

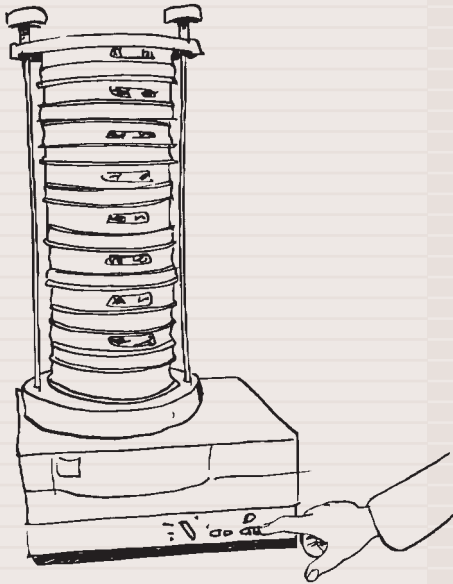


You will return to the contents of P1 SOIL by clicking the pictogram

PARTICLE SIZE DISTRIBUTION

P1.83

The sieve time can be set on the electro magnetic sieve shaker.



The particle size distribution (also called grain size distribution or texture) is one of the most important characteristics of the soil. Agricultural- as well as soil scientific properties are greatly determined by the texture of a soil. The particle size distribution has an effect on many properties of the soil such as for instance the ease of tillage, the capillary conductivity of a soil, the available moisture, the permeability of a soil, compaction, etc. The coarseness of a sandy soil is indicated on a map when doing soil survey work.

Furthermore the determination of the particle size is essential for the assessment of the availability of substances for the flora and fauna, the behavior of a substance in the soil and the determination of the quality of the soil (target- and intervention values for these parameters are calculated on the basis of, among other, the clay fraction).

08.05 Granular composition test set

Applying this set allows you to determine the particle size distribution of soil samples in order to be able to classify the soils on the basis of international standards.

The granular composition of the representative sample obtained in this way can be determined applying an electromagnetic sieve shaker. The sieve shaker keeps the sample continuously in motion in order to obtain the best possible sieving results.

The sieve shaker and the stainless steel mesh sieves (inclusive receivers and lids) are suitable for wet as well as dry sieving.

Manual sieving with the standard hand-sieve set.



Granular composition test set

PARTICLE SIZE DISTRIBUTION



P1.83

08.30 Hydrometer kit, standard set

To obtain an accurate determination of the particle size distribution of the smallest fractions it is possible to apply the hydrometer method.

In this method the sample is cleaned from organic matter after which it is dried and weighed.

Next it is suspended in water and sieved.

The solution that passes through the sieve is transferred to a measuring cylinder with water. Hydrometer readings are taken after regular intervals. Sedimentation time and hydrometer readings are used to determine the grain sizes according to the Stoke's Law.

The hydrometer kit, among other items, contains: a number of hydrometers, sedimentation cylinders, a thermometer, a glass container, a heating element with thermostat and stirrer, a soil stirrer and various accessories.

08.05.04 Mini hand sieves set

The mini hand sieves set is used for the determination of the particle size distribution of small quantities of soil in the laboratory as well as in the field.

The set contains sieves, lid and receiver, brush and a storage bag.

08.04 Sand rulers

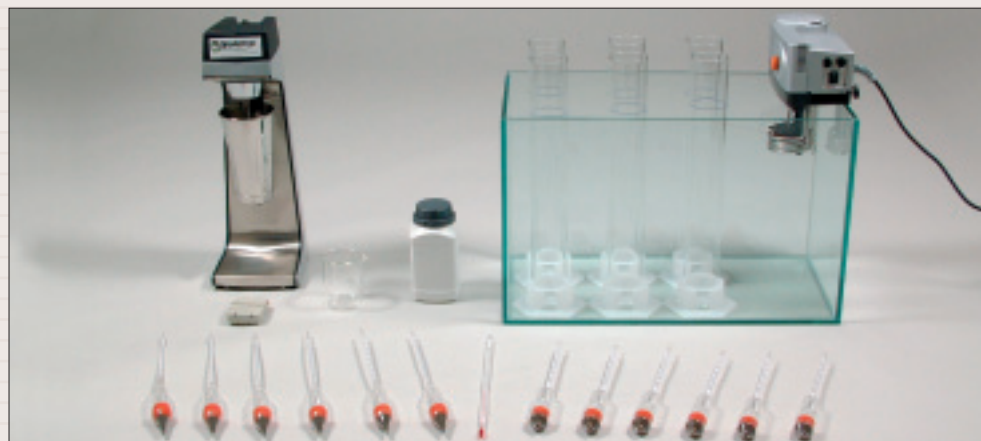
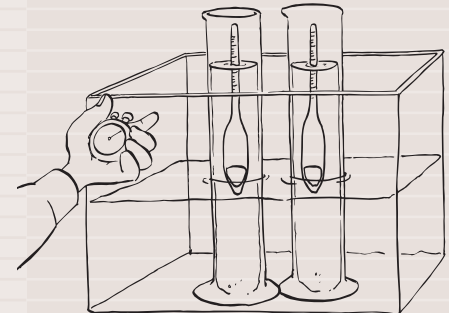
A sand ruler is a disc made of transparent material with standard (specimen) samples. It is an excellent indicative aid in determining the particle size distribution.

