,0 | 3,21 |
| 10,0 | 7,34 |
| 15,0 | 11,60 |
| 20,0 | 16,02 |
| 30,0 | 26,86 |
| 40,0 | 42,29 |
| 50,0 | 64,03 |
| 60,0 | 93,21 |
| 70,0 | 130,41 |
| 80,0 | 180,24 |
| 90,0 | 254,08 |
| 95,0 | 311,45 |
| 97,0 | 345,07 |
| 99,0 | 402,90 |

ANALYSETTE 22

Meas-No. 138564 **Name** **Date** 18-Sep-19 16:20:43
Material Cement **Lot** dry ground 3 min WC
Information B **Comment** M190264

Calculation Fraunhofer **TradeOff** broad (1000,0)
Refractive index --- **Absorptions coefficient** ---
Scans Fine 100 **Scans Coarse** 100 **Channels** 102 **Beam Obscuration** 5,0 %
Meas. Range 0.08 - 2100 µm **Pump** 80 % **Ultrasonic** 100 %



138564 dQ3(x) — 138564 Q3(x)

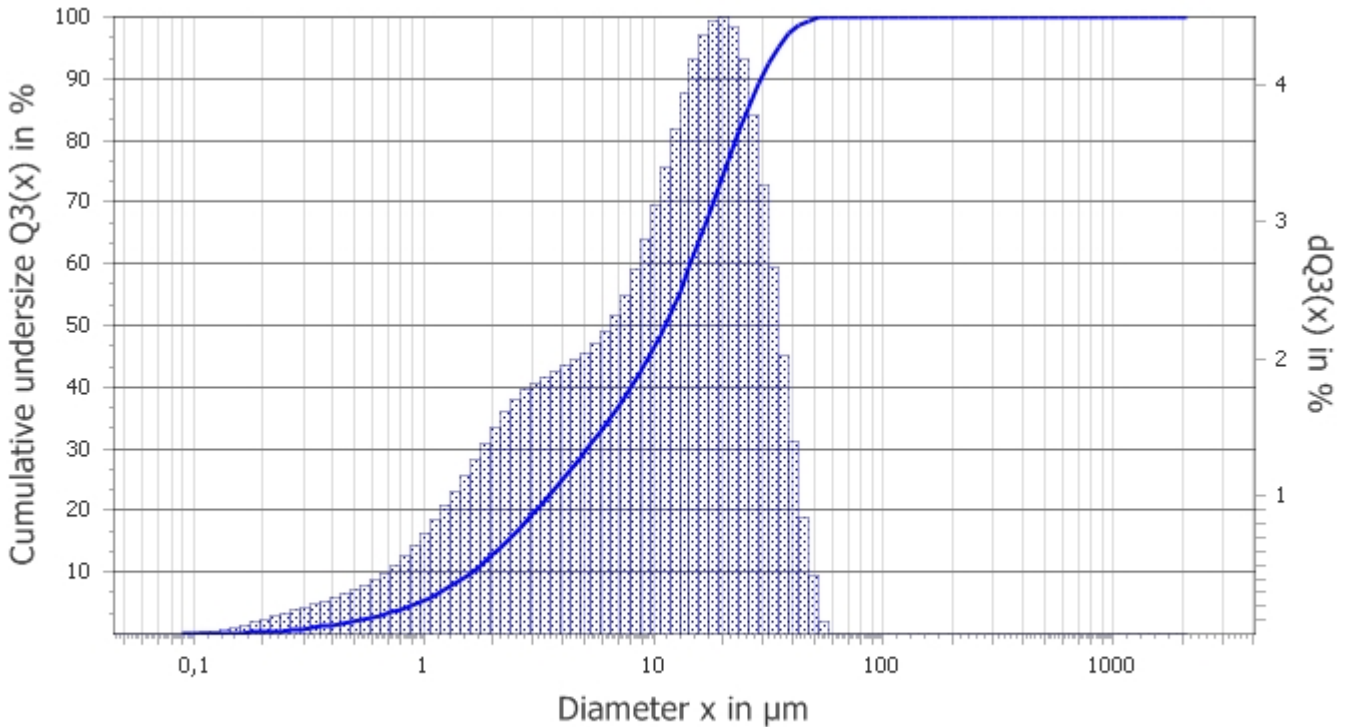
| x in µm | Q3(x) in % |
|---------|------------|
| 0,10 | 0,0 |
| 1,00 | 1,7 |
| 5,00 | 7,4 |
| 20,00 | 21,8 |
| 50,00 | 45,4 |
| 100,00 | 68,1 |
| 150,00 | 79,1 |
| 200,00 | 85,0 |
| 250,00 | 89,9 |
| 300,00 | 94,1 |
| 350,00 | 97,2 |
| 400,00 | 99,0 |
| 450,00 | 99,8 |
| 500,00 | 100,0 |
| 600,00 | 100,0 |

