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Project:

SGS INSTITUT FRESENIUS GmbH  
Grain size distribution data and coefficients  
4332000 / Lindane dump

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Sample: 171134675 / SKS-L-UNDIST-3

#### Screening of sample

Grain size [mm]	Mass of Residuals [g]	Sieve residue [Wt.-%]	Sum of Screen underflow [Wt.-%]
125	-	-	-
63	-	-	-
31,5	-	-	100,00
16	26,5	4,70	95,30
8	14,6	2,59	92,72
4	14,01	2,48	90,23
2	10,62	1,88	88,35
1	9,52	1,69	86,67
0,5	12,29	2,18	84,49
0,25	21,35	3,78	80,70
0,125	86,18	15,27	65,43
0,063	81,93	14,52	50,92
< 0,063	287,34	50,92	-

Tot. dry mass: 564,34 g  
Sum: 564,34 g  
Loss of screening:  
Type of screening: wet

#### Determination of grain size distribution by hydrometer

Dry mass: 49,99 g

Dispersion medium: 0,5g Natriumpyrophosphat

Grain density: 2,670 g/cm<sup>3</sup>

Hydrometer correction: 1,4 g/cm<sup>3</sup>

Time	Elapsed time to reading [h:min:s]	R' [g/cm <sup>3</sup> ]	R=R'+C <sub>m</sub> [g/cm <sup>3</sup> ]	d [mm]	T [°C]	C <sub>T</sub> [g/cm <sup>3</sup> ]	R+C <sub>T</sub> [g/cm <sup>3</sup> ]	a [Gew.-%]	a <sub>tot</sub> [Wt. %]
	00:00:30	28,5	29,9	0,0558	23,0	0,61	30,5	97,6	49,7
	00:01:00	27,5	28,9	0,0403	23,0	0,61	29,5	94,4	48,1
	00:02:00	25,5	26,9	0,0298	23,0	0,61	27,5	88,0	44,8
	00:05:00	22,5	23,9	0,0199	23,0	0,61	24,5	78,4	39,9
	00:15:00	16,5	17,9	0,0127	23,0	0,61	18,5	59,2	30,1
	00:45:00	2,5	3,9	0,0087	23,0	0,61	4,5	14,4	7,3
	02:00:00	0,0	1,4	0,0054	23,0	0,61	2,0	6,5	3,3
	06:00:00	0,0	1,4	0,0031	23,0	0,61	2,0	6,5	3,3
	24:00:00	0,0	1,4	0,0016	23,0	0,61	2,0	6,5	3,3

#### Coefficients

Soil type: Silt, fine sand (26%), medium sand (9%)  
Abbreviation: U, fs, ms'  
Soil group:  
Class of frost susceptibility: (n.d.)  
Compactability: (n.d.)  
U (Uniformity coefficient): 10,7  
C (Coefficient of gradation): 0,2

Component	[Wt. %]
T	3,28
U	47,63
S	37,44
G	11,65

Gravel packing (a. Bieske, 1961): 3,15 - 5,6 mm  
Width of screen slots (a. Bieske, 1961): n.b.

Kf after Beyer, 1964 (d<sub>10</sub> ≤ 0.06)  
Kf after Hazen, 1893 (d<sub>10</sub> to small)  
Kf after Zieschang, 1964 (d<sub>10</sub> < 0.1)  
Kf after Seelheim, 1880 (d<sub>10</sub> < 0.1)  
Kf after Mallet & Pacquant, 1954 <sup>1</sup> 1,07 E-07 (m/s)  
Kf after Mallet & Pacquant, 1954 <sup>2</sup> 1,24 E-07 (m/s)