Of the sample to be tested a representative part is rubbed dry with the fingers in the palm of the hand.

The sample is then placed in the hollow area in the center of the ruler. The average grain size is now judged by comparing the average grain size of the sample with the specimen in the ruler.

The sand ruler is available with different fractions.

The hydrometer is read.



Hydrometer kit

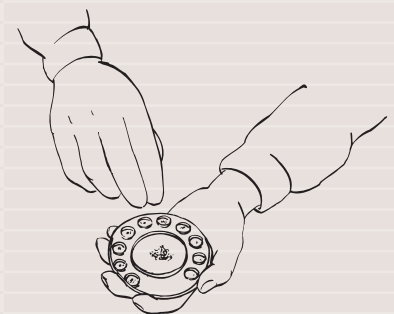


Mini hand sieves set



Sand ruler with ten fractions

The average grain size is compared to the specimen samples.





PARTS LIST

Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
Particle size distribution (P1.83)			08.05.04		
	For the execution of a complete analysis of the grain-size of soil samples two different sets are required: - Granular composition test set (for the coarse fractions) - Hydrometer set (for the smaller fractions).			Mini hand sieves set, pocket size, height 40 mm, with 6 interchangeable rimmed gauze sieve discs, Ø 100 mm, sieve openings: 2.0, 1.0, 0.500, 0.250, 0.125 and 0.063 mm	
				Sieve shaker	
08.05	Granular composition test set, complete set with sieve shaker and standard set of sieves for dry and wet sieving		08.05.01.05	Electromagnetic sieve shaker, to accept max. 8 sieves (50 mm height) with Ø of 200 mm 230V-50Hz. Time controlled 1 operation 1-99 min. Vibration height adjustable 0-3 mm with visible control. Incl. clamping cover (200 mm) for dry sieving.	
**08.05.01.05	Electromagnetic sieve shaker, to accept max. 8 sieves (50 mm height) with Ø of 200 mm 230V-50Hz. Time controlled 1 operation 1-99 min. Vibration height adjustable 0-3 mm with visible control. Incl. clamping cover (200 mm) for dry sieving.			Wire mesh sieves (available in Ø 100, 200 and 300 mm.)	
**08.05.10	Sieve set Ø 200 mm, standard set for wet and dry sieving, for electro magnetic sieve shaker (08.05.01.05)	1	08.05.02.01.04	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.053 mm	
			08.05.02.01.06	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.075 mm	
			08.05.02.01.08	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.106 mm	
08.30	Hydrometer kit, standard set		08.05.02.01.10	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.150 mm	
**08.30.01.01	Hydrometer, scale 0.995 – 1.035 gms/ml, according to BS 1377	6	08.05.02.01.12	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.212 mm	
**08.30.01.02	Hydrometer, scale -5 to +60 g/l, according to ASTM D 422 and AASHTO T 88	6	08.05.02.01.14	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.300 mm	
**08.30.12	Sedimentation cylinder 1000 cc, glass, with synthetic foot	6	08.05.02.01.16	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.425 mm	
**08.30.04	Rubber stopper for Ø 56 to 65 mm, height 45 mm	6	08.05.02.01.18	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.600 mm	
**08.30.03	Thermometer, 0 - 40° C	1	08.05.02.01.21	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 1.0 mm	
**08.30.08	Glass tank 60x30x38 cm	1	08.05.02.01.23	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 1.4 mm	
**08.30.10	Heating element with thermostat and stirrer	1	08.05.02.01.25	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 2.0 mm	
**08.30.05	Beaker, 250 ml	1			
**08.30.06	Sodium hexameta-phosphate, 1 kg	1	08.05.02.02.02	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.038 mm	
**98.23	Soil stirrer, revolution adjustable in 10000, 14000 or 17000 rpm, 220V 50Hz., incl. beaker with content 1 liter	1	08.05.02.02.03	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.045 mm	
**09.01.09	Stopwatch, digital, measuring range 10 hours, incl. 1.5 Volt Penlite (AA) battery	1	08.05.02.02.04	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.053 mm	
	Individual items:		08.05.02.02.05	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.063 mm	
08.04	Sand rulers		08.05.02.02.06	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.075 mm	
08.04.03	Sand ruler with 10 fractions according to NEN 2560, ASTM 11, ISO 565, BS 410 and DIN 4188. Fractions are divided between 63, 90, 125, 180, 250, 355, 500, 710, 1000, 1400 and 2000 µ		08.05.02.02.07	Stainless steel wire mesh sieve,	
08.04.04	Sand ruler with 6 fractions according to NEN 5104. Fractions are divided between 63, 105, 150, 210, 300, 420 and 2000 µ				