| Q3(x) in % | x in µm |
|-------------|---------------|
| 5,0 | 2,93 |
| 10,0 | 8,07 |
| 15,0 | 13,40 |
| 20,0 | 18,21 |
| 30,0 | 28,55 |
| 40,0 | 41,69 |
| 50,0 | 57,88 |
| 60,0 | 78,02 |
| 70,0 | 106,08 |
| 80,0 | 156,33 |
| 90,0 | 251,36 |
| 95,0 | 312,49 |
| 97,0 | 345,69 |
| 99,0 | 401,79 |

ANALYSETTE 22

Meas-No. 138569 **Name** **Date** 19-Sep-19 8:34:51
Material Cement **Lot** 10 min IPA 20mm WC
Information B **Comment** M190264

Calculation Fraunhofer **TradeOff** broad (1000,0)
Refractive index --- **Absorptions coefficient** ---
Scans Fine 100 **Scans Coarse** 100 **Channels** 102 **Beam Obscuration** 11,0 %
Meas. Range 0.08 - 2100 µm **Pump** 70 % **Ultrasonic** 100 %



138569 dQ3(x) 138569 Q3(x)

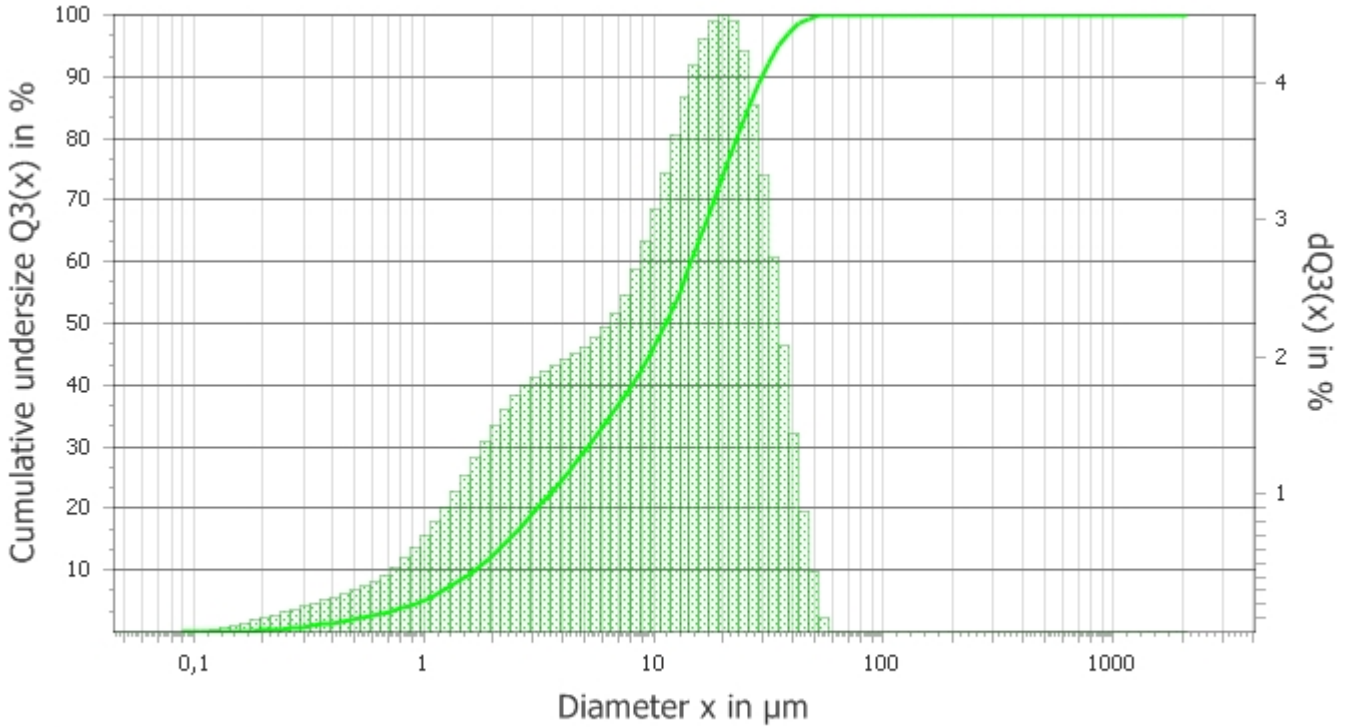
| x in µm | Q3(x) in % |
|---------|------------|
| 0,10 | 0,0 |
| 0,50 | 2,1 |
| 1,00 | 5,4 |
| 2,00 | 12,9 |
| 5,00 | 29,5 |
| 10,00 | 46,5 |
| 15,00 | 61,3 |
| 20,00 | 74,0 |
| 25,00 | 83,7 |
| 30,00 | 90,6 |
| 35,00 | 95,1 |
| 40,00 | 97,6 |
| 45,00 | 99,0 |
| 50,00 | 99,7 |
| 60,00 | 100,0 |