PARTS LIST



Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
08.05.02.02.08	Ø 200 mm, rim size 50 mm, aperture 0.090 mm Stainless steel wire mesh sieve,		08.05.02.03.05	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.063 mm	
08.05.02.02.09	Ø 200 mm, rim size 50 mm, aperture 0.106 mm Stainless steel wire mesh sieve,		08.05.02.03.06	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.075 mm	
08.05.02.02.10	Ø 200 mm, rim size 50 mm, aperture 0.125 mm Stainless steel wire mesh sieve,		08.05.02.03.07	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.090 mm	
08.05.02.02.11	Ø 200 mm, rim size 50 mm, aperture 0.150 mm Stainless steel wire mesh sieve,		08.05.02.03.08	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.106 mm	
08.05.02.02.12	Ø 200 mm, rim size 50 mm, aperture 0.180 mm Stainless steel wire mesh sieve,		08.05.02.03.09	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.125 mm	
08.05.02.02.13	Ø 200 mm, rim size 50 mm, aperture 0.212 mm Stainless steel wire mesh sieve,		08.05.02.03.10	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.150 mm	
08.05.02.02.14	Ø 200 mm, rim size 50 mm, aperture 0.250 mm Stainless steel wire mesh sieve,		08.05.02.03.11	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.180 mm	
08.05.02.02.15	Ø 200 mm, rim size 50 mm, aperture 0.300 mm Stainless steel wire mesh sieve,		08.05.02.03.12	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.212 mm	
08.05.02.02.16	Ø 200 mm, rim size 50 mm, aperture 0.355 mm Stainless steel wire mesh sieve,		08.05.02.03.13	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.250 mm	
08.05.02.02.17	Ø 200 mm, rim size 50 mm, aperture 0.425 mm Stainless steel wire mesh sieve,		08.05.02.03.14	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.300 mm	
08.05.02.02.18	Ø 200 mm, rim size 50 mm, aperture 0.500 mm Stainless steel wire mesh sieve,		08.05.02.03.15	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.355 mm	
08.05.02.02.19	Ø 200 mm, rim size 50 mm, aperture 0.600 mm Stainless steel wire mesh sieve,		08.05.02.03.16	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.425 mm	
08.05.02.02.20	Ø 200 mm, rim size 50 mm, aperture 0.710 mm Stainless steel wire mesh sieve,		08.05.02.03.17	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.500 mm	
08.05.02.02.21	Ø 200 mm, rim size 50 mm, aperture 0.850 mm Stainless steel wire mesh sieve,		08.05.02.03.18	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.600 mm	
08.05.02.02.22	Ø 200 mm, rim size 50 mm, aperture 1.0 mm Stainless steel wire mesh sieve,		08.05.02.03.19	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.710 mm	
08.05.02.02.23	Ø 200 mm, rim size 50 mm, aperture 1.40 mm Stainless steel wire mesh sieve,		08.05.02.03.20	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 0.850 mm	
08.05.02.02.25	Ø 200 mm, rim size 50 mm, aperture 2.00 mm Stainless steel wire mesh sieve,		08.05.02.03.21	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 1.0 mm	
08.05.02.02.27	Ø 200 mm, rim size 50 mm, aperture 2.80 mm Stainless steel wire mesh sieve,		08.05.02.03.23	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 1.40 mm	
08.05.02.02.29	Ø 200 mm, rim size 50 mm, aperture 4.00 mm Stainless steel wire mesh sieve,		08.05.02.03.25	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 2.00 mm	
08.05.02.02.31	Ø 200 mm, rim size 50 mm, aperture 5.60 mm Stainless steel wire mesh sieve,		08.05.02.03.27	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 2.8 mm	
08.05.02.02.33	Ø 200 mm, rim size 50 mm, aperture 8.00 mm Stainless steel wire mesh sieve,		08.05.02.03.29	Stainless steel wire mesh sieve, Ø 300 mm, rim size 55 mm, aperture 4.00 mm	
08.05.02.03.02	Ø 300 mm, rim size 55 mm, aperture 0.038 mm Stainless steel wire mesh sieve,		08.05.02.03.31	Ø 300 mm, rim size 55 mm, aperture 5.60 mm Stainless steel wire mesh sieve,	
08.05.02.03.03	Ø 300 mm, rim size 55 mm, aperture 0.045 mm Stainless steel wire mesh sieve,		08.05.02.03.33	Ø 300 mm, rim size 55 mm, aperture 8.00 mm Stainless steel wire mesh sieve,	
08.05.02.03.04	Ø 300 mm, rim size 55 mm, aperture 0.053 mm Stainless steel wire mesh sieve,		08.05.02.03.38	Ø 300 mm, rim size 55 mm, aperture 16.00 mm Stainless steel wire mesh sieve,	



PARTS LIST

Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
	Plate sieves				
08.05.02.13.09	Plate sieve with stainless steel rim, Ø 300 mm, rim size 55 mm, with galvanized steel sieve plate, aperture 16.00 mm		**08.05.02.01.23	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 1.4 mm	1
	Receivers and lids for sieves (available in Ø 100, 200 and 300 mm.)		**08.05.02.01.25	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 2.0 mm	1
08.05.03.01.01	Stainless steel receiver, Ø100 mm, height 40 mm		**08.05.03.01.01	Stainless steel receiver, Ø 100 mm, height 40 mm	1
08.05.03.01.02	Stainless steel lid, Ø 100 mm		**08.05.03.01.02	Stainless steel lid, Ø 100 mm	1
08.05.03.02.01	Stainless steel receiver, Ø200 mm, height 50 mm		08.05.10	Sieve set Ø 200 mm, standard set for wet and dry sieving, for electro magnetic sieve shaker (08.05.01.05)	
08.05.03.02.02	Stainless steel lid, Ø 200 mm		**08.05.02.02.05	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.063 mm	1
08.05.03.02.03	Stainless steel receiver, Ø200 mm, for wet sieving		**08.05.02.02.07	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.090 mm	1
08.05.03.02.04	Stainless steel lid, Ø 200 mm, for wet sieving (not suited for sieve shaker 08.05.01.05)		**08.05.02.02.09	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.125 mm	1
08.05.03.02.06	Stainless steel intermediate receiver, Ø 200 mm, height 50 mm		**08.05.02.02.11	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.180 mm	1
08.05.03.02.14	Lid for wet sieving, for electro magnetic sieve shaker (08.05.01.05) for sieves with Ø 100 and 200 mm		**08.05.02.02.13	Stainless steel, wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.250 mm	1
08.05.03.03.01	Stainless steel receiver, Ø300 mm, height 55 mm		**08.05.02.02.15	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.355 mm	1
08.05.03.03.02	Stainless steel lid, Ø 300 mm		**08.05.02.02.17	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.500 mm	1
08.05.03.03.03	Stainless steel receiver, Ø 300 mm, for wet sieving		**08.05.02.02.19	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 0.710 mm	1
08.05.03.03.04	Stainless steel lid, Ø 300 mm, for wet sieving		**08.05.02.02.21	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 1.0 mm	1
08.05.03.03.06	Stainless steel intermediate receiver, Ø 300 mm, height 55 mm		**08.05.02.02.25	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 2.00 mm	1
	Complete sieve sets (Ø 100 en 200 mm.)		**08.05.02.02.29	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 4.00 mm	1
08.05.05	Hand sieve set, Ø 100 mm, standard set.		**08.05.02.02.33	Stainless steel wire mesh sieve, Ø 200 mm, rim size 50 mm, aperture 8.00 mm	1
**08.05.02.01.04	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.053 mm	1	**08.05.03.02.01	Stainless steel receiver, Ø 200 mm, height 50 mm	1
**08.05.02.01.06	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.075 mm	1	**08.05.03.02.03	Stainless steel receiver, Ø 200 mm, for wet sieving	1
**08.05.02.01.08	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.106 mm	1	**08.05.03.02.14	Lid for wet sieving, for electro magnetic sieve shaker (08.05.01.05) for sieves with Ø 100 and 200 mm	1
**08.05.02.01.10	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.150 mm	1			
**08.05.02.01.12	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.212 mm	1			
**08.05.02.01.14	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.300 mm	1			
**08.05.02.01.16	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.425 mm	1			
*08.05.02.01.18	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 0.600 mm	1			
**08.05.02.01.21	Stainless steel wire mesh sieve, Ø 100 mm, rim size (height) 45 mm, aperture 1.0 mm	1			