| Q3(x) in % | x in µm |
|-------------|--------------|
| 5,0 | 0,94 |
| 10,0 | 1,62 |
| 15,0 | 2,29 |
| 20,0 | 3,05 |
| 30,0 | 5,11 |
| 40,0 | 7,94 |
| 50,0 | 11,13 |
| 60,0 | 14,52 |
| 70,0 | 18,31 |
| 80,0 | 22,90 |
| 90,0 | 29,43 |
| 95,0 | 34,86 |
| 97,0 | 38,38 |
| 99,0 | 44,81 |

ANALYSETTE 22

Meas-No. 138570 **Name** **Date** 19-Sep-19 8:35:26
Material Cement **Lot** 10 min IPA 20mm WC
Information B **Comment** M190264

Calculation Fraunhofer **TradeOff** broad (1000,0)
Refractive index --- **Absorptions coefficient** ---
Scans Fine 100 **Scans Coarse** 100 **Channels** 102 **Beam Obscuration** 10,0 %
Meas. Range 0.08 - 2100 µm **Pump** 70 % **Ultrasonic** 100 %



138570 dQ3(x) — 138570 Q3(x)

| x in µm | Q3(x) in % |
|---------|------------|
| 0,10 | 0,0 |
| 0,50 | 2,0 |
| 1,00 | 5,2 |
| 2,00 | 12,5 |
| 5,00 | 29,4 |
| 10,00 | 46,4 |
| 15,00 | 61,0 |
| 20,00 | 73,5 |
| 25,00 | 83,4 |
| 30,00 | 90,3 |
| 35,00 | 94,9 |
| 40,00 | 97,6 |
| 45,00 | 99,0 |
| 50,00 | 99,7 |
| 60,00 | 100,0 |

| Q3(x) in % | x in µm |
|-------------|--------------|
| 5,0 | 0,98 |
| 10,0 | 1,66 |
| 15,0 | 2,34 |
| 20,0 | 3,10 |
| 30,0 | 5,15 |
| 40,0 | 7,96 |
| 50,0 | 11,20 |
| 60,0 | 14,65 |
| 70,0 | 18,50 |
| 80,0 | 23,12 |
| 90,0 | 29,70 |
| 95,0 | 35,07 |
| 97,0 | 38,58 |
| 99,0 | 45,06 |